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Wood-Using Industries of Iowa

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The following brief report on the wood-using industries of Iowa is based on returns from the various plants which manufacture wood into finished or partially finished products. The investigation does not take into account the large quantity of lumber which is used for rough construction work. Any products which are manufactured further than sawing or which go into a planing mill or sash and door factory are included.

In addition to the lumber which is used in the so-called wood-using industries of the state, there are large quantities of timber used for firewood, poles, posts, mining timbers, railroad ties, etc. It has been recently estimated that the state uses annually between 25 and 30 million wooden fence posts and about two million cords of firewood. Accurate data are not at hand at this time in regard to the number of railroad ties, poles and mine