

## ModernWood Finishing

REVISIONS



changes in our Paint and Varnish Line—standardization of goods and revision of shades and names—have made obsolete certain results illustrated and affected to some extent the usefulness of this book as a guide to proper specification of Du Pont Paint and Varnish material.

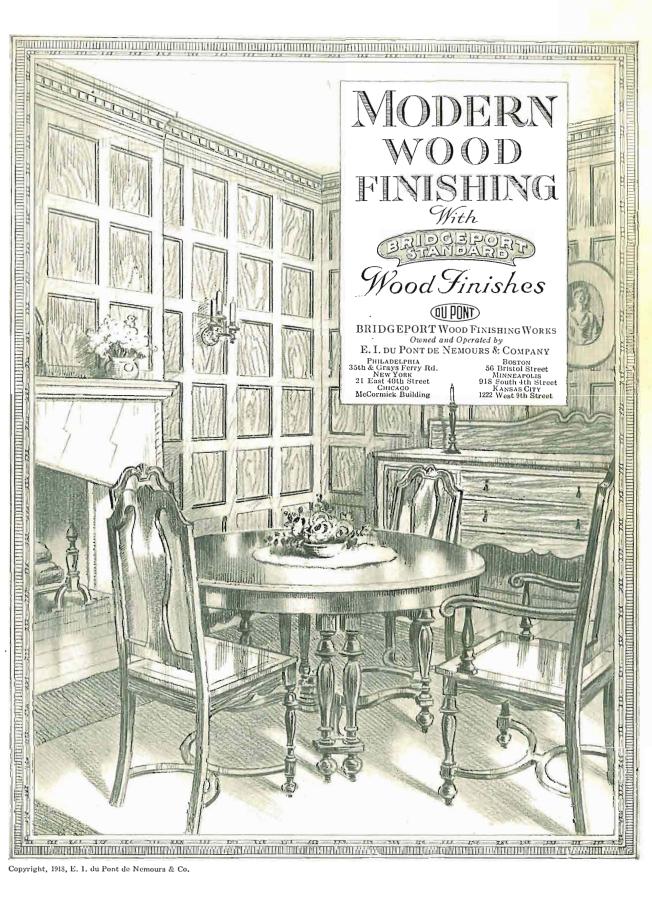
The purpose of this book is, however, unimpaired—it will still serve as a text-book of proper wood-finishing procedure.

In selecting any of the finishes illustrated, or specifying goods described, our Architectural Service Bureau at Wilmington will gladly assist you in obtaining the standard effects you are interested in.

E. I. DU PONT DE NEMOURS & CO., Inc.

Sales Department, Paint and Varnish Section

WILMINGTON, DELAWARE



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#### The Du Pont American Industries

The Du Pont American Industries, which include the Bridgeport Wood Finishing Works, are American in origin, financing, management and operation. No allegiance is paid to foreign capital or control.

They are crystallized around an aggressively progressive manufacturing institution, showing an unbroken record of 117 years of constant development along practical lines of industrial manufacture, purchase, finance and sales—an institution which has through all of its history been a loyal supporter of American affairs and of the Government of the United States.

The fair attitude of the Company toward all lines of allied business and toward the buying public has permitted it to establish its trademark, the Du Pont oval, as a positive guarantee of quality and service, which guarantee is now extended to all of its lines of endeavor.

The permanency of this guarantee is assured through the ample financing of all interests; through the ability and efficiency of engineering and operating departments; through a purchasing department that searches the world for the best raw materials; and through a sales department that makes detailed studies of domestic and export needs, and of the most economical methods of filling wants.

The different Du Pont industries are all, in a way, separate and distinct, but have as common bonds the intimate interlinking of the various highly specialized chemical units, and administrative control. No separate unit is primarily dependent upon the others, and the various materials manufactured by any one unit are in no way by-products of other units, but are, in all general classes, specifically manufactured for the purposes for which they are sold.

It is the purpose of the Du Pont American Industries, through properly co-ordinated plants, to take an active part in meeting foreign competition in times of peace by furnishing the world with standardized American products of proven worth.

This organization of industries exemplifies a new epoch in world commerce—the era of amalgamation of related industries as contrasted with the prior era of concentration on the development of a single industry.

Popular sentiment and law oppose the trust idea—the control by one concern of a majority of the nation's industries in one line—but industrial progress demands and welcomes the idea of using the experience, capital, organization and facilities of a successful business to develop other industries that are related to it either in manufacturing or selling problems.

### Part I ModernWood Finishing

What Modern Wood Finishing Is: How the Hidden Beauties of Wood Are Developed to Produce the Most Pleasing and Artistic Effects



MATURE is an artist—but many of her greatest artistic triumphs are not apparent to the casual or untrained eye. For the highest development of these hidden beauties she requires the cooperation of man. She demands of him artistic appreciation and skilled craftsmanship in fashioning the materials which she furnishes. She deals in fundamentals, furnishing the canvas and the colors, but man must paint the picture.

This is especially true of the finishing of woodwork used for the interior of buildings.

Woodwork, in its unfinished state, has peculiar, irregular markings and veinings, some so faint as to be lost to the naked or untrained eye. It is in drawing these delightfully artistic patterns that nature gives to man the means of developing woodwork to the highest degree of beauty.

The developing of this beauty and preserving it in the most attractive and permanent form have been the aim and object of this company since it originated the basic principles of modern wood finishing in 1876. This period marks the advent of Wheeler's Wood Filler, an article used for filling the pores of wood to make a proper foundation for varnish or other finishing coats. Wheeler's Filler has since become the standard wood filler of the world, and with it have been

perfected the complete line of Bridgeport Standard Wood Finishes, comprising stains, varnishes, waxes, enamels and other wood finishes.

We may truly claim considerable credit for originating and developing the wide variety of colors and effects now economically possible on all kinds of woods used in building construction.

Those unaccustomed to the wonderful effects it is possible to obtain with Bridge-port Standard Wood Finishing Materials are often greatly astonished when panels are exhibited showing these beautiful and inexpensive effects on all woods ranging from the least expensive to the most costly.

In the development of new and handsome colors—in the treatment of various grains and textures in different hard and soft woods—in adding to the preservative character of our finishes, combining beauty with *permanence*—our methods and materials have come to be recognized as *stand*ard by architects, builders and painters.

Other features of our finishes are the ease and economy with which they may be applied, and the certainty of distinctive results where the simple directions are carefully followed.

In the pages that follow we show, by description and illustration, how the highest possibilities of wood finishing can be attained with Bridgeport Standard Wood Finishes.

# BRIDGEPORT STANDARD SERVICE Departments



The Bridgeport Standard Service Departments are located in New York, Philadelphia, Chicago, Boston, Minneapolis and Kansas City; and similar Service Departments are in the hands of leading Distributors in important centers throughout the

country. These Service Departments are of real assistance to Architects, Builders, Contractors, Painters, Decorators, or anyone who is building, in planning the best decorative treatments for Interior Woodwork, Doors, Walls and Floors.

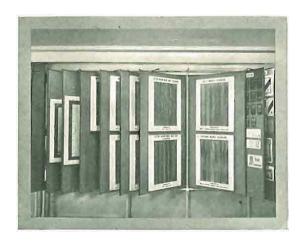
HE Home-Owner may have his "ideal house" definitely in mind and may feel that he knows exactly how it shall be planned. He may even have decided on the furnishings; and yet when it comes to finishing the interior woodwork, difficult technical problems may arise.

It is highly desirable, therefore, that he have a fundamental knowledge of interior decoration, particularly that part of it relating to the finishing of interior woodwork.

Since the woodwork often makes or mars a home, the home-owner should be familiar with the characteristics of different woods. He should know something about the correct choice of color schemes, especially



This is a general view of the joint exhibit of the National Lumber Manufacturers' Association, Morgan Sash and Door Company and the Bridgeport Wood Finishing Works, in the Insurance Exchange, Jackson Boulevard, just off LaSafle Street, Chicago, Ill. This together with a similar exhibit at 21 Rasa 40th Street, New York, is the most complete exhibit in the country of matshed effects on lumber. Several hundred different pieces of literature issued by the various lumber associations are available. Facilities are provided for architects and contractors to work out interior decentrive plans for any building.



These illustrations show the complete way we are displaying flooring. They give an idea of just what you can obtain in different grades of commercial American woods for flooring.

where an entire house is to be finished and different color plans and treatments are desired for different rooms. Once the selections have been made, he should have some knowledge of the proper methods of obtaining the finished results.

He will naturally consult his architect; but he and the architect can work together with better understanding if he (the owner) has a knowledge of the broad principles of wood finishing, which he can obtain by a perusal of this book.

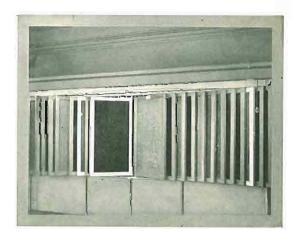
Then, again, the finishing of interior woodwork is constantly developing. New ideas in color schemes and treatments are being originated. Not only have many new and truly beautiful effects been developed on hardwoods like oak, mahogany, birch and gum—but the range of finishes on less expensive woods—like pine, cypress and fir—has proven surprising to all who have seen the great variety.

It is also necessary to consider changes in *style* in wood finishing; for styles change in the finishing of interior woodwork as in everything else; and what may have been "good style" fifteen or twenty years ago in finishing trim, doors, walls and floors is not necessarily "good" today.

The present tendency is decidedly toward the soft-toned flat effects so well exemplified in the new shades of Bridgeport Standard Wood Finishes, which are specified by leading architects and used by leading painters and decorators, also by prominent manufacturers of fine furniture. It is a noteworthy fact that these new finishes have almost completely superseded the loud grain and "shiny" finishes of a few years ago—these being no longer in vogue.

It is for the purpose of being of real assistance to Architects, Builders, Contractors, Painters, Decorators, Home-Owners, or anyone who is building, in planning the best decorative treatments for Interior Woodwork, Doors, Walls and Floors, that we have established Bridgeport Standard Service Departments at important centers throughout the country, of which we can show only a few typical examples.

Our own Service Departments are located in New York (21 East 40th Street); Philadelphia (35th and Grays Ferry Road); Chicago (McCormick Building); Boston (56 Bristol Street); Minneapolis (918 S. 4th Street); Kansas City (1222 W. 9th Street). If you reside outside of these cities, we will, upon request, give you the name and address of our distributor nearest you who has a Bridgeport Standard Service Department. If we do not have a service department in your locality, we can give you excellent service by mail. Simply give us a general idea



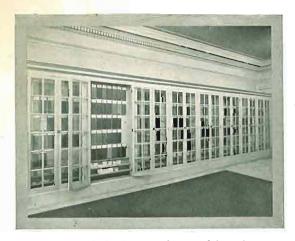
This shows a detailed view of many large panels, bringing out the wonderful beauty and figure of American woods.

of your house and what you have in mind. We will send samples of finishes and advise you regarding the best decorative treatment for interior woodwork.

# Literally There Are Thousands of Different Possible Bridgeport Standard Combinations—Affording a Choice for the Exercise of Your Fullest Individuality

AT our Service Department Exhibits are shown countless colors and combinations in new shades and types of finish—such as the rich browns and mahoganies, beautiful grays—soft and velvety in appearance—for trim and doors; also, for walls, a wide variety of charming tones that are alike artistic, restful and harmonious.

Literally there are thousands of different combinations possible. Nothing so complete, comprehensive and practical has ever been shown in interior finishing. Your individuality can find its fullest expression in home decoration through this wide choice.



This shows in detail the completeness of the equipment. The display cases contain three leaves which open up, and on each leaf are hung samples of all the commercial woods used in the country, finished in a great variety of the latest effects. These effects are all on the average run of house trim. When in Chicago or New York you should avail yourself of the facilities of these exhibits.

Moderate Cost—A Very Important Consideration for the Average Home-Builder

Cost is an important consideration for the average home-builder, who frequently associates beautifully finished woodwork and



This shows a close view of the full-size, averagerun of Morgan Doors, finished in the latest effects. They are shown just as you can expect to see them in your home.

walls with a lavish expenditure of money, possible only for those financially able to build mansions and equip them accordingly. This idea is decidedly erroneous, because it costs no more to use Bridgeport Standard Wood Finishes and secure the newer, handsome effects, than it does to have conventional treatments.

Even the less expensive varieties of wood respond beautifully to the application of Bridgeport Standard Wood Finishes—resulting in woodwork that is a delight to the possessor and in keeping with his means.

Although Bridgeport Standard Wood Finishes have been specified and used for some of the finest buildings in America—notably the elegant new Biltmore Hotel, New York; Railway Exchange Building, St. Louis; La Salle Hotel, Chicago; William Penn Hotel, Pittsburgh; Miami Hotel, Dayton, O.; and many others of the same

character too numerous to mention—they are even more extensively used in the average American home.

Economy is combined with permanency; and to both of these is added *practical working properties*. The painter who executes your work can produce the same effects shown on our panels.

The Cost of the Wood Finishing Materials in

the Average Home Approximates Only 2% to 5% of the Total

Do you know that the cost of the wood finishing materials in the average home approximates only 2% to 5% of the total?

Do you know that the cost of any interior finishing job is made up of approximately 70% for labor and 30% for materials?

A fraction of this small percentage of material cost can make or mar the job.

Incidentally, the best filler, stains, varnishes, enamels and waxes will cover from 25% to 40% more surface than cheap goods.

This is not a trade argument, but a fact, as can be demonstrated by taking equal quantities of Bridgeport Standard Materials and equal quantities of cheap materials and seeing how much greater surface Bridgeport Standard materials will cover.

Many well-informed architects, contractors, painters, decorators, and home-owners are taking the view that it does not pay to run chances. The small apparent "saving"

does not justify it. They are paying more attention to the "up-keep" of property, and they realize that the best way to keep down "up-keep" is to do the work right in the first place.

Also it pays from an investment standpoint—it greatly enhances resale or rental value. A specific instance of this, and of the assistance which one of our service departments rendered to a home-owner, is related by The Dillistin Lumber Co., Paterson, N. J. They furnished the lumber for a house to a Mr. R. J. Edwards, and through one of the Bridgeport Standard Service Departments took pains to help their customer get the proper finished



To Fifth Avenue, Offices
Bridgeport
Wood Finishing Works
Second Floor.

To Subway Station 42d Street and Madison Avenue,

Building, 21 East 40th Street, corner Madison Avenue, New York, in which are situated the offices of Bridgeport Wood Finishing Works. These offices are convenient to Fifth Avenue, Grand Central Station, the Subway at 42d St., and to the hotel, theatre and shopping sections.

At these offices may be seen a most complete exhibit of finished American woods used for interior trim and flooring, as well as a complete display of Wood Finishing Products, House Paints (interior and exterior), Technical and Industrial Paints.

effect on the woodwork. We quote the result from their letter:

"The job was the 'talk of the town,' and it had many visitors. All were of the same voice in high praise of the appearance of the trim. Mr. Edwards received such a tempting offer that he has sold the house and purchased property near this house, on which he is to erect another."

The average person builds a home but once in a life-time. If you are building a home, why not assure yourself of the possession of attractively and properly finished woodwork with Bridgeport Standard Wood Finishes? Your Architect knows Bridgeport Standard Wood Finishes and will gladly specify them upon your request.

The following letter shows how our New York Service Department co-operated with a home builder in obtaining specific results. It also shows the necessity of using wood finishes of the highest standard—Bridgeport Standard.

Office of E. W. Bullinger, Publisher, 53 Park Place, New York.

Bridgeport Wood Finishing Works:

Gentlemen: I wish you could realize the inestimable value to me of the samples of birch with mahogany

finish which you prepared for me.

You will remember that I came to you because I thoroughly understood and appreciated the high character of your stains and varnishes, and asked you to prepare several pieces of birch treated with Bridgeport Standard Stains, filled with Wheeler's Filler, and finished with your Rubbing Varnish, which you very kindly did.

These samples, as you know, I used in and made a part of the contract for the wood finishing of my new residence, with the result that when the builder delivered the house to me I was able to prove at once that

he had violated his contract.

Investigation showed conclusively that about onetenth of the material used had been bought from you, and it is impossible to characterize the result, and the builder was compelled to make a contract with another man to re-finish the whole woodwork at great expense. The work was done over and refinished by an honest

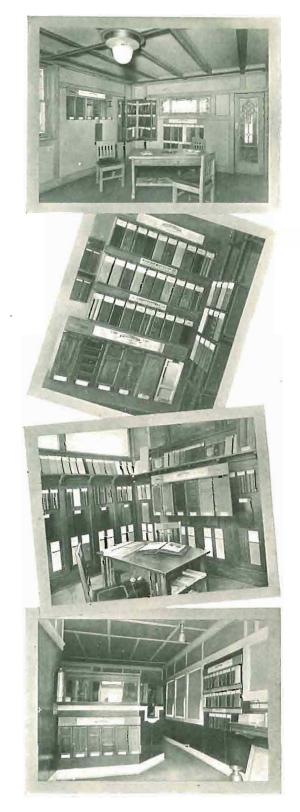
The work was done over and refinished by an honest and capable man, who used your goods exclusively, and I am glad to say that any manufacturer of your material would be proud of the finished woodwork as it

now appears.

I owe this final result to your kindness in preparing the samples and to the character and efficiency of your goods and I want you to enroll me among the multitude of those who owe you many thanks and much gratitude for the high standard on which you conduct your business.

Yours very truly,

(Signed) E. W. BULLINGER.



A group of typical Bridgeport Standard Service Departments in the hands of leading distributors at important centers throughout the country.



The Bridgeport Standard Service Departments co-operate with Home-Owners, Architects, Contractors, Decorators, and Painters in obtaining new and distinc-tive finishes for interior woodwork. Many Architects, Painters, and Decorators bring their clients to these exhibits. They then have some-thing definite and tangible to work on; clients can see the exact finished result in advance.

#### BRIDGEPORT STANDARD WOOD FINISHES from the Home Owner's Standpoint



**TET** us say that you are planning to build a new home or to redecorate or refinish an old one - how can one of our Service Departments be of assistance to you in obtaining new and distinctive effects for your Interior Woodwork, Doors, Walls and Floors?

We will assume that you have consulted your Architect and have discussed with him the matter of interior finishing and that he may know in a general way the effects desired.

You wish to be absolutely certain of your choice of these effects, however, because you realize that while furniture and furnishings may be changed from time to time, the finished woodwork must remain, as a change is not only expensive, but frequently impossible.

A competent architect or decorator can see in advance the finished result which he is planning—woodwork that is rich, yet unassuming; walls beautiful in soft tones; doors in which are emphasized the beautiful markings of nature; and floors that are faultless in appearance.

All of these units go to make up a perfect and harmonious whole; and while the mental picture may be very clear to your Architect or Decorator, you may not be able so readily to visualize it yourself.

Suppose, then, that both you and your Architect visit one of the Bridgeport Standard Service Departments—as many Architects and their clients do. This will give you both something definite and tangible to work on, because you can see literally hundreds of combinations for any room on Real House Trim and Real Model Doors, also the latest Wall Tints—effects possible to obtain with Bridgeport Standard Wood Finishes, just as they will appear in the building or home. You need not wait until the job has actually been done to find out whether it is what you wanted or expected.

On your arrival at the Service Department Exhibit, a conversation somewhat along the lines of the following may ensue — this being a typical presentation of the fundamental principles of modern wood finishing which is occurring daily at our Service Department Exhibits all over the country.

#### A Frequent Occurrence at a Bridgeport Standard Service Exhibit

 $Principals: Architect-Client-Bridgeport \ Representative-Painter$ 

Architect: "I have brought in Mrs. Homebuilder to see the exact effects that can be obtained on different woods with Bridgeport Standard Wood Finishing Products. I am designing her new home, and she, the painter and I are giving special attention to the interior decorating."

Mrs. Homebuilder: "Yes, I'm planning my 'ideal home,' and I suppose my architect and my painter both think I am over-particular, but it's the 'dream of my life,' and naturally I want to have everything just right, especially the interior woodwork."

Bridgeport Representative: "Exactly so, Mrs. Homebuilder, and that's what we are here for—to co-operate with you, your archivesults."

Architect: "Mrs. Homebuilder is rather partial to a brown finish, but we have both decided that we want to get away from the ordinary finishes. Please show her some of the new, soft brown finishes on real house trim that I saw here the other day."

Bridgeport Representative: "These new soft browns are now the vogue. Nearly everyone is familiar with the conventional shiny golden and light oak shades of finish, which represented the extent of wood finishing possibilities until very recent years; but these new, soft-toned effects are so pleasing and so modern, that they are almost completely superseding the old light, shiny tones.

"Here is something especially pleasing. We call it our Brown Oak Finish. It is identical with the finish of the Library and Cafe of the elegant new Biltmore Hotel, New York City. Bridgeport Standard Products were used on that 'job,' which has attracted wide attention for its beauty and uniqueness."

Mrs.
Homebuilder: "That's just the thing for my library or living-room. I've often admired the woodwork of the library of the Biltmore, and it's certainly a great satisfaction to know that I can have the same thing for my house."

Architect: "We are planning to use a light gray finish for the dining-room. Show Mrs. Homebuilder some of the new gray finishes on real house trim."

Bridgeport Representative: "Here are two new and very beautiful gray finishes—Satin Gray and Standard Gray. They are perfectly flat, without gloss, and the gray is a real gray."

Mrs. "One of my neighbors recently had a room finished in gray, but it has a decidedly greenish cast. I don't want that objectionable green on my gray woodwork. How do you account for it?"

Bridgeport Representative: "That's because shellac and wax were used as a finish over the stain. There's just enough yellow in shellac to kill the delicate gray tint; but your woodwork will never show the objectionable greenish cast, Mrs. Homebuilder, if it is stained with Bridgeport Standard Acid Stain and finished with WonderLac. WonderLac is colorless, so it retains that beautiful gray tone which the stain gives to the wood."

Mrs.
Homebuilder: "The gray you are showing me on this sample of house trim is just what I want, but can I be sure of gray on my neighbor's woodwork."

Bridgeport "You can, positively. Your Representative: painter has only to follow the directions on the package. He can't go wrong if he follows the simple directions."

Architect: "While we're here, Mrs. Homebuilder, I suggest that we take up the finish for the doors and walls. Please show Mrs. Homebuilder those model doors finished with Bridgeport Standard Finishes, and the wall samples finished with Washotint."

Representative: "Here are a number of doors beautifully finished with our goods. The results speak for these doors would look in your home. Your painter can duplicate any of these finishes."

Mrs. "They're certainly beautifully finished doors, and I can easily choose the tone I want."

Architect: "We are planning to use flat wall paint on most of the walls. Show Mrs. Homebuilder some of the attractive shades of Bridgeport Standard Washotint."

Bridgeport finishes are having a wide vogue because they're sensible, sanitary, and really beautiful. Bridgeport Standard Washotint is most enduring. It can be washed with soap and water, the surface is non-absorbent and hard. Altogether it's without a single shortcoming."

Architect: "Washotint looks well on these samples, but how about its use on actual walls? I have had a lot of trouble in getting a good finish on plaster, stone and brick."

Bridgeport of rosin or glue size was used before applying the paint. Make your specification read, 'one coat of Bridgeport Standard Lithogen Primer' and then you're safe. Lithogen Primer stops all suction and seals up the pores of brick, plaster, stone or wood, making a permanent foundation for successive coatings.

There are over a million square feet of surface in the Consolidated Gas Company's Building, New York, coated with Lithogen Primer and it is a perfect job from start to finish. It was also used in the Metropolitan Life Building and many others."

Mrs.
Homebuilder: "I am convinced that I want Bridgeport Standard Wood Finishing
Products used on the interior woodwork of my home. Could I have a few small
samples of the finishes I selected to take along to
show to Mr. Homebuilder?"

Bridgeport "Certainly. And, Mr. Architect, now that we have a memorandum of the finishes you want, we will be pleased to send you small panels in duplicate so you can keep one in your office and hand the other to your painter to go by. He will appreciate this co-operation, as he, too, is vitally interested in securing the best results."



© 1917 by Good Furniture Magazine.

The simple and sincere architecture of this room, with its beamed ceiling and excellent selection of furniture, is extremely pleasing. It very clearly visualizes the possibilities of attractively finished woodwork and floors. Bridgeport Standard Service Departments are always glad to co-operate in obtaining distinctive interior effects.



# BRIDGEPORT STANDARD WOOD FINISHES from the Architect's Standpoint



TO THE ARCHITECT: With the constant and rapid development of methods and materials connected with modern building construction, there is ever present a mass of detail which

you must consider in connection with every project.

In the single field of interior decoration, technical problems connected with the finishing of interior woodwork, walls, doors and floors have become so many and so complicated, that even though you were to make a specialized study of the subject, it would consume a great amount of time to keep fully informed of all the latest developments.

We realize that, as a practical man, you must act in an advisory capacity, basing your specifications on nothing but demonstrable results; that you want exact technical facts—not prejudiced opinion or "sales verbiage."

Accordingly we offer you a service in wood finishing, based on our years of study and development of this subject, that eliminates the harassing details.

Through the establishment of Service Departments at our branches, as well as in leading cities throughout the country, you are enabled to keep in touch with every new idea, shade or type of finish as soon as perfected, and see it illustrated on *real house trim*.

You may wish to originate some wholly new and unusual wood finishing effect; you may, at times, require some particular treatment for a specific job; you may occasionally feel the need of new inspiration on the entire subject of wood finishing. You can surely find this assistance and inspiration in our Service Departments.

To these Service Departments you can bring your clients, and together (with our co-operation) you can work out, in a practical manner, interior decorative effects for an entire building—effects that might require weeks to develop by ordinary methods.

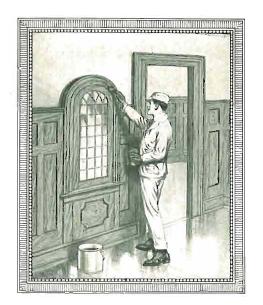
Leading architects everywhere are appreciating this form of co-operation, because it serves to simplify wood finishing problems and at the same time secures for them the highest development of permanent and economical wood finishing beauty.

Architects today are demanding the individual, the distinctive, in wood finishes; and Bridgeport Standard Wood Finishes in the beautiful new softtoned effects which we have developed will not only be pleasing to you, but they will afford you the opportunity to furnish your clients with something individual and distinctive at moderate cost.

We have all of the standard finishes, of course; but the new finishes, with their beautiful soft tones, which we have developed, have the decided preference. Really wonderful effects are obtained on both hard and soft woods.

Accurate color reproductions, with specifications of new and popular effects on all woods, will be found in the color section of this book. These new finishes are also shown on real house trim and model doors by our Service Departments.

We shall also be glad to send any Architect a practical and convenient set of panels for office use.



# BRIDGEPORT STANDARD WOOD FINISHES from the Master Painter's and Decorator's Standpoint



ORATOR: Your work represents a most important link in the chain of successful wood

finishing. Your skill, combined with products known to master-painters for forty years as the most practical and reliable, insures a job that will please the Architect and satisfy the owner. With the great variety of color effects now possible on all types of wood, you must combine with your technical skill a thorough knowledge of all the latest developments in wood finishing. New developments are constantly occurring.

You naturally wish to be progressive—and this means that you must keep abreast of all of the new ideas in the finishing of interior woodwork. While there will always be a certain demand for some of the conventional finishes, you cannot afford, in view of the constant advancement in the art, to show your customers the same old finishes with which everybody is familiar.

The beautiful new soft brown and gray effects which we have developed open up for you greatly enlarged possibilities for all woods, enabling you to obtain very beautiful results at moderate cost. Show these new, soft-toned effects to your customers, pointing out to them that among the makers of artistic furniture the trend is likewise toward these soft, subdued finishes, eliminating the loud grain and shiny surface.

Constructive work of this nature is certain to result in increased business for you. It is one of the best forms of advertising you can employ.

Our Service Departments in leading cities will be pleased to co-operate with you. They will render, without obligation, the most helpful and valuable service ever conceived in the practical solution of interior decorative and wood finishing problems. The hundreds of trim panels, covering thousands of combinations on all commercial woods, and the simple and practical methods of producing them, mark an epoch in the painter's art that is really remarkable.

A word as to the working properties of Bridge-port Standard Wood Finishes: Painters not only like, but prefer, Bridgeport Standard Wood Finishing Products, because they are free from complicated manipulations, blending, lapping, brush-dragging, and other awkward features which render the best results difficult to produce. Every Bridgeport Standard Product is practical from the master painter's standpoint—easy in working properties and application, economical and genuine in quality.

The numerous letters received daily from highclass painters testify to the universal satisfaction of Bridgeport Standard materials in their work. To these we add the hundreds of requests from others who have heard of these products and desire to know more about them; all of which is a constant incentive for us to co-operate closely with the painting profession on all details of interior decoration.

Serviceable and useful panels covering the latest effects on any type of wood will be cheerfully furnished painters or decorators upon request.

It will pay you to study the colored section of this book, which shows some of the possibilities of Bridgeport Standard Wood Finishes on the woods which you are called upon to finish in your daily work.



Thinning Wheeler's Paste Wood Filler with turpentine or benzine to the consistency of thin, flowing varnish.

## BRIDGEPORT STANDARD WHEELER'S Patent Wood Filler



For Filling the Pores of Open-Grained Woods, such as Oak, Ash, Chestnut, Mahogany, etc., before the Application of the Varnish or other Finish — and for Preparing a Foundation in Finishing any type of Floor.

Variation and certain other finishes require a proper foundation; that is, they cannot successfully be applied to the bare wood. When used on such open-grained woods as oak, ash, chestnut and mahogany, the pores of the wood must be properly filled beforehand.

Hence, successful wood finishing, like successful building, depends upon a proper foundation for the best results.

It is the function of Wheeler's Wood Filler to give this proper foundation—to produce a perfectly smooth, elastic and transparent surface for the application of the finish—to bring out and emphasize the natural life and beauty of the wood—to save time and cost of labor—and to ensure a perfect finish with the least amount of varnish, shellac, wax or other finishing material.

Modern Wood Finishing really originated in 1876 with the advent of Wheeler's Filler. It inaugurated a new era in the finishing of interior woodwork, furniture and pianos. Wood finishers were assured of a *permanent* finish with Wheeler's Filler as the foundation.

Wheeler's Wood Filler for many years has been used, among other fields, by the best known piano and furniture manu-

facturers in this country and abroad, those whose names you constantly see nationally advertised, and whose goods are known for their quality and splendid finish. Among the leaders, an expression from Berkey & Gay Furniture Co., well-known furniture manufacturers, is typical:

#### Gentlemen:

We have been users of your Wheeler's wood filler for upwards of twenty-five years, with a great degree of satisfaction to ourselves.

On the furniture recently supplied to the Biltmore Hotel, New York, no other filler but yours was used. You are at liberty to make such use of this in an advertising way as you may desire.

Very truly yours,
BERKEY & GAY FURNITURE CO.
C. B. Hamilton,
Sales Manager

Wheeler's Filler has certain characteristics which can be described only as exclusive. Many people have for years described them as "peculiar"—as something which they have been unable to find in other fillers. This description seems to be well justified.

In addition to thoroughly filling the pores or grain of the wood (thereby forming a



After thinning Wheeler's Paste Wood Filler, apply it to the surface of the wood with a brush, allow it to set five or ten minutes, then rub well into the porce of the wood with a cloth and wipe off the work thoroughly.

perfect foundation), and bringing out the full life and beauty of the wood, the "peculiar characteristics" of Wheeler's  $\operatorname{Filler}$ these: It dries firm and "diamond hard" to the bottom of every pore; it never shrinks, sweats nor absorbs the varnish or finish; it requires a minimum quantity of varnish,

wax or finishing material; it is most economical, standing more reducer than ordinary fillers and therefore covering more surface per pound; and by reason of the perfect foundation and reduction in the number of coats of varnish, shellac, wax or other finishing materials, it saves the cost of extra materials and labor in applying.

Finally, it produces a permanent finish. As one leading architect expressed it:

"I went purposely to a house which I had built 16 years ago, and where your filler had been used, to examine the finish of the oak woodwork, and found it in excellent condition."

The base of Wheeler's Wood Filler is a peculiar form of silex especially prepared from pure *rock crystal quartz*, approaching the diamond in hardness.

To this base are added certain vehicles

and *special* binders so that when applied to the wood, the minute particles of silex are imbedded or bound into the pores of the wood to make the transparent, unshrinkable surface for the finishing coats.

Particular attention is called to our form of silex, which differs from that used as the base for other wood fillers in its prismatic, needle-like points (like tiny crystals); also to its remarkable, diamond-like hardness referred to—so hard that it will cut glass.

Most other (socalled) silex wood fillers are based on such ingredients as Silver White, Gypsum, Whiting, Corn Starch, Western Silex, etc., all of which are more or less soft materials and permit of



absorption and shrinkage—the two deadliest foes to good wood finishing.

Wheeler's Filler has been specified by Architects and used by leading painters and furniture and piano manufacturers for years. It is the recognized—the accepted—standard in wood fillers. "As good as Wheeler's Filler" implies that the article which is compared with Wheeler's lacks some of the merits of the standard. Wheeler's Filler cannot be duplicated by others because of the special japan binders, which are our exclusive product.

The use of Wheeler's Filler is not only country-wide—it is world-wide. It extends to practically every civilized country on the globe.



#### How to Obtain Various Effects

with

#### Wheeler's *Paste* Wood Filler

EFORE varnishing, all open-grained wood should be filled. Use No. 1 or Natural Wheeler's Wood Filler, then varnish, or shellac and wax for a natural finish on light woods.

Use No. 3 Wheeler's Wood Filler for a light antique finish on light woods, or a natural finish on walnut, and other dark

Use Golden Oak Wheeler's Wood Filler for a Golden Oak finish on plain oak, ash or chestnut. See page 56 for another type of Golden Oak finish.

Use No. 7 Wheeler's Wood Filler to produce a natural light finish on mahogany wood. For darker effects use Mahogany N.

Use No. 10, or Ebony Wheeler's Wood Filler in connection with Ebony or Weathered Oak Stains before varnishing.

For the white-pored effects, which are obtained only over acid stains, use Wheeler's Special White Filler.

#### Wheeler's Silex *Liquid* Wood Filler

**\O**R use in obtaining a *Natural* Finish on Close-Grained Woods such as Pine, Cypress, Fir, Redwood and With Wheeler's Silex Liquid Filler and Varnish, it is possible to produce a very

smooth and beautiful finish on these woods in the most economical man-

Liquid wood filler, however, is not intended for use on floors; use paste filler, no matter what the wood is. This is important.

Wheeler's Silex Liquid Wood Filler has the same dis-

We use the same rock crystal quartz base and combine with it certain light-colored, good-bodied vehicles, so that the finishing coats stand out smooth and full.

Over Wheeler's Silex Liquid Wood Filler two coats of Wheeler's Varnish should be applied.

Wheeler's Silex Liquid Wood Filler develops all the beauty of grain and figure,

and age does not dim nor darken the transparency of the finish, as is frequently the case where cheap liquid fillers are used.

In the colored section of the book are illustrated the results obtainable with Wheeler's Silex

Liquid Filler on different woods.



For use on close-grained woods,

Applying Wheeler's Silex Liquid Filler on a Vellow Pine or Cypress Porch Ceiling,

tinctive qualities as Wheeler's Paste Filler, is applied like shellac and requires no wiping off.

(The treatise on the finishing of interior woodwork is continued on page 51)

## Part II ModernWoodFinishing

Illustrations of the Latest and Most Popular Finishes in Actual Colors



N the following pages we show illustrations of the newest and most popular finishes on various woods advertised by leading lumber associations for interior trim, doors and floors.

These woods are arranged in alphabetical order—as follows:

Birch—Northern Hemlock & Hardwood Manufacturers' Association, Oshkosh, Wisconsin.

Cypress—Southern Cypress Manufacturers' Association, New Orleans, Louisi-

Fir (Douglas)—West Coast Lumbermen's Association, Inc., Seattle, Washington.

Gum—Gum Department, American Hardwood M'f'rs' Ass'n, Memphis, Tenn. Oak—Oak Department, American Hardwood M'f'rs' Ass'n, Memphis, Tenn.

Pine--North Carolina-The North Carolina Pine Association, Norfolk, Virginia.

Pine (Southern) - Southern Pine Association, New Orleans, Louisiana.

Redwood (California)—California Redwood Association, San Francisco, California.

In addition, other woods used for interior finishing are shown as follows:

Ash — Chestnut — Hemlock — American Walnut — Larch — White Pine — Tupelo — Cedar — Spruce — Bass Wood — Elm — Poplar — Beech — Cherry — Maple — Sycamore — Mahogany.

The illustrations are photographic reproductions of the average run of commercial trim PROPERLY FINISHED. They are not fancy panels, neither are they processed—they represent the shades and results that can be produced economically on the average run of house trim.

We call particular attention to the new

soft shades of Bridgeport Standard Wood Finishes, which are now the vogue.

Exact specifications for obtaining these finishes on any given wood will be found under each illustration. The painter or wood finisher has only to follow these specifications and the simple directions on the packages to obtain the same results.

We urge those interested to call at our nearest Service Department and see the great variety of effects obtainable with Bridgeport Standard Wood Finishing Products on actual trim, floors and model doors. Visitors continually express astonishment at the wonderfully artistic results shown. The advice and co-operation of our Service Departments are free, and they are invaluable in obtaining the most satisfactory results at moderate cost.



#### Beautiful Birch



By O. T. SWAN, Secretary, Northern Hemlock & Hardwood Manufacturers' Association, Oshkosh, Wis.

BIRCH is fitted for a large variety of purposes because of its beauty and its excellent mechanical and physical properties. It is somewhat easier to work than oak or maple, yet possesses the same quality of strength as these species. It is used very extensively for interior woodwork, doors, flooring, ornamental veneer and furniture.

BIRCH has won recognition for interior trim as a high-class hardwood, of very handsome figure and capable of attractive finish and a high polish. It is in use not only inside of a multitude of residences and apartments, but also in many hotels and buildings of the highest class, for mouldings, base, doors, etc., also for beam and panel ceilings, wainscoting, grille work, built-in cabinets and for newel posts and other parts of ornamental stairways.

BIRCH doors are usually of veneer on a backing of softer wood. The veneer may be selected from a wide variety of figures, from the rather modest to the highly ornate.

BIRCH flooring is comparable in service value with maple flooring, having nearly the same physical properties, including hardness, and ability to wear smooth. It comes either in red or unselected. Selected Red Birch floors are very desirable in color schemes of high-class interior decoration, especially with trim of Birch or mahogany.

BIRCH has the qualities required of the best furniture woods. Statistics show 59% of all woods used for parlor furniture to be Birch, while combining all lines of furniture, case goods, chairs, fixtures, tables, etc., over 1/5 of the total of 64 kinds of hardwoods consumed is Birch. Susceptible to

many successful finishes, Birch furniture can be had in connection with color schemes to accord with the interior trim, or else the interior trim of Beautiful Birch can readily be treated to harmonize with the furniture.

BIRCH is a hardwood, possessing strength, density and hardness, and for these reasons, lends itself perfectly to the production of any effect or finish which can be applied to any high-grade hardwood.

BIRCH has been so frequently finished in imitation mahogany that many users often think of birch in this respect. However, birch can be finished in a wide variety of beautiful tones, ranging from a rich brown tone to the most delicate tint of gray. These shades are rapidly growing in popularity, and have an individuality on birch peculiarly their own. You can examine them all, and make your selections from the finished birch samples offered by the birch manufacturers free, through the association named below.

BIRCH has small-size pores, and because of this a filler is usually not employed. However, if a dark filler is used, the pores can be made conspicuous, giving the wood an additional handsome figure. Rubbed, waxed and polished finishes give most excellent results with Birch. The user of Beautiful Birch should always remember that he is handling a high-class hardwood, whose peculiar richness of tone and figure is worthy of painstaking treatment. It is of just the right density and texture to form a superior base for white enamel finish for which unselected wood is, of course, used.

BIRCH, in spite of its beauty, strength and hardness is not costly. It compares favorably in price in most localities with many of the other high-class hardwoods.

BIRCH, with its adaptability and uses, is described in a handsome book. The various finishes are shown by wood samples. Any specific information or assistance required will be gladly supplied upon application.

Secretary

Northern Hemlock & Hardwood Manufacturers' Assn., Oshkosh, Wisconsin



Birch Finish 207 B-2
Stained with Bridgeport Standard No. 1883 American Walnut Acid Stain, given a coat of Bridgeport Standard White Shellac, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed eggshell.



Birch Finish 105 D-3
Stained with Bridgeport Standard Brown Oak Penetrating Stain and Waxed Finish, given a coat of Bridgeport Standard White Shellac, and finished with Bridgeport Standard Prepared Wax.



Birch Finish 224 E-1
Stained with Bridgeport Standard Gray Acid Stain, given a coat of Bridgeport Standard No. 3001
Smoked Pearl Toner, and finished with two coats of Bridgeport Standard WonderLac.



Birch Finish 106 B-2
Stained with Bridgeport Standard English Oak Penetrating Stain and Waxed Finish, given a coat of Bridgeport Standard White Shellac, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed eggshell.



Birch Finish 109 C-2
Stained with Bridgeport Standard Brown Mahogany Penetrating Stain, given a coat of Bridgeport Standard Mahogany Primer, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed eggshell.



Birch Finish 302 F-2
Given three coats of Bridgeport
Standard Wheeler's Enamel Undercoating (first coat thinned with a
little Oil), and finished with two
coats of Bridgeport Standard
Wheeler's Ivory Eggshell Enamel.



Birch Finish 108 C-2
Stained with Bridgeport Standard Dark Mahogany Penetrating Stain, given a coat of Bridgeport Standard Mahogany Primer, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed eggshell.



Birch Finish 1 A-2 Filled with No. 1 Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed eggshell.



By GEORGE E. WATSON, Secretary of the Southern Cypress Manufacturers' Association, New Orleans, La., and Jacksonville, Fla.

#### Cypress for Interior Trim

RANTING that you avoid selecting for interior trim a wood that swells unreasonably when it rains, and shrinks provokingly during a dry spell, and warps regardless of anything and everything, and whose fibre or texture, or chemical characteristics or resinous or pitchy nature (or plain "natural perversity") makes staining, painting or varnishing a petty tragedy instead of an artistic triumph —granting, then, that you select for interior trim a wood appropriate to such use, a reliable wood, in short—then the first natural choice one would make is the wood with the finest natural grain; and there is no wood better deserving of critical artistic comparison than Cypress.

The grain found in selected cypress is a study in itself. Most people have an inborn, natural and healthy fondness for the natural grain of wood, and there is scarcely a home, be it ever so humble, that does not contain some tiny piece of natural grain, which is the pride of its possessor. The grain must not all be alike, or it will have the monotonous effect of a sleeping car instead of a home; nor must it be too jar-

ringly different.

We do not mean by this that the natural color of the wood must be preserved, for in many cases the grain of the wood is brought out much more beautifully by the judicious use of stains. Sometimes the natural color is best, but present day tendencies are toward harmonious stains. As a rule, architects prefer to carefully consider judicious color effects in the woodwork; at least, this is true where the architect is to have some voice in the decorations, hangings and, perhaps, furnishings.

The alternating bands of spring and summer wood give to cypress a decided grain when flat-sawn. In many trees there is a marked irregularity or eccentricity of growth that produces remarkable figures of delicate and intricate design. The com-

bination of grain and color renders cypress a desirable wood for interior trim, panels and doors. At least half of the high-grade cypress manufactured is used for this purpose.

By proper staining, cypress woodwork can readily be made to harmonize with the furnishings of any room or rendered some neutral shade that will appear well under all conditions. Penetrating stains can be used to give an even tone to the wood without obliterating the grain or concealing the variations in the natural color. In this way richness of effect and quietness of tone may be secured which does not become tiresome or "get on one's nerves." Another method adaptable to cypress is to rub the stain soon after applying. In this way the stain penetrates only the softer spring wood and is removed from the flaky summer wood which in consequence appears in bolder relief. In every case the instructions of the thoroughly responsible manufacturer of high-grade stains should be scrupulously followed. Cypress woodwork may also be painted or enameled if desired.

Cypress has proved very serviceable for use in kitchens where it is subjected to considerable dampness and heat. It shrinks, swells and warps very little and is used successfully for drainboards, sinks, kitchen and pantry tables, cupboards, kitchen cabi-

nets, and floors.

We think it worth repeating for the benefit of the largest numbers that your first thought in connection with interior woodwork should be the reliable physical character of the species of wood.

Next in importance is its behavior toward paint, stains, oils and varnish. In this connection, the peculiar qualities of Cypress deserve (for your satisfaction and profit) the most careful investigation, and may be relied upon to thereafter justify your unqualified confidence.

Toloralson.

Descriptive Literature will be mailed upon request to the "All-Round Helps Department" of the Southern Cypress Manufacturers' Association, New Orleans, La., or Jacksonville, Fla.



Cypress. Finish 9 A-1
Given a coat of Bridgeport
Standard Wheeler's Silex Liquid
Wood Filler, and finished with
Bridgeport Standard Wheeler's
Interior Varnish, left in the gloss.



Cypress. Finish 106 B-5
Stained with Bridgeport Standard English Oak Penetrating Stain and Waxed Finish, given a coat of B. S. White Shellac, and finished with one coat of B. S. Wheeler's Interior Varnish and one coat of B. S. Wheeler's Flat Varnish.



Cypress. Finish 110 D-3
Stained with Bridgeoort Standard No. 530 Mission Green Penetrating Stain, given a coat of Bridgeport Standard White Shellac, and finished with Bridgeport Standard Prepared Wax.



Cypress. Finish 105 D-3
Stained with Bridgeport Standard Brown Oak Penetrating Stain
and Waxed Finish, given a coat of
Bridgeport Standard White Shellac, and finished with Bridgeport
Standard Prepared Wax.



Cypress, Sugied. Finish Sugied
First given a coat of Bridgeport
Standard WonderLac, then filed
with Special White Wheeler's Wood
Filler, and finished with two coats
of Bridgeport Standard WonderLac.



Cypress. Finish 108 C-5
Stained with Bridgeport Standard Dark Mahogany Penetrating Stain, given a coat of Bridgeport Standard Mahogany Primer, and finished with one coat of Bridgeport Standard Wheeler's Interior Varnish, and one coat of Bridgeport Standard Wheeler's Flat Varnish.



Cypress. Finish 225 E-1
Given a coat of Bridgeport
Standard No. 2006 Acid Stain
Evener, followed by one coat of
Bridgeport Standard No. 2007
Steel Gray Acid Stain. Given a
coat of Bridgeport Standard No.
3004 Steel Gray Toner, and finished
with two coats of Bridgeport
Standard WonderLac.



Cypress. Finish 107 D-3 Stained with Bridgeport Standard Flemish Oak Penetrating Stain and Waxed Finish, given a coat of Bridgeport Standard White Shellac, and finished with Bridgeport Standard Prepared Wax.



#### Douglas Fir



#### As a Structural Wood and as a Finish

By ROBERT B. ALLEN, Secretary West Coast Lumbermen's Association, Inc., Seattle, Wash.

The following is an extract from a report recently made by the United States Forest Service:

"Douglas Fir may perhaps be considered as the most important of American woods. Its rapid growth in the Pacific Coast forests, its comparatively wide distribution, and the great variety of uses to which its wood can be put, place it first. It is very extensively used in the building trade; by the railroads in the form of ties, piling, car and bridge material, and by many of the manufacturing industries of the country, and as a structural timber it is not surpassed and probably is most widely used and known in this capacity."

Douglas Fir exceeds in strength every other American structural timber, strength governed by density directly proportional to weight. It is this quality of light weight and great strength that has caused the United States government and its Allies to use Douglas Fir extensively for wing spars in battle, bombing and training planes. It also is one of the principal woods used in wood ship construction. Eliminating the factor of lightness in weight, Douglas Fir has strength equal to that of the world's strongest softwoods.

Many of the best homes in America today are built of Douglas Fir throughout, with the exception of the roofs, which are of Red Cedar Shingles. The strength and durability which makes Douglas Fir so desirable for heavy construction work, make it equally adaptable for all exterior uses—such as Siding, Stepping, and Columns. It takes paints and stains readily and uniformly; it resists the action of the weather and appears well throughout its length of service. While the value of a wood for construction purposes and exterior uses is of great importance, the chief interest of the home-builder must be in the interior finish, for the quality of this will play an important part in the attractiveness and comfort of the house. The woodwork must have life and character, for the finish often betrays the temperament and taste of the owner; it must have a grain which is prominent and distinctive, yet varied.

The value of Douglas Fir finishing lies in its beautiful grain, a grain which is different from that of any other wood, and different in each individual board. The variety and beauty of the figures and grain effects found in this wood are unsurpassed. The grain, though prominent, is soft and beautiful in appearance—the pleasing characters in the wood seem ever new and untiring to the eye, and make an appeal to the most conservative person. The immense size and fine growth of these old Fir Trees make it possible to secure any quantity of clear material for paneling free from blemish. The paneling rails should be of edge grain material, and the panel of flat grain material, thus bringing out the beauty of the grain and finish. It can be finished

with any desired design and grain effect, to harmonize with the general design of the home. Various shades of brown are most generally used, but Fir also takes beautiful shades of soft greys and greens. This wood can be worked with ease, finishes smoothly, and does not mar readily. It takes and holds any good stain, and presents a finished appearance which is surprisingly beautiful and distinctive. The substitution of Douglas Fir for some of the more costly hardwoods has been aided by its unusual beauty, combined with its considerably lower cost. Fir may be either stained or enameled; stain-finished may be shellacked, varnished, or waxed. Before finishing, the wood should be thoroughly kiln-dried.

As a finish wood, selected for grain, Old Growth Douglas Fir should be used throughout.

It is possible to produce paneling unsurpassed in

beauty from rotary cut veneer, or flat grain veneer Fir. In cutting large logs, the two pieces next to the saw are opened out and matched for grain, thus forming a balanced panel which, when framed in vertical grain rails, produces a wonderfully attractive appearance.

The Flat Grain Clear lumber produces many pleasing figures, and the contrast between the spring

and summer wood is unusually attractive.

All Clear Fir Finish takes stain well, and by staining the beauty of the grain may be more prominently emphasized. Fir Finish for Door and Window Casing, Base Boards, and all kinds of Panel Work, now is a well-known commodity

throughout the country.

While Fir for interior finish is growing in popularity, it is probable that this wood is best known among home builders for its wide use as Vertical Grain Flooring, which, for beauty and utilitarian purposes, is unsurpassed. A good flooring material must not only be hard, but it must be tough and of uniform grain, so as to wear evenly and without splintering. It must be readily workable, and take a smooth finish, if it is to meet its full requirements as a residence floor. Douglas Fir measures up to all of these qualifications. In many homes of the Pacific Coast, Douglas Fir Vertical Grain Flooring is preferred to hardwood flooring.

Secretary,

West Coast Lumbermen's Association, Inc., Seattle, Wash.



Douglas Fir. Finish 106 B-3 Stained with Bridgeport Standard English Oak Penetrating Stain and Waxed Finish, given a coat of Bridgeport Standard White Shellac, and finished with Bridgeport Standard Prepared Wax.



Douglas Fir. Finish 8 B-1 Given a coat of Bridgeport Standard Wheeler's Liquid Wood Filler and finished with Bridgeport Standard Wheeler's Interior Varnish, left in the gloss.



Douglas Fir. Finish 105 B-2
Stained with Bridgeport Standard Brown Oak Penetrating Stain and Waxed Finish, given a coat of Bridgeport Standard White Shelac, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed egg shell.



Douglas Fir. Finish 107 D-3
Stained with Bridgeport Standard Flemish Oak Penetrating Stain and Waxed Finish, given a coat of Bridgeport Standard White Shellac and finished with Bridgeport Standard Prepared Wax.



Douglas Fir. Finish 112 D-3 Stained with Bridgeport Standard R. Y. Golden Oak Penetrating Stain, given a coat of Bridgeport Standard White Shellac, and finished with Bridgeport Standard Prepared Wax.



Douglas Fir. Finish 211 E-1
Given two coats of Bridgeport
Standard No. 2005 Satin Brown
Acid Stain, the first coat acts as an
evener. Given a coat of Bridgeport Standard No. 3003 Satin
Brown Toner, and finished with
two coats of Bridgeport Standard
WonderLac.



Douglas Fir. Finish 108 C-5
Stained with Bridgeport Standard Dark Mahogany Penetrating
Stain, given a coat of Bridgeport
Standard Mahogany Primer, and
finished with one coat of Bridgeport Standard Wheeler's Interior
Varnish, and one coat of Bridgeport
Standard Wheeler's Flat Varnish.



Douglas Fir. Finish 209 E-1
Given two coats of Bridgeport
Standard No. 2001 Smoked Pearl
Acid Stain, the first coat acts as an
evener. Given a coat of Bridgeport Standard No. 3001 Smoked
Pearl Toner, and finished with two
coats of Bridgeport Standard
WonderLac.

By C. E. VAN CAMP, Manager, Gum Department, American Hardwood Manufacturers' Association, Memphis, Tenn.

WE Americans have been so inclined to accept the theoretical superiorities of foreign products that it is now and then helpful to our pride to realize that Europe has been ahead of us in admitting a superior appreciation to a native American product that until recently was overlooked by us in our search for beauty and adaptability in cabinet woods.

European countries were first in this recognition of the fine qualities of Red Gum, or as it was generally termed "Satin Walnut," and for many years it has been put in the same class as Circassian Walnut, Mahogany, and Black Walnut. In many instances, the finished product brought prices equal to or greater than was obtained for the other woods mentioned.

Americans travelling abroad were astonished to see the beautiful effects produced with Red Gum by European cabinet makers, and interest was thus created at home, and the American Hardwood Manufacturers' Association was organized for developing and promoting its use. Their success has been phenomenal, and today Red Gum ranks as a leading cabinet wood at home as well as abroad, and in every way meets the popular taste for fine furniture and interior woodwork.

It is doubtful if the natural grain of any other wood may be converted merely by a stain to so closely resemble as great a variety of other woods; in fact, Red Gum is virtually the "Mocking Bird" of the Southern forests.

Red Gum, selected for figure, closely resembles Circassian Walnut, and many other stains such as American Walnut,

Mahogany, Silver Gray, etc., may be applied with entire success and very gratifying results.

Red Gum, finished natural, however, is rapidly growing in favor, and the Architect or Designer has a wide latitude for taste and individuality in its use. Selections of lumber or veneer may be made to meet special requirements, either of highly figured or plain wood, quarter-sawed or plain sawed.

Leading Architects in all parts of the country are specifying Red Gum for their finest architectural work.

It has rapidly come to the front as a desirable wood for fine interiors and many of the newest and most magnificent hotels and churches possess Red Gum trim and doors.

The owners of apartments find that apartments rent more readily and at a better price where Red Gum finish is used for the interior woodwork. The first reason for this is the attractiveness of the wood itself, and the next is that natural finished Red Gum does not show dust or finger marks, and is more easily kept clean than any other hardwood finish. What is said of apartment houses is also true of dwellings and bungalows.

The American Hardwood Manufacturers' Association will take pleasure in sending to anyone interested in Red Gum, a brochure illustrating the various effects produced by the different methods of manufacturing Red Gum. In this brochure are given the terms which should be used in specifying individual requirements to avoid misunderstanding and confusion.

 $M_{anager}$ 

Gum Dept., American Hardwood M'f'rs' Association, Memphis, Tenn.



Plain Red Gum. Finish 224 E-1 Stained with Bridgeport Standard Gray Acid Stain, given a coat of Bridgeport Standard No. 2001 Smoked Pearl Toner, and finished with two coats of Bridgeport Standard WonderLac.



Quartered Red Gum. Finish
1 A-2
Filled with No. 1 Wheeler's
Wood Filler, and finished with
Bridgeport Standard Wheeler's
Interior Varnish rubbed egg shell.



Quartered Red Gum. Finish 113 C-2 Stained with Bridgeport Standard No. 2090 Light Mahogany Penetrating Stain, given a coat of B.S. Mahogany Primer, and finished with B. S. Wheeler's Interior Varnish, rubbed egg shell.



Plain Red Gum. Finish 1 A-2 Filled with No. 1 Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed egg shell.



Plain Red Gum. Finish 208 B-2 Stained with Bridgeport Standard No. 1893 American Walnut Acid Stain, guven a coat of Bridgeport Standard White Shellac, and fuished with Bridgeport Standard Wheeler's Interior Varnish rubbed egg shell.



Plain Red Gum. Finish 108 C-5 Stained with Bridgeport Standard Dark Mahogany Penetrating Stain, given a coat of Bridgeport Standard Mahogany Primer, and finished with one coat of Bridgeport Standard Wheeler's Interior Varnish, and one coat of Bridgeport Standard Wheeler's Flat Varnish.



Plain Red Gum. Finish 302 F-2
Given three coats of Bridgeport
Standard Wheeler's Enamel Undercoating (first coat thinned with
a little oil) and two coats of Bridgeport Standard Wheeler's lvory
Egg-shell Enamel.



Quartered Red Gum. Finish 114 D-3 Stained with Bridgeport Standard No. 2303 Circassian Walnut, Penetrating Stain, given a coat of Bridgeport Standard White Shellac, and finished with Bridgeport Standard Prepared Wax.

#### Oak: Its Growth and Uses

By J. T. KENDALL, Manager, Oak Department, American Hardwood Manufacturers' Association, Memphis, Tenn.

#### Oak Used from Time Immemorial

AK has been regarded as the King of the forest from the earliest days. There are hundreds of thousands of buildings in the United States and Europe in which Oak doors, trim, paneling, furniture, etc., have been used. The old Baronial castles and ancestral seats in Europe are finished in Oak. After many centuries of dignified and unchallenged supremacy, Oak remains today the world's premier hardwood. Oak is the most

useful of all hardwoods and is used for more purposes than any other hardwood. It is strong, tough, enduring and beautiful. The possibilities of Oak are almost infinite; it is good for almost everything for which wood is used. It is our best wood for furniture manufacturing, doors, interior trim, paneling, flooring, agricultural implements, car building, ship building, general construction, vehicle stock, cooperage, and hundreds of other uses.

#### Oak Pioneer Hardwood

The manufacture of Oak into lumber was a pioneer phase of the hardwood industry of the country. Manufacturers of Oak lumber have profited by many years' experience, long training, and mechanical appliances of the very best. Expert knowledge is required in every process of manufacturing Oak lumber. The felling of the

trees in the forest, the transportation of the timber to the sawmill, the selection of logs, by size and quality, according to certain specified methods of sawing, the reduction into lumber itself, the proper piling and seasoning—all receive the most careful attention at the hands of Oak Manufacturers.

#### Quarter Sawed Oak

The medullary rays of no wood in the world are more utilized to commercial advantage than those of the Oak. Quarter-sawing is for the purpose of bringing them out; they are the bright streaks, clearly visible to the naked eye, in the end of an Oak log, radiating from the center outward like the

spokes of a wheel. By quarter-sawing the rays are cut edgewise and appear as bright streaks or flakes, often called mirrors on the surface of the board. This method of sawing is what produces the beautiful figure in quarter-sawed Oak.

#### The Home-Builder

In planning a home one cannot be too careful of the wood selected for furniture, doors, interior trim, paneling and flooring. The most attractive and restful homes are never gaudy, never fantastic. The use of Oak throughout the interior of a home strikes the very top note of refinement and is effecting true art in home-building. Oak is charming in its simplicity; it is a wood of appealing qualities, pleasing appearance and quiet tones. Oak is the staunchest of all hardwoods and will be in style and good taste for all time to come. Furniture made of this very rich and handsome wood expresses luxury and affluence, and has a beauty that endures. It is not too costly and will be liked always. The use of Oak flooring, the flooring of quality, distinctiveness, and durability, imparts a cheerful and friendly atmosphere to home surroundings. By using Oak in every part of the interior of the dwelling, the furniture and woodwork will harmonize beautifully, and will add attractiveness, restfulness, coziness, and a note of beauty and pleasantness to the home that will be lasting.

#### Oak Doors and Interior Trim for Public Buildings

Oak doors and interior trim for public buildings are desired by the well informed, not only because of Oak's historic excellence as a cabinet wood and its all around dependability, but also because, by reason of respectful familiarity, there is an inbred accuracy in handling Oak among those who

work in woods. Oak is a genuine hardwood and is our most enduring wood, and there is no wood which will withstand the very hard usage to which doors, interior trim, floorings, paneling and furniture are put to in public buildings, as does Oak.



J. Hendall

Manager,
Oak Depa

American Hardwood Manufacturers' Association



Quartered White Oak. Finish I A-2 Filled with No. 1 Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed egg shell.



Quartered White Oak. Finish 2 A-2 Filled with No. 3 Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed egg shell.



Quartered White Oak. Finish 201 E-1 Stained with Bridgeport Standard Gray Acid Stain, and finished with two coats of Bridgeport Standard WonderLac.



Quartered White Oak. Finish
106 D-3
Stained with Bridgeport Standard English Oak Penetrating Stain
and Waxed Finish, given a coat of
Bridgeport Standard White Shellac,
and finished with Bridgeport Standard Prepared Wax.



Quartered White Oak. Finish 213 H-1 Stained with Bridgeport Standard No. 1000 Fumed Oak Acid Stain, filled with Special White Wheeler's Wood Filler, and finished with Bridgeport Standard Prepared Wax.



Quartered White Oak. Finish 206 E-1 Stained with Bridgeport Standard No. 1000 Fumed Oak Acid Stain, and finished with two coats of Bridgeport Standard WonderLac.



Quartered White Oak. Finish 116 A-2 Stained with Bridgeport Standard R. Y. Golden Oak Penetrating Stain, filled with No. 3 Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed egg shell.



Quartered White Oak. Finish
115 D-1
Stained with Bridgeport Standard No. 25 Standard Jacobean Oak
Penetrating Stain, given a coat of
one-half Orange and one-half White
Shellac, and finished with one coat
of B. S. Wheeler's Flat Varnish.
(Conlinued on page 28)



Quartered White Oak, Finish
118 D-3
Stained with Bridgeport Standard Weathered Oak Penetrating
Stain and Waxed Finish, filled
with No. 10 Wheeler's Wood Filler,
given a coat of B. S. White Shellac,
and finished with B. S. Prepared Wax.



Quartered White Oak. Finish
212 H-1
Stained with Bridgeport Standard Gray Acid Stain, filled with Special White Wheeler's Wood Filler, and finished with Bridgeport Standard Prepared Wax.



Quartered White Oak, Finish 107 D-3 Stained with Bridgeport Stand-ard Flemish Oak Penetrating Stain and Waxed Finish, given a coat of Bridgeport Standard White Shel-lac, and finished with Bridgeport Standard Prepared Wax.



Plain Red Oak. Finish 2 A-2 Filled with No. 3 Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed egg shell.



Plain Red Oak. Finish 3 A-2 Filied with Golden Oak Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed egg shell.



Plain Red Oak. Finish 1 A-2 Filled with No. 1 Wheeler's Wood Filler and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed egg shell.



Plain Red Oak. Firish 206 E-1 Stained with Bridgeport Stand-ard No. 1000 Funned Oak Acid Stain, and finished with two coats of Bridgeport Standard WonderLac.



Plain White Oak. Finish 201 E-1 Stained with Bridgeport Stand-ard Gray Acid Stain and finished with two coats of Bridgeport Standard WonderLac.

#### Why Use Wood?

By JOHN H. KIRBY, President, The National Lumber Manufacturers' Association, Chicago, Ill.

WOOD has always been one of the most important structural materials, and, despite substitutes of many kinds, the intrinsic properties of wood are such that it will continue in favor long into the future. Some of the reasons why wood construction and articles made of wood give satisfaction and service are:

- (1) Its general availability. Wood is a natural product more widely distributed and more easily obtainable than any other structural material which the earth affords. The multiplicity of purposes for which it is used is surprising, even to those best informed upon the subject.
- (2) Wooden structures can be altered and moved, or built over, more easily and cheaply than can structures of any other material.
- (3) Wood is very strong for its weight, compared with other structural materials. The average weight of the wood ordinarily used is some 30 pounds per cubic foot; that of iron and steel is 14 to 15 times as much. This is a great advantage in handling. A bar of hickory greatly surpasses in tensile strength a bar of steel of the same weight and length. Similarly, a block of hickory or longleaf pine will sustain a much greater weight in compression than a block of wrought iron of the same height and weight. Indeed, practically any piece of sound, straight-grained, dry wood is stronger than steel, weight for weight. Moreover, wood will sustain a far greater distortion of shape than metal, without suffering permanent injury; while, of course, no such distortion can be sustained by either concrete or clay products.
- (4) Wood is easily worked with common tools, while to work the metals requires special tools and much power and time. Anyone with saw and plane and auger can build a structure of wood; an iron worker is a skilled mechanic. His services come high.
- (5) Wood is a non-conductor of heat and electricity, as compared with metal; and of moisture, as compared with ordinary concrete and brick. These are points for serious consideration in home-building. They also explain why we prefer to sit on wooden seats, work at wooden desks and eat at wooden tables.
- (6) Wood does not contract and expand with changes of temperature, while its tendency to shrink and swell with atmospheric conditions can be completely overcome by proper seasoning and painting; hence wood can be made to "stay where it is put."
- (7) Wood has a varied and beautiful figure with which no other material can hope to compete, for furniture, house trim, and general decorative purposes. It gives a comfortable, homey atmosphere that can be obtained in no other way.
- (8) Wood offers a combination of strength, toughness, and elasticity not possessed by any other material. Imagine, if one can, a baseball bat, a golf club, or an ax handle of anything but wood.

The installation, in principal cities, by the Bridgeport Wood Finishing Works, of permanent exhibits of all the leading woods carrying a variety of stains and finishes, will be most helpful to architects and builders. Everyone likes to see in advance what effect he can expect if he chooses a certain wood finished in a certain way, and this is exactly what he can do with the assistance of these excellent exhibits.



Most Birby

President

The National Lumber Manufacturers' Association, Chicago, Ill.

The well-known Fairbanks House in Dedham, Mass., built in 1636, still standing and still occupied. There are hundreds of wood houses over a century old. The wonderful lasting qualities of wood, when properly painted, are now more appreciated than ever. One of the best illustrations of this is the George Washington residence at Mount Vernon, built in 1743.

#### North Carolina Pine

By W. B. ROPER, Secretary-Treasurer, The North Carolina Pine Association, Norfolk, Va.

THE uses of North Carolina Pine are exceedingly varied. In the better grades it goes mostly into interior finish, ceiling, trim, flooring, doors, weather boarding, etc., for which purposes it is eminently fitted.

It has a beautiful natural grain, varying from straight to extremely curly, the figure of which is brought out prominently by finishing in the natural color or in stains. The nature of the wood renders it peculiarly receptive of stains, paints, and varnishes. The most fastidious home-builder or architect can secure results with this wood that will please the artistic sense and delight the eye. He can arrange his decorative scheme for the entire house, confident that the woodwork will be harmonious and charming.

For rooms where the color scheme demands white enamel and the grain of the wood is of no moment, North Carolina Pine still presents indisputable claims for its use. It forms a perfect base for paint, and has been found to retain White Enamel in its pristine glossy whiteness for years without any special treatment. The same sort of treatment that is accorded any other soft wood is suitable for this versatile wood. It contains nothing in its fibre to repel or prevent the absorption of the ingredients and hold the paint.

In a booklet on "The Southern Pines," issued by the Forest Service (Circular No. 164), there appears the following paragraph, relative to the uses and properties of North Carolina Pine: "Shortleaf and Loblolly (North Carolina Pine) are used principally for building lumber, such as interior finish, flooring, ceiling, frames and sashes, wainscoting, weather boarding, joists, lath, and shingles; \* \* \* \* The wood of shortleaf pine is especially fitted to the work of the small carpenter, because of its comparative freedom from resinous matter, its stiffness and its ease of working."

For floors this wood is well fitted by nature.

While classed among the soft woods, it has great inherent strength and stiffness, and the grain is hard enough to give it good wearing qualities and resistance to heel prints and scratches. Its appearance when finished with wax, with or without stain, is most attractive. The flooring is made both in "Flat Grain" and "Rift Grain." The "Rift" is better for floors where the service is apt to be heavy, as it will resist wear much better than the "Flat." Note what Uncle Sam has to say on the subject of flooring in another of the Forest Service Bulletins (Circular No. 99)—"Inside and outside trim for houses is manufactured from short-leaf pine. It is widely used for flooring and is recommended both by appearance and because of its wearing qualities. It responds readily to oils, wax, and other floor finishes and dressings."

For exterior purposes, there is no wood that will resist decay and wear indefinitely. Unless the heart of the wood is used, the elements will eventually conquer it, but if kept properly protected with paint, almost any good wood will last a lifetime. We do not recommend the use of North Carolina Pine where it comes in contact with the ground, unless the heart is used, or a preservative is applied. For other outside uses it is fitted, and experience has shown that it will outlast the usual span of human life by many years. There are many homes of pre-Revolutionary days yet in use to attest this statement. The most notable of these is in Mount Vernon, the home of Washington, built in 1743. With the exception of the frame, which is of hewn white oak, this house was constructed of North Carolina Pine, and practically all of the woodwork now in the building is the original material. Even the siding, or weatherboarding, is mostly intact. In Williamsburgh, the old colonial capital of Virginia, are many handsome specimens of colonial days, as well as at Yorktown, where Cornwallis surrendered, and at Fredericksburg, where Mary Washington's home still stands. Citations could be made to a number of other interesting old homes, but "enough is as good as a feast," and these should suffice to prove that with proper care, a house built of North Carolina Pine will last long enough. The facts outlined above prove conclusively also that the title "The Wood Universal" is justly earned.

Moder Secretary-Treasurer

The North Carolina Pine Association, Norfolk, Va.



North Carolina Pine. Finish
106 B-5
Stained with Bridgeport Standard English Oak Penetrating Stain
and Waxed Finish, given a coat of
B. S. White Shellac, and finished
with one coat of B. S. Wheeler's
Interior Varnish and one coat of
B. S. Wheeler's Flat Varnish.



North Carolina Pine. Finish 106 D-3 Stained with Bridgeport Stand-ard Flemish Oak Penetrating Stain and Waxed Finish, given a coat of Bridgeport Standard White Shellac, and finished with Bridgeport Stand-ard Prepared Wax. ard Prepared Wax.



North Carolina Pine. Finish

210 E-1

Given a coat of Bridgeport
Standard No. 2003 Acid Stain
Evener, followed by one coat of
B. S. No. 2004 Satin Gray Acid
Stain, given a coat of B. S. No. 3002
Satin Gray Toner, and finished
with two coats of B. S. WonderLac.



North Carolina Pine. Finish
105 D-3
Stained with Bridgeport Standard Brown Oak Penetrating Stain
and Waxed Finish, given a coat of
Bridgeport Standard White Shellac, and finished with Bridgeport
Standard Prepared Wax.



North Carolina Pine. Finish

211 E-1

Given two coats of Bridgeport Standard No. 2005 Satin Brown Acid Stain, the first coat acts as an evener. Given a coat of B. S. No. 3003 Satin Brown Toner, and finished with two coats of B. S. WonderLac.



North Carolina Pine. Finish 8 A-1
Given a coat of Bridgeport Standard Wheeler's Liquid Wood Filler, and finished with Bridgeport Standard Wheeler's Interior Varnish left in the gloss.



North Carolina Pine. Finish
108 C-5
Stained with Bridgeport Standard Dark Mahogany Penetrating
Stain, given a coat of Bridgeport
Standard Mahogany Primer, and
finished with one coat of Bridgeport Standard Wheeler's Interior
Varnish and one coat of Bridgeport
Standard Wheeler's Flat Varnish.



North Carolina Pine. Finish
209 E-1
Given two coats of Bridgeport
Standard No. 2001 Smoked Pearl
Acid Stain, the first coat acts as an
evener. Given a coat of Bridgeport Standard No. 3001 Smoked
Pearl Toner, and finished with two
coats of Bridgeport Standard
WonderLac.



#### Southern Pine

#### An "All-Purpose" Building Material





SOUTHERN Pine is a wood universally esteemed for its strength and durability for house framing and exterior trim, but its suitability for the finest interior finish is not so fully appreciated as it should be. Since it is the lowest priced of all our high-grade building woods, it is well worth the while of every home builder to familiarize himself with its adaptability as an "all-purpose" material.

While Southern Pine has the easy working qualities that give it rating as a soft wood, it has a compact, even texture that fits it for use in the finest joinery. It takes and holds perfectly paints, enamels, stains and varnishes, so there is no effect of tone or color in interior finish and trim beyond the possibilities of wood so used. The varied and beautiful grain makes it particularly suitable for staining or finishing in its natural color. Manufactured in edge-grain ("quarter-sawed") material, it makes a floor that in durability and appearance is entitled to rank with the hardwoods long used for such purposes.

Every year the consumption of Southern Pine lumber for every requirement of home-building is increasing, particularly as its superior qualities as interior trim and finish win recognition. "In a large part of the country," says Bulletin 99 of the United States Forest Service, "it is so universally used that there are few places of importance it does not fill." In enumerating specific uses for this wood the Government bulletin further says:

"It is widely used for flooring, and is recommended both by appearance and because of its wearing qualities. It responds readily to oils, wax and other floor finishes and dressings. It answers equally well as wainscoting and ceiling, for chairboards, baseboards, brackets, molding, cornice roseblocks, ornaments, carved work, spindles, balusters, railing, stairs and panels. Window frames and frames for doors, and the doors themselves, and sash are largely manufactured from this wood."

A tremendous impetus has been given the use of Southern Pine for interior trim by recent improvements in the methods of treating it with stains, paints and enamels. It has long occupied a position of first importance for interior use in home building where its natural light color is in harmony with the decorative scheme employed; in some instances, however, other and more expensive materials are employed to maintain darker and more varied effects. Southern Pine can readily be stained any desired tone or color.

The paint manufacturers realized that Southern Pine was of such importance that it merited special study, so that with the purchase of the best materials it is now possible to stain Southern Pine any desired shade, thereby retaining all the natural beauty of the grain of the wood.

The quality and beauty of Southern Pine fit it for use in the most pretentious homes, while its availability and moderate cost make it the main dependence of builders of modest means. An idea of its adaptability for interior trim may be had from sample panels of the wood showing a variety of beautiful finishes, which we will gladly send you upon request. Address J. E. Rhodes, Secretary-Manager, Southern Pine Association, Interstate Bank Bldg., New Orleans, La.

Khocles
Secretary-Manager

Southern Pine Association, New Orleans, La.



Southern Yellow Pine. Finish
105 D-3
Stained with Bridgeport Standard Brown Oak Penetrating Stain
and Waxed Finish, given a coat of
Bridgeport Standard White Shellac, and finished with Bridgeport
Standard Prepared Wax.



Southern Yellow Pine. Finish

209 E-1

Given two coats of Bridgeport
Standard No. 2001 Smoked Pearl
Acid Stain, the first coat acts as an
evener. Given a coat of B. S.
No. 3001 Smoked Pearl Toner, and
finished with two coats of B. S.
WonderLae.



Southern Yellow Pine, Finish 106 B-5
Stained with Bridgeport Standard English Oak Penetrating Stain and Waxed Finish, given a coat of Bridgeport Standard White Shellac, and finished with one coat of Bridgeport Standard Wheeler's Interior Varnish and one coat of Bridgeport Standard Wheeler's Flat Varnish.



Southern Yellow Pine. Finish 107 D-3 Stained with Bridgeport Stand-ard Flemish Oak Penetrating Stain and Waxed Finish, given a coat of Bridgeport Standard White Shel-lac, and finished with Bridgeport Standard Prepared Wax.



Southern Yellow Pine. Finish Southern Yellow Pine. Finish 8 A-1
Given a coat of Bridgeport Standard Wheeler's Liquid Wood Filler, and finished with Bridgeport Standard Wheeler's Interior Varnish, left in the gloss.



Southern Yellow Pine. Finish 211 E-1
Given two coats of Bridgeport Standard No. 2005 Satin Brown Acid Stain, the first coat acts as an evener. Given a coat of B. S. No. 3003 Satin Brown Toner, and finished with two coats of B. S. WonderLac.



Southern Yellow Pine. Finish
108 C-5
Stained with Bridgeport Standard Dark Mahogany Penetrating
Stain, given a coat of Bridgeport
Standard Mahogany Primer, and
finished with one coat of Bridgeport Standard Wheeler's Interior
Varnish, and one coat of Bridgeport
Standard Wheeler's Flat Varnish.



## California Redwood

"Nature's Lumber Masterpiece"

By S. W. McCANN, Secretary and Manager, California Redwood Association, San Francisco, Cal.

ALIFORNIA Redwood is the commercial lumber product of the "Sequoia Sempervirens"—one of the species of the big trees of the Pacific Coast. It is widely used in that section, and although heretofore it has not been extensively used in the East, its use in the eastern section of the country is rapidly growing as its excellent qualities are becoming better known.

It has remarkable possibilities for use as interior trim. It possesses a beautiful figure of even sameness and color. Its rich, reddish tone makes possible many very attractive effects in stain or natural finish, and its close grain and freedom from pitch makes an excellent base for enamel. Its freedom from shrinkage and swelling tends to insure against unsightly cracks in enameled work.

The great age of the trees—ranging from 800 to 2,000 years—endows Redwood with wonderful preservative qualities, giving the wood a kind of natural seasoning which prevents warping or splitting and which makes it resist decay to a remarkable degree.

The great size of the trees affords another advantage in the astonishing widths of the lumber. It is no unusual thing to see Redwood panels five

feet wide. These wide panels keep their position without either shrinking or swelling—a peculiar characteristic of California Redwood.

California Redwood is slow to ignite, and for that reason is one of the safest materials for wooden houses.

It is soft of texture, ranging in color from a light cherry to a dark mahogany in the heart wood; is obtainable in a variety of grains; and the clear grades are absolutely free from knots or blemishes.

The physical properties of redwood are its ease of working, freedom from pitch, splitting readily and evenly and holding nails well. It is an excellent wood for wainscoting, ceiling, casing, moulding, doors, paneling and shelving.

Secretary and Manager
California Redwood Association,
San Francisco, Cal.



Entrance Hall, Residence of Mr. Junius H. Browne, Los Angeles. Mr. E. Russel Ray, Architect, Santa Barbara. All Redwood, done in its Natural Tones with Wax Finish.



California Redwood. Finish 110 D-3 Stained with Bridgeport Stand-ard 530 Mission Green Penetrating Stain, given a coat of Bridgeport Standard White Shellac, and fin-ished with Bridgeport Standard Prepared Wax.



California Redwood. Finish
211 E-1
Given two coats of Bridgeport
Standard No. 2001 Smoked Pearl
Acid Stain, the first coat acts as an
evener. Given a coat of Bridgeport Standard No. 3001 Smoked
Pearl Toner, and finished with two
coats of Bridgeport Standard
WonderLac.



California Redwood. Finish 224 E-1 Stained with Bridgeport Stand-ard Gray Acid Stain, given a coat of Bridgeport Standard No. 3001 Smoked Pearl Toner, and finished with Bridgeport Standard Wonder-Lac.



California Redwood. Finish
105 B-5
Stained with Bridgeport Standard Brown Oak Penetrating Stain
and Waxed Finish, given a coat of
Bridgeport Standard White Shellac,
and finished with one coat of
Bridgeport Standard Wheeler's
Interior Varnish, and one coat of
Bridgeport Standard Wheeler's
Flat Varnish.



California Redwood. Finish 108 C-5
Stained with Bridgeport Standard Dark Mahogany Penetrating Stain, given a coat of B. S. Mahogany Primer, and finished with one coat of B. S. Wheeler's Interior Varnish, and one coat of B. S. Wheeler's First Varnish.



California Redwood. Finish E-1
Given two coats of Bridgeport Standard WonderLac. Note:
WonderLac is a colorless liquid
which forms a protective dampproof coating which does not in the
least change the color or the
natural beauty of the wood.



California Redwood. Finish
210 E-1
Given a coat of Bridgeport
Standard No. 2003 Acid Stain
Evener, followed by one coat of
B. S. No. 2004 Satin Gray Acid
Stain. Given a coat of B. S. No.
3002 Satin Gray Toner and finished
with two coats of B. S. WonderLac.

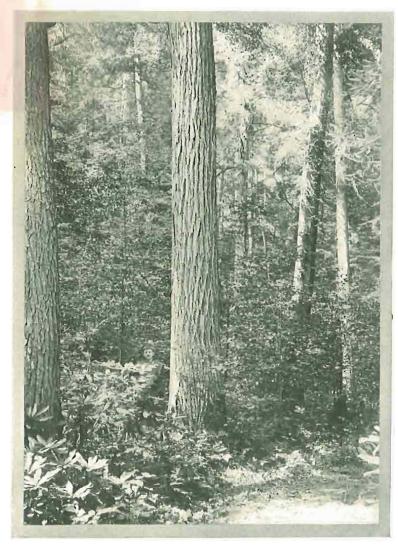


California Redwood. Finish 107 D-3
Stained with Bridgeport Standard Flemish Oak Penetrating Stain and Waxed Finish, given a coat of Bridgeport Standard White Shellac, and finished with Bridgeport Standard Prepared Wax.

### Chestnut and Ash

open grain. Like oak, it requires filling before the application of the varnish coats. It is a plain but very attractive wood. Its rather pronounced figure makes it readily adaptable for large, plain surfaces without elaborate ornamentation. Chestnut, in general, takes about the same finishes as oak, and therefore, the same general treatment. It is largely used for fumed "mission" furniture and is equally valuable for interior woodwork.

ASH is a distant relative of oak. Its treatment is substantially the same. It is coarser and lighter than oak, and, although not so attractive a wood, some very beautiful and striking stained effects can be obtained with it. Being open grained, it requires filling for the finishing coats. It is a somewhat difficult wood to work and is therefore hard on tools, but has its compensations in being one of the less expensive woods.



Chestnut trees growing in the forest. The beauties of Chestnut for interior woodwork, when finished with Bridgeport Standard Wood Finishes, are abundantly demonstrated by the color illustrations on the opposite page.



Chestnut. Finish 2 A-2 Filled with No. 3 Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed egg shell.



Chestnut. Finish 201 E-1 Stained with Bridgeport Standard Gray Acid Stain, and finished with two coats of Bridgeport Standard WonderLac.



Chestnut. Finish I A-2 Filled with No. 1 Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed egg shell.



Chestnut. Finish 212 H-1 Stained with Bridgeport Standard Gray Acid Stain, filled with Special White Wheeler's Wood Filler, and finished with Bridgeport Standard Prepared Wax.



Chestnut. Finish 206 E-1 Stained with Bridgeport Standard No. 1000 Fumed Oak Acid Stain, and finished with two coats of Bridgeport Standard WonderLac.



Ash. Finish 209 E-1
Given two coats of Bridgeport
Standard No. 2001 Smoked Pearl
Acid Stain, the first coat acts as an
evener. Given a coat of Bridgeport Standard No. 3001 Smoked
Pearl Toner, and finished with two
coats of Bridgeport Standard
WonderLac.



Ash. Finish 3 A-2 Filled with Golden Oak Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed egg shell.



Ash. Finish 1 A-2 Filled with No. 1 Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Interior Varnish rubbed egg shell.

## Hemlock

EMLOCK is divided in two classifications, "Eastern" and "Western" Hemlock. The Western Hemlock is regarded as the better. Its qualities are summed up by the United States Forestry Service in a bulletin as follows: "Western Hemlock is best adapted for uses which require ease of working, handsome finish and lightness combined with considerable strength . . . taking a high polish, free from pitch, and, when properly sawed, showing a beautiful grain; it is an excellent wood for wainscoting, panels and newels."

Hemlock is low-priced, economical and durable. It is not subject to dry rot. Millions of Hemlock cross-ties are used by the railroads yearly, and most of these are laid without any preservative treatment, which is a good indication of the life of Hemlock

under hard service.

Hemlock affords a firm grip for nails, and when nailed in place it is there to stay. The fact that it is light in weight, yet strong for its weight, easily handled "on the job" and easily worked with tools, makes it one of the most extensively used woods in building construction. Its freedom from pitch tends to prevent blistering of paint. While Hemlock is used principally for rafters, roof boards, studding, lath, joists, sheathing and underflooring, and while it does not pretend to fill the place of many more costly woods, modern methods of finishing interior woodwork make it possible to produce very attractive effects on Hemlock. The color illustrations on this page show the possibilities of Hemlock for interior woodwork when properly finished.

The Hemlock Manufacturers, Oshkosh, Wis., issue a series of books which will be sent free on request, describing "Old Faithful" Hemlock and illustrating plans for the use of this lumber for Town Houses, Farm Houses, Barns and Dairy Barns, Garages, Corn Cribs and Graneries, Hog Houses, Poultry Houses, Small Farm Buildings, Silos



Hemlock. Finish 9 A-1 Given a coat of Bridgeport Standard Wheeler's Silex Liquid Wood Filler, and finished with Bridgeport Standard Wheeler's Bridgeport Standard Wheele Interior Varnish left in the gloss.



Hemlock. Finish 209 E-1 Hemlock. Finish 209 E-1 Given two coats of Bridgeport Standard No. 2001 Smoked Pearl Acid Stain, the first coat acts as an evener. Given a coat of Bridge-port Standard No. 3001 Smoked Pearl Toner, and finished with two coats of Bridgeport Standard WonderLac.



Hemlock. Finish 108 C-5 Hemlock. Finish 108 C-5 Stained with Bridgeport Standard Dark Mahogany Penetrating Stain, given a coat of Bridgeport Standard Mahogany Primer, and finished with one coat of Bridgeport Standard Wheeler's Interior Varnish, and one coat of Bridgeport Standard Wheeler's Flat Varnish.



Hemlock. Finish 211 E-1
Given two coats of Bridgeport
Standard No. 2005 Satin Brown
Acid Stain, the first coat acts as an
evener. Given a coat of Bridgeport Standard No. 3003 Satin
Brown Toner, and finished with two
coats of Bridgeport Standard WonderLac.

## Walnut

I T is perhaps natural to regard Walnut as one of the most expensive and "aristocratic" of woods. There seems to be a general impression that American Black Walnut is almost extinct, yet this is far from the truth.

In the early days and up to a period ending approximately with the year 1880, there was an almost wanton waste of this wood; but owing to the rapid growth of the trees, much black walnut timber has grown since then, and the supply is now sufficient to justify its use for many commercial purposes. The fact that leading furniture manufacturers employ it in the production of "period" furniture indicates its commercial availability.

Unquestionably walnut is one of the richest and most luxurious woods that can be used for interior trim, and it will always be in demand where cost need not be con-

sidered. It lends itself well to intricate carving and ornate effects.

Walnut has been the favorite of practical cabinet makers for generations. It is not only beautiful in appearance, having a rich brown color, which is both attractive and distinctly "livable," but it is mild in texture and easily worked.

It is largely used for veneer—many rich effects at comparatively moderate cost being possible with Walnut as a veneer and one of the less expensive woods as a core.

American Black Walnut is a heavy, tough wood with an open grain. It requires filling for the finishing coats. Its dark, natural color requires little or no pigment.

American Walnut Association, 1404 Starks Building, Louisville, Ky., issues a booklet entitled "American Black Walnut—The Aristocrat of American Hardwoods," which will be sent free on request to the association.



American Walnut. Finish
214 A-2
Stained with Bridgeport Standard No. 4 American Walnut Acid
Stain, filled with No. 17 American
Walnut Wheeler's Wood Filler,
and finished with Bridgeport Standard Wheeler's Interior Varnish,
rubbed egg shell.



American Walnut. Finish 3 A-2 Filled with Golden Oak Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed egg shell.



American Walnut. Finish 2 A-2 Filled with No. 3 Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed egg shell.



American Walnut. Finish 11 A-2
Filled with No. 78 William and Mary Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed egg shell.

## Larch

wood that resists decay unusually well. According to U. S. Forest Service Bulletin, No. 122, its qualifications for interior mar easily." See color illustrations.

TARCH is generally understood to be a finishing are: "It finishes smoothly and takes a high polish. It also takes stains well and, because of its hardness, does not

## White Pine

THITE Pine is one of the most popular woods used in home-building. It is soft, easily worked, does not split when nailed, and when properly seasoned does not warp or shrink.

Under modern wood finishing methods, White Pine can be finished very attractively; it is especially suited to a white enamel finish. See color illustrations.

Tupelo

**DUPELO** lumber, while a soft wood and platforms where heavy trucking is done. therefore easily worked and laid, has what scientists call an "involved" grain; that is, a grain in which the fibres are knitted or interwoven, which makes it suitable for interior flooring, as it will neither splinter nor sliver. Tupelo is so tough and resists wear so well, that it is also extensively used for flooring in warehouses and for

For interior flooring in residences there is nothing superior to Tupelo except hardwood flooring. It will make a smooth, long-wearing floor, and on interior trim, it takes stains and varnishes perfectly. Tupelo should never be used where moisture is encountered, such as for porches, siding, etc. See color illustrations.

## Cedar

ED Cedar is extensively used as an ex- straight grain and takes various finishes terior wood, especially for shingles, but it is also valuable for interiors. It has a close.

well. See color illustrations.



© 1917 by Good Furniture Magazine.

A white enamel interior suggests elegance and simplicity. This charming hall is a case in point. Bridgeport Standard Wheeler's White Enamel is used with satisfaction in many fine American homes.



Larch. Finish 105 B-5
Stained with Bridgeport Standard Brown Oak Penetrating Stain and Waxed Finish, given a coat of B. S. White Shellac, and finished with one coat of B. S. Wheeler's Interior Varnish, and one coat of B. S. Wheeler's Flat Varnish.



Larch. Finish 9 A-1
Given a coat of Bridgeport
Standard Wheeler's Silex Liquid
Wood Filler, and finished with
Bridgeport Standard Wheeler's
Interior Varnish, left in the gloss.



White Pine. Finish 9 A-1
Given a coat of Bridgeport
Standard Wheeler's Silex Liquid
Wood Filler and finished with
Bridgeport Standard Wheeler's
Interior Varnish, left in the gloss.



Tupelo. Finish 9 A-1
Given a coat of Bridgeport
Standard Wheeler's Silex Liquid
Wood Filler, and finished with
Bridgeport Standard Wheeler's
Interior Varnish, left in the gloss.



Cedar. Finish 211 E-1
Given two coats of Bridgeport
Standard No. 2005 Satin Brown
Acid Stain, the first coat acts as an
evener. Given a coat of Bridgeport Standard No. 3003 Satin
Brown Toner, and finished with
two coats of Bridgeport Standard
WonderLac.



Cedar. Finish 9 A-1
Given a coat of Bridgeport
Standard Wheeler's Silex Liquid
Wood Filler, and finished with
Bridgeport Standard Wheeler's
Interior Varnish, left in the gloss.



Tupelo. Finish 224 E-1 Stained with Bridgenort Standard Gray Acid Stain, given a coat of Bridgeport Standard No 3001 Smoked Pearl Toner, and finished with two coats of Bridgeport Standard WonderLac.



Tupelo. Finish 108 C-5
Stained with Bridgeport Standard Dark Mahogany Penetrating Stain, given a coat of Bridgeport Standard Mahogany Primer, and finished with one coat of Bridgeport Standard Wheeler's Interior Varnish, and one coat of Bridgeport Standard Wheeler's Flat Varnish.

## Spruce

CPRUCE is a white, closely grained wood. and quite hard in texture. Its possibilities It takes stains beautifully and is often for attractive finishing are shown by the used where more costly woods are to be imitated. It is absolutely free from pitch

color illustrations.

### **B**asswood

TERY largely used for tongue and grooved or no grain or figure; nevertheless, under ceilings. For this purpose it joins tightly, modern wood finishing methods, it shows and being soft it works easily. It has little some very attractive effects, as illustrated.

## Elm

so generally known as some others as an interior wood, it is nevertheless extensively used for this purpose. In its plain "white" state, elm possesses no par-

STRONG, tough wood, and while not ticularly attractive markings; yet, in common with many other woods, it is transformed into a thing of beauty with the proper finishes. The illustrations speak for themselves.

## **P**oplar

one of the best woods for enameling purposes. It is also used to imitate more expensive woods. It is not much used where a

TELLOW Poplar is considered to be natural finish is desired, but its possibilities when stained are shown by the color illustrations.



These dignified, individual interiors, with the paneled hall and the French doors leading to the living room, illustrate some of the effects possible with woodwork properly finished.



Sitka Spruce. Finish 9 A-1
Given a coat of Bridgeport
Standard Wheeler's Silex Liquid
Wood Filler, and finished with
Bridgeport Standard Wheeler's
Interior Varnish, left in the gloss.



Elm. Finish 224 E-1
Stained with Bridgeport Standard Gray Acid Stain, given a coat of
Bridgeport Standard No. 3001
Smoked Pearl Toner, and finished
with two coats of Bridgeport
Standard WonderLac.



Elm. Finish 3 A-2 Filled with Golden Oak Wheeler's Filled with Golden Oak Wheeler's Bridgeport Standard Wheeler's Interior Varnish, rubbed egg shell.



Elm. Finish 1 A-2 Filled with No. 1 Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed egg shell.



Basswood. Finish 9 A-1
Given a coat of Bridgeport
Standard Wheeler's Silex Liquid
Wood Filler, and finished with
Bridgeport Standard Wheeler's
Interior Varnish left in the gloss.



Basswood. Finish 108 C-5
Stained with Bridgeport Standard Dark Mahogany Penetrating
Stain, given a coat of Bridgeport
Standard Mahogany Primer, and
finished with one coat of Bridgeport Standard Wheeler's Interior
Varnish, and one coat of Bridgeport Standard Wheeler's Flat Varnish.



Poplar. Finish 105 D-3 Stained with Bridgeport Standard Brown Oak Penetrating Stain and Waxed Finish, given a coat of Bridgeport Standard White Shellac, and finished with Bridgeport Standard Prepared Wax.



Poplar. Finish 211 E-1
Given two coats of Bridgeport
Standard No. 2005 Satin Brown
Acid Stain, the first coat acts as an
evener. Given a coat of Bridgeport Standard No. 3003 Satin
Brown Toner, and finished with
two coats of Bridgeport Standard
WonderLac.

## Beech

PERHAPS best known as a flooring finishing make it available for interior trim material, but modern methods of wood—as the color illustrations prove.

## Cherry

HERRY is ranked with Walnut and been known as capable of taking a fine Mahogany among the aristocrats of woods, and is frequently substituted for the latter; of a peculiarly rich color, it has always

finish, and modern methods have improved upon even the attractive effects heretofore possible to obtain. See color illustrations.

## Maple

furniture are known to everyone. Different varieties of Maple take finishes very well. Maple is a strong, tough, close-

APLE flooring and "bird's-eye" Maple grained wood. It is characteristic of Maple that the white tones of the wood do not affect the gray stains—these often being changed by the yellow undertones of certain woods.

## Sycamore

figure. The size of the trees makes broad panels available, and for this reason

THEN quarter-sawed it has a rich it is desirable for certain interior woodwork. Modern wood finishing develops the fine figure referred to—see color illustrations.



© 1917 by Good Furniture Magazine.

This stately dining room, reminiscent of the Jacobean period, owes much of its distinction to the beautifully finished paneled woodwork. Bridgeport Standard Wood Finishes bring out the hidden beauties of all woods. Bridgeport Standard Service Departments co-operate in obtaining the most pleasing and appropriate effects.



Sycamore. Finish 1 A-2 Filled with No. 1 Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed egg shell.



Sycamore. Finish 209 E-1
Given two coats of Bridgeport
Standard No. 2001 Smoked Pearl
Acid Stain, the first coat acts as an
evener. Given a coat of B. S. No.
3001 Smoked Pearl Toner, and
finished with two coats of B. S.
WonderLac.



Cherry. Finish 1 A-2 Filled with No. 1 Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed egg shell.



Cherry. Finish 108 C-2
Stained with Bridgeport Standard Dark Mahogany Penetrating
Stain, given a coat of Bridgeport
Standard Mahogany Primer, and
finished with Bridgeport Standard
Wheeler's Interior Varnish, rubbed
egg shell.



Beech. Finish 1 A-2 Filled with No. 1 'Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed egg shell.



Maple, Finish 1 A-2 Filled with No. 1 Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed egg shell.



Maple. Finish 201 E-1 Stained with Bridgeport Standard Gray Acid Stain, and finished with two coats of Bridgeport Standard WonderLac.



Maple. Finish 108 C-2
Stained with Bridgeport Standard Dark Mahogany Penetrating Stain, given a coat of Bridgeport Standard Mahogany Primer, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed egg shell.

## Mahogany

AHOGANY shares with Walnut the distinction of being one of the "aristocratic" woods. Its decorative value has long been known and its history is contemporaneous with that of famous furniture "periods" and "styles." "Queen Anne," "Chippendale," "Adam," "Hepplewhite," "Sheraton," "Empire," "Colonial"—all of these names are linked with Mahogany.

Mahogany comes from the West Indies and Central America. The color with which it is associated, in the public mind is red. Contrary to popular belief, however, Mahogany is not red by nature. With age it does develop a deep, rich golden brown color; but the characteristic reddish brown color seen on Mahogany furniture is the result of staining.

While from the viewpoint of the antiquary the "natural" color of Mahogany as the result of age may be preferable to the results obtained with stain, the fashion of reddening Mahogany is so long established (it came into vogue in the latter part of the eighteenth century), that for practical purposes it is evident that this fashion must be continued. Most of us wish to enjoy the use of our Mahogany furniture and the association with our Mahogany interior woodwork during our lifetime, and for that reason, if for no other, we must have recourse to the beautiful stained effects used by makers of fine furniture and specified by leading architects and interior decorators on interior woodwork.

Moreover, it is generally recognized that the skillful staining of Mahogany enhances its natural beauty. Certainly the latest and most charming effects obtainable with Bridgeport Standard Wood Finishes, illustrated on the opposite page, are self-evident proof of the correctness of that statement.



Modern method of hauling Mahogany logs to the landing. British Honduras.



Philippine Mahogany.
Finish 215 A-2
Stained with Bridgeport Standard Dark Mahogany Acid Stain, filled with Mahogany "N" Filler, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed egg shell.



Mahogany. Finish 7 A-2 Filled with No. 7 Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed egg shell.



Mahogany. Finish 216 A-2 Stained with Bridgeport Standard No. 2 Standard American Mahogany Acid Stain, filled with No. 15 American Mahogany Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed egg shell.



Mahogany. Finish 217 A-2
Stained with Bridgeport Standard Old English Mahogany Acid
Stain, filled with Mahogany "N"
Wheeler's Wood Filler, and finished
with Bridgeport Standard Wheeler's Interior Varnish, rubbed egg
shell.



Mahogany, Finish 218 A-2 Stained with Bridgeport Standard No. 1 Standard Brown Mahogany Acid Stain, filled with No. 16 Brown Mahogany Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed egg shell.



Mahogany. Finish 219 A-2 Stained with Bridgeport Standard No. 5 Sheraton Mahogany Acid Stain, filled with No. 18 Sheraton Mahogany Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed egg shell.



Mahogany. Finish 220 A-2 Stained with Bridgeport Standard No. 3000-A Mahogany Acid Stain, filled with Mahogany "N" Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed egg shell.



Mahogany. Finish 221 A-2 Stained with Bridgeport Standard No. 1846 Adam Mahogany Acid Stain, filled with No. 2624 Adam Mahogany Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Interior Varnish, rubbed egg shell.

#### W. -

## The Development of the Door

By THE MORGAN COMPANY

BUILDING beautiful doors, so that they will last and give perfect service with no after expense, has not been the work of a day. The first Morgan door was made over forty years ago, and every year since has seen constant improvement in our product. Today we use timber from our own forests, and operate our own saw mills, planing mills, veneer mills, and door and millwork factories. Our warehouses and sales offices are located in the principal cities of the country. Every step in the making of a door and distributing it is under our careful supervision. From the felling of the tree until the door is ready to be installed in your home, we jealously guard its quality.

It always has been our idea to build a distinctive, better-than-ordinary door; and the demand which we have created for our Morgan better-built doors shows that homebuilders in ever-increasing numbers appreciate quality and honesty of workmanship in a door just as they do in other purchases.



Morgan Door Design M-117
Finish 206 E-1
Plain Red Oak—Stained with
Bridgeport Standard No. 1000
Fumed Oak Acid Stain, and
finished with two coats of Bridgeport Standard WonderLac.

#### Morgan Doors in the Home

Home-makers have come to realize that doors are among the most essential parts of a home. They make or destroy the harmonious appearance of a house. An exterior door may be the very symbol of hospitality or it may express the opposite.

Interior doors, because they are used as much as furniture and because they are as conspicuous, help just as much as expensive furniture to give to the interior of the house a refined, homelike atmosphere.

Morgan doors are built with the appreciation that they are to be used in the home and as part of the home. They are built in such a wide variety of designs and finishes that you will find just the doors that will satisfy your own ideas of beauty, and that will harmonize with your chosen style of Architecture.



Morgan Door Design M-115
Design of Inlay A-2. Finish
201 E-1
Quartered White Oak—Stained
with Bridgeport Standard Gray
Acid Stain, and finished with two
coats of Bridgeport Standard
WonderLac.

#### Morgan Veneers

A hardwood door is made of two essential parts, the outside or veneer, and the inside or core. The beauty of a door is in the veneer. We choose only the most beautiful veneers as coverings for Morgan doors. However, beauty is not the only thing we consider in select-

ing veneers. Attention is given the strength and freedom from defects. No eggshell veneers are allowed to spoil Morgan doors. Moisture does not penetrate our thick veneers and cause them to peel and crack as in the case of ordinary doors.

Not only is care used in the selection of our veneers, but extreme care is used in applying the veneers to the core. Morgan veneers are not glued to the cores and then put in hand clamps over night. Morgan veneered cores, freshly glued, are placed in powerful hydraulic presses where the pressure is uniform over the entire surface of the veneered wood. This uniformity of pressure, because it attaches the veneer securely to all parts of the door, eliminates the trouble and expense occasioned by peeling and crawling veneers. After leaving the hydraulic presses, the veneered stock is put in retainers under the same tremendous pressure. Here it remains for 36 to 48 hours until the glue is thoroughly set and absolutely dry.

#### Careful Workmanship Adds to the Beauty of Morgan Doors

Not only are the finest veneers selected to cover Morgan doors, but all the beauty in the wood is brought out by careful work-

manship. Automatic sanders and smoothers are used to complete ordinary doors, but in addition to this, Morgan doors receive their final touches at the hands of Morgan skilled craftsmen. beauty of grain and finish, Morgan doors have won for themselves the name, "Handcraft Doors."

#### The Heart of the Morgan Door— All White Pine Core

On account of their

The core of a door determines whether the door will later warp, swell, stick, crack, etc.

White Pine forms the core of the Morgan Door—because White Pine will not warp, swell, etc. Only Morgan doors, as far as we have been able to find out, have "All White Pine Core." Thus only Morgan doors are insured against door-annoyance and after-expense.

All woods which go into Morgan doors are thoroughly and correctly kiln dried and tested before they go to the workrooms.



Morgan Door Design M-115
Design of Inlay A-2. Finish
224 E-1
Selected Birch—Stained with
Bridgeport Standard Gray Acid
Stain, given a coat of Bridgeport
Standard No. 3001 Smoked Pearl
Toner, and finished with two coats
of Bridgeport Standard WonderLac.



Morgan Door Design M-115
Design of Inlay A-2. Finish
114 D-3
Quarter Sawed Red Gum—
Stained with Bridgeport Standard
No. 2303 Circassian Walnut Penetrating Stain, given a coat of
Bridgeport Standard White Shellac, and finished with Bridgeport
Standard Prepared Wax.



Morgan Door Design M-115
Design of Inlay A-2. Finish
7 A-2
Figured African Mahogany—
Filled with No. 7 Wheeler's Wood
Filler, and finished with Bridgeport
Standard Wheeler's Interior Varnish, rubbed egg shell.



Morgan Door Design M-59
Finish 108 G-2
Unselected Birch—Stained with
Bridgeport Standard Dark Mahogany Penetrating Stain, given a
coat of Bridgeport Standard Mahogany Primer, and finished with
Bridgeport Standard Wheeler's
Interior Varnish, rubbed egg shell.



The Wedge Protects You.

#### The Wedge Dowel

(Patented)

Insures the Morgan Door from Coming Apart

We do not stop here in freeing the Morgan door from after-expense. The wedge dowel (patented) is used to lock the parts of the door together and to hold the door together for life.

The wedge dowel is made of hardwood, slit obliquely at each end. When the dowels are put in place and the door is clamped together under hydraulic pressure, the wedges formed by the slits are driven into the dowel expanding the ends. This causes the expanded dowels to hold like a vise. The wedge dowel insures the Morgan door from splitting and coming apart.

A catalog giving full description of Morgan Doors will be mailed upon request to any of the following addresses:

Morgan Company Oshkosh, Wisconsin Morgan Company 21 East 40th St., New York

Morgan Sash and Door Company Chicago, Illinois Morgan Millwork Company Baltimore, Md.







Morgan Door Design M-59
Finish 211 E-1
North Carolina Pine—Given two
coats of Bridgeport Standard No.
2005 Satin Brown Acid Stain, the
first coat acts as an evener. Given
a coat of Bridgeport Standard No.
3003 Satin Brown Toner and finished with two coats of Bridgeport
Standard WonderLac.



Morgan Door Design M-54
Finish 209 E-1
Cypress—Given two coats of
Bridgeport Standard No. 2001
Smoked Pearl Acid Stain, the first
coat acts as an evener. Given a
coat of Bridgeport Standard No.
3001 Smoked Pearl Toner, and
finished with two coats of Bridgeport Standard WonderLac.



Morgan Door Design M-54
Finish 105 D-3
Douglas Fir—Stained with
Bridgeport Standard Brown Oak
Penetrating Stain and Waxed
Finish, given a coat of Bridgeport
Standard White Shellac, and finished with Bridgeport Standard
Prepared Wax.



Morgan Door Design M-59
Finish 210 E-1
Southern Yellow Pine—Given a
coat of Bridgeport Standard No.
2003 Acid Stain Evener, followed
by one coat of Bridgeport Standard No. 2004 Satin Gray Acid
Stain. Given a coat of Bridgeport
Standard No. 3002 Satin Gray
Toner, and finished with two coats
of Bridgeport Standard WonderLac.



Laying the foundation for the finish by filling the pores with Wheeler's Paste Wood Filler.

## Modern Floor Finishin



The Finishing and Care of Hardwood Floors—Not a Problem but a Pleasure

FINE Hardwood Floor is a real delight. It is one of the four cardinal principles of the interior decorative scheme. The other three are attractively finished woodwork, walls and doors.

The hardwood floor has come to such general use that it is hardly necessary to enlarge upon its advantages. Its sanitary features are obvious.

Not so generally known, however, are the best methods of finishing hardwood floors, their maintenance and care.

There is an impression in the minds of some people, unfortunately, that the finishing of hardwood floors is difficult—and that the floors are troublesome to care for.

This is a mistake. To a large extent this impression is due to the number of articles that have been sold for the treatment of hardwood floors, with their many diverse directions for use. These articles are apt to confuse those who read the literature of different manufacturers with a view of determining the best materials for their floors.

A further cause for confusion has been that a certain article has often been recommended for all kinds of floors, regardless of conditions or requirements.

No one article can be successfully used on all floors to meet different requirements—any more than one kind of paint will answer for various classes of work.

We manufacture different products for different floor uses. We are not confined to advocating the use of *one* floor finishing material. Our line is large enough to enable us to recommend the most appropriate finish for the purpose.

With Bridgeport Standard Wood Finishes the finishing and care of hardwood floors is not a problem but a pleasure.

#### Directions for Finishing a New Floor

A new floor must be properly scraped and sandpapered before the application of the filler to fill the pores of the wood. If there are any cracks, these should be carefully filled with Bridgeport Standard Crack and Crevice Filler after sandpapering. Most hardwood floors are so tightly joined, however, that there are no cracks. Bridgeport Standard Crevice Filler is described on page 64.

#### Filling the Pores of the Wood to Make a Proper Foundation for the Varnish or Wax

After the floor has been scraped and sandpapered the wood should be filled with Wheeler's Paste Wood Filler, which makes a foundation for the finish. This should be done regardless of whether the wood is hard or soft, because the proper results cannot be obtained by applying varnish or wax directly to the bare white wood.

Liquid wood filler should never be used on any floor. We make liquid filler, but for purposes other than floor finishing.

Bridgeport Standard Wheeler's Paste Wood Filler is fully described on pages 14-16.

#### Different Tones Obtainable on a Hardwood Floor

The most pleasing tones for hardwood floors are Natural, Light Antique and Golden Oak. These are obtained by using Bridgeport Standard Wheeler's Paste Wood Filler and either Bridgeport Standard Wheeler's Floor Varnish or Bridgeport Standard Prepared Wax.

#### Natural Finish

Natural Finish is the most popular. For the foundation, use No. 1 Wheeler's Transparent Paste Wood Filler for either a Varnish or a Wax Finish.



Quartered White Oak Flooring Finish 1 J-1 Filled with No. 1 Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Floor Varnish.



Plain Oak Flooring. Finish
1 D-3
Filled with No. 1 Wheeler's
Wood Filler, given a coat of Bridgeport Standard White Shellac, and
finished with Bridgeport Standard
Prepared Wax.



Maple Flooring. Finish 1 J-1 Filled with No. 1 Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Floor Varnish.



Birch Flooring, Finish 1 J-1 Filled with No. 1 Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Floor Varnish.



North Carolina Pine Flooring.
Finish 1 D-3
Filled with No. 1 Wheeler's Wood
Filler, given a coat of Bridgeport
Standard White Shellac, and finished with Bridgeport Standard
Prepared Wax.



Douglas Fir Flooring, Finish
1 J-1
Filled with No. 1 Wheeler's
Wood Filler, and finished with
Bridgeport Standard Wheeler's
Floor Varnish.



Tupelo Flooring. Finish 1 J-1 Filled with No. 1 Wheeler's Wood Filler, and finished with Bridgeport Standard Wheeler's Floor Varnish.



Southern Yellow Pine Flooring.
Finish 1 J-1
Filled with No. 1 Wheeler's
Wood Filler, and finished with
Bridgeport Standard Wheeler's
Floor Varnish.



Applying Bridgeport Standard Floor Varnish Over a Foundation of Wheeler's Paste Wood Filler.

For the foundation, use No. 3 Wheeler's Paste Wood Filler for either a Varnish or a Wax Finish.

Golden Oak Finish

For the foundation, use Wheeler's Golden Oak Filler for either a Varnish or a Wax Finish.

> Darker Stained Effects than the Above

When darker effects than the above are desired, Bridgeport Standard Stains

should be used before filling. These stains are fully described on pages 55-57.

#### How to Obtain a Varnish Finish After Filling

A properly Varnished Floor is the most satisfactory of all floors for the average home.

Your floors, if varnished with BRIDGEPORT STANDARD WHEELER'S FLOOR VARNISH, over Wheeler's Paste Wood Filler as a foundation, will wear and they will be beautiful and lustrous. The fine grain and figure of the wood will stand out clearly.

After filling a new floor, finish with two coats of Bridgeport Standard Wheeler's Floor Varnish, according to the easily-followed directions on the package. Bridgeport Standard Floor Varnish is described on page 61.

#### The Care of a Varnished Floor

An occasional dusting with a damp cloth or dustless mop will serve to keep a varnished floor attractive.

When slight signs of wear are evident, the floor should be gone over with Bridgeport Standard Old Dutch Finish.

Where a varnished floor is very dirty, it should be washed with lukewarm water and good soap, carefully wiped and allowed to dry; then use Old Dutch Finish.

This preparation removes slight marks of wear and produces a beautiful finish with a soft lustre.

Where the wear is particularly severe, it is advisable to "touch up" all badly worn spots with Wheeler's Floor Varnish, allow to dry, and then follow with one full coat over all the floor.

Before revarnishing a floor, wash it with water and good soap, carefully wipe off with clean water and allow to dry; then lightly sand (using fine sandpaper), and apply Bridgeport Standard Floor Varnish according to directions.

It is also practical to use Bridgeport Standard Prepared Wax over a varnished floor if desired. A finish with a good body and with somewhat of an

eggshell gloss is thus obtained.

#### How to Obtain a Wax Finish after Filling

After the floor has been filled with Bridgeport Standard Wheeler's Filler, apply a coat of white shellac or a coat of half orange and half white. Then complete with two coats of Bridgeport Standard Prepared Wax, following the directions on the can.



Waxing a Floor with Bridgeport Standard Prepared Wax. For Large Surfaces a Weighted Floor Brush Should Be Used.

The wide popularity of waxed floors shows that wax has a prominent place in floor finishing. To fill this demand, we make a wax of superior quality—Bridgeport Standard Prepared Wax—described on pages 64-65.

#### The Care of a Waxed Floor

A waxed floor is easy to care for. It should receive an occasional dusting with a piece of cheese cloth tied over a broom. A weighted floor brush is also recommended.

When the surface shows wear, simply use an additional coat of wax.

#### For a Soft, Lustrous Effect Use Bridgeport Standard Old Dutch Finish

Some people prefer this effect rather than a high polish produced by the use of wax. The degree of lustre depends upon the undercoatings used, as more lustre would be produced if Old Dutch Finish was applied over Floor Varnish than directly over Filler and Stain.

#### Refinishing Old Varnished Floors

If very badly worn, the only practical way to treat the floor is to remove the old finish with Bridgeport Standard Paint and Varnish Remover and then proceed as per directions for new floor.

When slightly worn or worn in spots, the floor should be thoroughly scrubbed, the worn spots "touched up" with Bridgeport Standard Floor Varnish and allowed to dry. Then the entire floor should be gone over with Floor Varnish. See opposite column on "The Care of a Varnished Floor."

#### Refinishing Old Waxed Floors

Ordinarily, the only refinishing required for an old waxed floor is to apply a new coat of wax when the old one becomes worn.

If the floor has not had a proper cleaning, and is grimy and discolored, the old wax should be removed with turpentine before the application of

#### Refinishing an Old Floor with Bridgeport Standard Mirror Finish

Sometimes it is desired to change a light-colored floor to a dark shade.

Thoroughly scrub the floor and apply two coats of Bridgeport Standard Mirror Finish. If it is desired to change a dark floor to a light one, apply a coat of ground color Mirror Finish as a foundation for the required shade. Then apply any one of the nine different shades of Mirror Finish—Natural, Light Oak, Dark (Golden) Oak, Rich Walnut, Cherry, Mahogany, Rosewood, Forest Green, Weathered Oak—shown on the Mirror Finish Color Card, for the desired effect.

Bridgeport Standard Mirror Finish is described on page 64.



Filling Cracks in a Floor with Bridgeport Standard Crack and Crevice Filler.

Bridgeport Standard Crack and Crevice Filler

Before finishing a floor, whether new or old, all cracks and crevices should be filled with BRIDGEPORT STANDARD WHEELER'S CRACK AND CREVICE FIL-LER, which makes a perfectly smooth, level surface.

The use of this article for filling

cracks in floors, regardless of how they are finished, is particularly recommended from a sanitary standpoint, because it keeps dirt out of the cracks.

## Woods for Flooring

N general, it may be stated that woods are divided into two classes, hard and soft. Hardwoods are better adapted for floors than soft woods, although all hardwoods are not necessarily good for flooring.

We give below some brief information of general interest in

regard to various woods, with reference to their adaptability

for flooring.

Woods vary greatly in grain, or figure, and texture. If properly treated, all the grain and the full life and beauty of the woods are developed, thus bringing out the beautiful and irregular markings that Nature has produced in them.

There are many varieti wood. Those mostly used, however, are the whi k, either of which may be plain-sawed or quart arter-sawing develops the beautiful and irregular it it is more expensive igs, than plain or straight sawed.

Oak is one of the best woods for floors. Its durability is well known. It is hard and does not warp when properly kilndried. Its coloring is rich and dignified, and it takes a good finish.

Oak "takes" stain well, and can be finished in a variety of colors by the use of our stains or tinted fillers.

Detailed literature regarding Oak Flooring can be obtained by addressing Oak Service Flooring Bureau, Cincinnati, Ohio.

#### Maple

Maple is a hardwood largely used for flooring. It is compact in structure, fine-grained and uniform in texture.

A Maple floor will stand hard service. It shows no perceptible wear and will not sliver nor splinter. It takes a high pol-It takes a high polish and fits in admirably with various color schemes.

Although a close-grained wood, Maple has many small pores, and these should invariably be filled with Wheeler's Paste Wood Filler before finishing with varnish or wax.

#### Beech and Birch

Beech and Birch flooring are very similar to Maple in tex-

Beech is of a darker and warmer hue and its grain is more open. It takes a beautiful finish.
Birch has a rich, cheerful color.

Properly finished it has a sparkling lustre, making a beautiful floor.

Detailed literature regarding Maple, Beech and Birch Flooring can be obtained by addressing the Maple Flooring Manufacturers' Association, 1308 Rector Building, Chicago, Ill.

#### Hard Yellow Pine

Hard Yellow Pine, including Georgia, North Carolina and Oregon, is very desirable for floors. Although close-grained it should always be filled with Wheeler's Paste Wood Filler before finishing. Yellow Pine "takes" stain particularly well, and can thus be treated and finished in a variety of beautiful colors.

Detailed literature regarding Yellow Pine Flooring may be obtained by addressing The North Carolina Pine Association, Norfolk, Va., and the Southern Pine Association, New Orleans, La.

#### Fir

Edge-grained Fir is extensively used for flooring. It is close-grained and of great strength. It takes a beautiful finish.

Detailed literature regarding Fir Flooring can be obtained by addressing West Coast Lumbermen's Association, Inc., Seattle, Wash.

#### Walnut and Mahogany

Are both hardwoods adapted for flooring, but because of their high price, are seldom used, excepting for decorative

borders for parquetry flooring.

These woods should be treated in the same manner as other hardwoods, by use of Wheeler's Paste Wood Filler and finished with Bridgeport Standard Varnish or Wax, as desired.



Applying Bridgeport Standard Penetrating Stains. They develop the full beauty of the wood, and do not raise the grain.

Bridgeport Standard stains give a variety of soft, rich, artistic colorings in various shades of gray, brown, green, weathered, flemish, etc., which are a revelation to those who have not seen them.

Different types of stain are required for different woods; some varieties, however, "take" almost any type of stain successfully.

An idea of these beautiful colorings can be obtained by referring to color reproductions elsewhere in this book.

No interior decorative scheme need be sacrificed today through lack of color effects for woodwork; nor is it necessary to make interior trim serve as a basis for the whole treatment, because there are countless shades that will harmonize with almost any type of wall or furnishings.

The richness of tone of some shades of Bridgeport Standard Stains, the delicate softness of others, and the wonderful clearness of them all are the result of special study and ingredients, representing the same distinctive quality in stains as found in Wheeler's Wood Filler.

As stated in the chapter on Wheeler's Wood Filler, a natural finish on opengrained woods can be obtained by the use of natural Wheeler's Wood Filler; while light oak and light mahogany effects may be obtained by the use of tinted Wheeler's Filler, for which purpose we manufacture

## How to Obtain Stained Effects on Wood



THE modern and artistic coloring of wood is simply taking the natural wood, and by skillful treatment bringing out the beauty of grain and figure in colors that are pleasing to the eye.

Beautiful effects can be obtained on both hard and soft woods with Bridgeport Standard Stains, and the less expensive varieties are particularly pleasing when properly treated with these stains.

> Wheeler's Filler in the following principal shades; other shades illustrated will be supplied on request.

No. 1—Natural—For light woods.

No. 3—For dark woods, or light antique oak (see page 16).

Golden Oak-For Golden Oak effects (see page 16).

No. 7—For light or natural mahogany (see page 16).

Mahogany N-For darker mahogany effects.

No. 10—For ebony.

Special White-Used with acid stain for white pored eff

## Stain ar

Bridgeport S d Penetrating Ad Finish

HIS class of Penetrating Stains can be used to produce a mission effect in one application. However, the "one coat" finish is primarily intended for work where economy is the first consideration. A thin wash of shellac over the stain, followed with finishing coats of Bridgeport Standard Prepared Wax, gives



For Beautiful, Clear Stained Effects.

beautiful effects and affords thorough protection to the wood.

Penetrating Stain and Waxed Finish is

made in the following shades:

Weathered Flemish English Brown Golden Oak

The variety of shades can be greatly extended by mixing. These stains are adapted for nearly all types of interior trim.



Applying Bridgeport Standard Pene-trating Stain and Wax Finish, the Practical Painter's Stain.

#### Bridgeport Standard Penetrating Stains

S their name indicates, these stains are penetrating; that is, they sink deeply into the wood, emphasizing the irregular markings of Nature. They contain no pigments, therefore leave nothing on the surface to hide the grain. They do not raise the grain nor show brush laps, and in this respect must not be classed with ordinary spirit dyes.

The colors are rich, soft, artistic and durable.

As distinguished from "Penetrating Stain and Waxed Finish" (see page 55) they are not intended for a one-coat finish. Shellac and wax or filler and varnish, according to the wood and type of finish desired, must be applied over them.

If a varnish finish is desired on opengrained woods like Oak, Ash or Chestnut, after staining, fill with the proper shade of Wheeler's Paste Wood Filler and then finish with Wheeler's Interior Varnish.

If a waxed finish is desired, apply a thin coat of shellac over the stain and then finish with Bridgeport Standard Prepared

For obtaining mahogany effects, first use Mahogany Penetrating Stain, and on closegrained woods, such as birch, pine and cypress, apply one coat of Bridgeport Standard Mahogany Primer (see description on page 65). For a dull, rubbed effect, use one coat of Mahogany Primer, one coat of Wheeler's Interior Varnish, and one coat of Wheeler's Flat Varnish.

Over our Mahogany Penetrating Stains, the best results are obtained with the Mahogany Primer, which is especially made for the purpose.

Penetrating Stains are made in the following principal shades; other shades illustrated will be supplied on request.

> Dark Mahogany Brown Mahogany R Y Golden Oak No. 530 Mission Green No. 2303 Circassian Walnut

#### Golden Oak Effects

which are rich and distinctive, can be produced on quartered oak, chestnut, pine and similar woods by the use of R Y Golden Oak Penetrating Stain and then filling with No. 3 Wheeler's Wood Filler. (See page 16 for Golden Oak effects with Wheeler's Wood Filler only.)



Mahogany Penetrating Stain for rich mahogany effects.

### Bridgeport Standard Acid Stains

THESE stains are used to produce on wood certain peculiar and distinctive tones not possible to obtain with any other type of stain. Such shades as the new and popular browns and grays are very practically and economically obtained with Acid Stains. Acid Stains sink deeply into the wood and for this reason are very permanent.

Clear and rich color effects are created on oak, chestnut, pine, birch, cypress, fir, tupelo and similar woods in these newer tones (see colored section), which are made still richer by finishing with WonderLac (see description page 65), giving a dull or subdued surface that grows richer with age.

While shellac and wax can be used over the grays and browns, yet the most popular and pleasing treatment is to finish with Bridgeport Standard WonderLac. This latter product is without color, body or gloss and does not kill the clear gray tone as shellac and wax do.

Bridgeport Standard Acid Stains made in the following principal shades; other shades illustrated will be supplied on request.

No. 3000 A Mahogany (a rich brown shade)

Dark Mahogany (rich red)

Standard Gray

No. 1000 Fumed Oak (a medium shade on a rich brown tone)

The grays and browns are particularly beautiful and harmonize with almost any decorative scheme. They appeal to the eye because of their delightful simplicity, and at the same time are so economically produced as to commend them for all types of work.

In addition to the above, we have the following new shades of finish for producing soft, delicate tones on such woods as Pine and Cypress. To get these distinctive effects it is necessary to use the Eveners and Toners as specified.

Satin Gray—No. 2003 Acid Stain Evener, No. 2004 Satin Gray Acid Stain, No. 3002 Satin Gray Toner, Wonder-Lac.

Satin Brown—No. 2005 Satin Brown Acid Stain, No. 3003 Satin Brown Toner, WonderLac.

Steel Gray—No. 2006 Acid Stain Evener, No. 2007 Steel Gray Acid Stain, No. 3004 Steel Gray Toner, WonderLac.

Smoked Pearl—No. 2001 Smoked Pearl Acid Stain, No. 3001 Smoked Pearl Toner, WonderLac.

#### Acid Stains for Mahogany

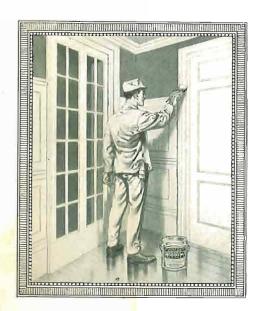
In staining genuine mahogany, always use Acid Stain, which gives the necessary richness and depth of tone, after which fill with the proper shade of Wheeler's Paste Wood Filler.

There are quite a variety of finishes for mahogany, ranging from the rich red tones to the very richest browns, the latter being more generally used on the modern and period types of furniture. These include such shades as Sheraton, Adam, Brown, Antique and Old English, all of which are produced by the use of Acid Stain in connection with Wheeler's Wood Filler.



The exact method of obtaining any given under each sample in the

atea is specifically



## BRIDGEPORT STANDARD WHEELER'S WHITE ENAMEL



PERHAPS no other type of interior decorative treatment is more beautiful in its spotless purity than white enamel. The pleasing charm—the quiet elegance—and the harmonious fitting

with other surroundings are a few of the reasons for the never-waning popularity of a white enamel finish. And to this we might add its sanitary and serviceable features.

#### Bridgeport Standard Wheeler's White Enamel

is an original product that has the easy flow, spread and body so necessary to perfect results.

It "evens up" under the brush, eliminating all brush marks, lending an appearance of finest porcelain to the finished surface.

These are features that appeal to the practical painter, enabling him to turn out work that is rich and faultless in appearance.

#### Bridgeport Standard Wheeler's Enamel is White

Wheeler's Enamel is snow-white—it is unsurpassed for whiteness.

As enamel partakes of the nature of both paint and varnish, its permanent whiteness depends very materially on the grade

of varnish used in its manufacture.

Nothing but the highest type of ingredients enter into Wheeler's White Enamel. It is true white when applied, and stays white simply because whiteness is a qual-



ity permanently incorporated in the process of manufacture.

Wheeler's Enamel dries hard, yet possesses an elasticity that prevents cracking.

It will give excellent satisfaction on exterior exposed surfaces, and can be safely used wherever an enamel finish is required on this type of work.

#### Bridgeport Standard Wheeler's White Enamel

is made in gloss and can be rubbed. It is also made in egg-shell gloss for producing the popular semi-gloss finish. Either of these can be tinted with colors in oil or japan to the popular tones.

Bridgeport Standard Wheeler's Enamel is also supplied in Ivory egg-shell for producing the popular semi-gloss finish in this tone.

A special word to Architects and Painters: You can specify and use Wheeler's White Enamel wherever the highest type of enamel finish is required in your work.

The working properties of this enamel will prove a revelation to the painter, and the final results will merit the approval of both architect and owner.



"TWIN BROTHERS"

Wheeler's Wood Filler and Wheeler's Varnishes

Architects, painters, contractors and others who for years have placed their confidence in Wheeler's Wood Filler can place the same confidence in all of Wheeler's Varnishes.

## BRIDGEPORT STANDARD WHEELER'S Varnishes



WHERE varnished effects are the object, it must be remembered that varnish represents the last process—the final touch that makes or mars the finish.

And perhaps no other article in the whole line of wood finishing material is more deceptive in quality than varnish, and of no other article is it more important that the quality should be right.

Almost all varnish looks alike in the cans, and some months may elapse after application before evidence of inferiority manifests itself. So appearance is no guide to the architect, painter, contractor or homebuilder in the selection of quality in varnish.

Today we recognize quality in many things by trade-mark—the stamp of a reputable manufacturer who puts quality goods in a can and his seal on the outside, so that you may recognize and pick out the quality article from all the others.

Bridgeport Standard quality was established in 1876 when Wheeler's Wood Filler was placed on the market. This article, through its exceeding merit, has become the world's standard. Every individual product put out by this Company since that period has had to measure up to this standard of quality before the Bridgeport Standard trade-mark appeared on the outside of the packages. And this is your safe guide in the selection of varnish for any purpose.

Bridgeport Standard Wheeler's Architectural Varnishes are made from selected material in our factory, by those who

understand the art of varnish making. In each type is injected the essentials that stand for easy working properties, distinctive results and durability.

Always Remember That, as Labor is the Main Cost of any Varnish Job, it is Genuine Economy to Use High-Grade Varnish, and Not Spoil an Otherwise Good Finish.

In addition to following the directions on the package, there are several important points for the user to consider in the use of varnishes:

First: See that the foundation is properly prepared with Wheeler's Wood Filler.

Second: Have the temperature as near 70 degrees Fahrenheit as possible.

Third: Keep the work free from dampness during varnishing and drying.

Fourth: Be sure each coat of varnish is thoroughly dry before applying another.

We manufacture various types of Bridgeport Standard Wheeler's Varnishes, each for a particular purpose, among which are the following principal architectural varnishes:

#### Bridgeport Standard Wheeler's Interior Varnish



Wheeler's Interior Varnish is intended for jobs where permanency is the watchword.

NE of the requirements of varnish for high-class interior wood work is permanency. It is vastly more important that the finish retain its life over a term of years than that the first cost be low.

Bridgeport Standard Wheeler's Interior Varnish is a high-class varnish in every sense of the word. It is intended for jobs where *permanency* is the watchword—for jobs on which no chance can be taken of deterioration after the lapse of time.



It is made from the finest materials and is properly aged.

Wheeler's Interior Varnish is light in color and has good body. It dries with a hard, elastic surface, which can be left in the gloss, rubbed and polished or rubbed to a flat or eggshell finish.

#### Bridgeport Standard Wheeler's Flat Varnish

This varnish is used for producing the flat rubbed effect without the labor of rubbing.

It is used as a final coat over work which has been shellacked or varnished—and is simply intended to produce the flat, rubbed effect without the labor of rubbing.

It is easy to apply and under good conditions dries in 24 hours with a beautiful flat finish.

Bridgeport Standard Wheeler's Flat Varnish is an entirely different product from ordinary flat varnishes which are made by the addition of wax to regular varnish.



CAUTION: The only genuine "Wheeler's Filler Quality" Yarnishes are those made by Bridgeport Wood Finishing Works, the package bearing the red Bridgeport Standard shield and the Du Pont oval.

Wheeler's Flat Varnish is unquestionably one of the finest architectural varnishes on the market.

A complete list of other Bridgeport Standard Wheeler's Varnishes is given in our general Catalogue Price List.

#### Bridgeport Standard Wheeler's Floor Varnish



No type of varnish is expected to withstand such "wear and tear" as floor



Bridgeport Standard Floor Varnish is made for floors subject to considerable wear, giving a finish of excellent body and lustre. It dries hard, yet elastic, in 24 hours, and will not easily mar or scratch white.

This varnish is also an excellent article for use on linoleum and oilthe chapter, "Modern

cloth. See also Floor Finishing."

## Bridgeport Standard Wheeler's Cabinet Varnish

For general interior woodwork in schools, churches, office buildings and residences. Combines durability with moderate initial cost.



A free flowing varnish that dries with a high gloss, and can be rubbed and polished, or rubbed dull if desired.

#### Bridgeport Standard Wheeler's Spar Varnish



An outside varnish has to stand about the hardest test to which a varnish can be subjected. Wheeler's Spar Varnish stands the test.

A varnish for outside use requires exceptional staying qualities. It has about the

hardest test to which a varnish can be subjected. The action of the elements, extremes of heat and cold, dust, dirt, injurious gases in the atmosphere, especially in cities, all quickly show their effects on an inferior outside varnish.

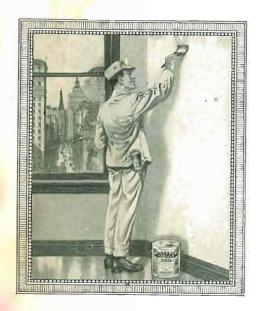


Wheeler's Spar Varnish is made to with-

stand dampness and the most severe conditions. It is unexcelled for all exterior work, but particularly for outside doors, porch ceilings and wherever a varnish is required to withstand the action of the elements. Especially recommended for woodwork of yachts and boats.

A leading boat builder spread Wheeler's Spar Varnish and four other leading Spar Varnishes, purchased in the open market, on boards and for a year exposed them to the action of the sun and tides, giving the different varnishes the same test they would receive in actual use.

At the end of the year, the results were so decidedly in favor of Wheeler's Spar Varnish that he unhesitatingly chose Wheeler's.



## BRIDGEPORT STANDARD Washotint

The Washable Wall Tint



WHO is there that does not delight in soft-toned walls without gloss — rich but simple in color harmony, pleasing to the eye and restful to the mind? And do you know that harmony in decoration affects temperament and indicates per-

sonality? The law of appropriateness dictates that the decoration of any room be in keeping with the type and size of the house, and in harmony with the purpose and use of the room. We do not want to sit on gilt chairs with brocaded seats if we dress in homespun.

The same ideas of color harmony apply to the use of wall tints in business offices, hospitals and public buildings of all kinds, particularly schools, where the predominating wall color is known to have a marked effect.

Walls should determine the color note of a room and everything else should harmonize with them. Generally speaking, the woodwork should form a contrast with the walls; the carpets or rugs may harmoniously contrast with the woodwork; while draperies should match or agreeably contrast with the walls. In other words, the idea is to work out a combination that will appeal as harmonious to the trained mind or sense.

Therefore, the walls—being the keynote of the decorative harmony of the room—should be plain, unfigured and uniformly flat, or without gloss.

The New Idea in decorative art is that the present period, while careful to profit by the lessons of the past, is strong enough to evolve a style of its own; that elaboration is not indispensable to



art, but that the truest art may be associated with the greatest simplicity; that simplicity is not an attribute of inexperience, but in decoration can be successfully practiced only by the master; that correct color harmony, because it is more restful to the temperament, is more enduringly satisfying than any mere pattern.

#### Bridgeport Standard Washotint

is a washable coating, for interior walls and ceilings, producing a soft, flat finish that is far more pleasing, satisfactory and durable than kalsomine or water paint.

An important feature of Washotint is the ease with which it can be washed when stained or soiled, whereas the use of soap and water on kalsomine, cold water paint and other similar wall preparations would ruin the finish.

A Washotint surface is non-porous, non-absorbent and hard, therefore germ-proof, sanitary and cleanly.

Washotint is a good heat resister and is excellent for use on radiators, steam pipes, or any similar surface.

There are 12 of the most beautiful Washotint shades, and this variety can be greatly

extended by mixing. These colors are rich, deep and clear, producing decorative effects of great charm, yet not conventional.

Many a decorative effect carrying with it



the personality of the originator has been sacrificed because of some certain tone in a wallpaper pattern at variance with the rest of the scheme. The one, two or threetoned idea in Washotint decoration makes possible the suc-

cessful carrying out of almost any interior decorative plan.

Bridgeport Standard Washotint is constantly being specified and used on critical work throughout the country. It was used extensively in the new and beautiful Miami

Hotel, Dayton, Ohio. It was selected from twenty competing flat wall finishes because actual tests proved that it gave best results—that it went farther (less material being required) and showed no brush marks. See photograph of this hotel on page 66.

#### Bridgeport Standard Lithogen Primer

should be applied over all surfaces which have not been previously painted, before applying Washotint. This Primer stops all suction, seals up the pores and causes the Washotint coats to stand out in full strength.

#### Washotint for Wall Board

In finishing any type of wallboard, Washotint is an ideal product, producing a surface that is faultless in appearance.

At our various Service Departments, referred to on page 5, large panels of wall board may be seen in beautiful color combinations.



@ 1917 by Good Furniture Magazine.

A soft-toned flat finish without gloss is the modern treatment for walls. Bridgeport Standard Washotint comes in twelve beautiful shades, and this variety can be greatly extended by tinting the white. A Washotint wall is germ-proof, sanitary, cleanly. It can be washed.

## Miscellaneous BRIDGEPORT STANDARD Products



### Bridgeport Standard Mirror Finish For Refinishing Old Woodwork, Floors and Furniture



Applying Bridgeport Standard Mirror Finish, the superior varnish stain, to furniture.

BRIDGEPORT Standard Mirror Finish will do wonders to a chair, table, floor or to interior woodwork. It will give a beautiful, transparent, mirror-like finish with very little work.

Made in a variety of colors, so that you can completely change the color scheme of the original finish. If, for instance, you are tired of the natural or antique oak finish, you can change it to cherry, mahogany or any of the other eight colors.



Bridgeport Standard Mirror Finish is the highest grade of varnish stain. It gives a stained and varnished effect in one operation.

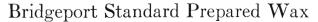
#### Bridgeport Standard Crack and Crevice Filler



For filling cracks and crevices in floors or woodwork before finishing.

This article is somewhat similar to our Wheeler's Paste Wood Filler. It leaves in cracks and crevices a tough, adhesive material that will not shrink.

Its use on floors is particularly recommended from a sanitary standpoint, in addition to the smooth, level surface it gives.



For giving to floors, woodwork and furniture the popular wax finish. Its velvety lustre is very attractive. The natural markings of the wood are strengthened and their beauty enhanced. Bridgeport Standard Prepared Wax





Applying the Popular Wax Finish to Floors and Furniture.

is easy working, free from greasiness and dries with a harder surface than other waxes. Therefore it takes a higher polish and has greater durability.

The illustration shows the method of obtaining a wax finish on floors and furniture. The weighted brush indicated can be purchased at almost any paint or hardware store.



#### Bridgeport Standard Old Dutch Finish

is used for producing a soft, lustrous effect on wood work. Varnished floors are kept in order with an occasional application of Old D tch Finish (See page 53). It removes the slight marks of wear and is both a cleaner and a polisher.

#### Bridgeport Standard Mahogany Primer

When finishing birch in mahogany, or mahoganizing other close-grained woods, we recommend a coat of Bridgeport Standard Mahogany Primer over our Mahogany Penetrating Stains (See page 56), in place of shellac. This Primer is in the nature of a tinted liquid filler, and besides supporting the finishing coats prevents the varnish from "bleeding" the stain.

#### Bridgeport Standard Oil Wood Stain

This type of stain is for use on close-grained woods to produce an imitation of such shades as oak, cherry and mahogany. The Light Oak and Dark Oak, which are the shades more generally used at present, are illustrated on pages 27-28 of the colored section.

Shellac and wax, or shellac and varnish can be used over these stains. Made in the following shades: Light Oak, Dark Oak (Golden), Rich Walnut, Cherry, Mahogany, Rosewood and Forest Green.

#### Bridgeport Standard WonderLac

A colorless liquid for use over the popular brown and gray acid stains, producing that soft, rich, dull velvety effect now demanded on all types of work. (See page 57).

It has the peculiar property of not changing in tone the most delicate shade of stain, and in this respect differs from shellac and wax. The yellow in shellac and wax has a tendency to impart a greenish cast to gray stain.

WonderLac leaves the surface without even a suggestion of body or gloss—just a touch of softness that emphasizes the modern idea of beauty in woodwork, without the conspicuous glare or built-up appearance of heavy finishing coats.

It is damp-proof, affording thorough protection to the work—an invisible coating that is an artistic finish and surface protector.

Two coats of WonderLac only are required directly over the Acid Stain, making a very economical finish.

#### Bridgeport Standard Paint and Varnish Remover

It removes paint and varnish quickly and thoroughly, leaving the surface ready for refinishing.

It can be used on interior woodwork, floors, doors, furniture or any varnished or painted surface from which it is desired to remove the old finish and finish anew; or when it is desired to change the finish from one type or shade to another.

Bridgeport Standard Paint and Varnish Remover can also be used for removing old paint before repainting.

For this purpose it is superior to the old "burning off" process, which is dangerous and forbidden in some states.

Our Remover contains no carbolic acid, and is not injurious to the hands; neither does it raise the grain of the wood.

Testing samples will be furnished to support our claims for its efficiency.



# Many Prominent Buildings Owe their Beautiful Woodwork to BRIDGEPORT STANDARD WOOD FINISHES



In this era of palatial hotels, it is interesting to know how important a part Bridgeport Standard Wood Finishes play in obtaining beautiful and unusual interior effects on hotels of this class.

The WILLIAM PENN HOTEL, Pittsburgh, Pa., is one of the latest additions to the luxurious class of hotels.

"The Bridgeport Standard Walnut Stain which we used throughout this building and applied generally on birch," says the Barker Painting Co., New York, the painting contractors of The William Penn, "gave a beautiful color and finish which was most satisfactory to the architects and to ourselves.

"This color was used throughout, excepting in certain special rooms, which were of painted finish, and a few of which were done in oak and Circassian walnut woods."

Bridgeport Standard Wood Finishes were used on the interior trim of The BILTMORE, New York, and it would be difficult to create effects more beautiful or more unique.

Particular attention is called to the Brown Oak Finish in the library. This has attracted wide attention.

The painting contractors, Robert E. Mackey Co., state: "Bridgeport Standard Stains and Fillers were of great assistance to us in turning out a thoroughly first-class job."

Bridgeport Standard Wood Finishes were also used for the beautiful Biltmore furniture. See letter Berkey & Gay Furniture Co., page 14.

In the MIAMI HOTEL, Dayton, Ohio, Bridgeport Standard Penetrating Stains were used on all Gum Wood, Wheeler's Paste Wood Filler on all Walnut wood; and the two most prominent suites in the building, the presidential suite and the suite on the sixth floor, were decorated entirely with Bridgeport Standard Washotint.

Washotint was also used extensively in other parts of the building. A test of twenty different flat wall finishes proved that Washotint was best. It had greater covering capacity, requiring less material, and it showed no brush marks.



Miami Hotel Dayton, O.



## BRIDGEPORT STANDARD WOOD FINISHES

For Moderate-Cost Homes



RIDGEPORT Standard Wood Finishes are not confined to "big" or costly work. They are used still more extensively for mod rate-cost residences, cottages and bungalows—for the ordinary home as well as the palatial hotel and residence.

The finishing of the interior woodwork to express the owner's taste and individuality, even in the case of a moderate-cost home, has become so important that we urge everyone about to build a new home or refinish an old one to visit our nearest Service Department—see pages 4 to 8—where every assistance will be given to obtain unusual results.

In dealing with home owners, we cooperate entirely through architects, contractors, painters, decorators or dealers.

Bridgeport Fillers, Stains, Waxes and Varnishes are especially adapted for fine results on doors, floors and wood work of private homes. Specify them when building or refinishing. They cost no more than less satisfactory kinds, and the distinctive effects secured are sure to fulfill your highest expectations.

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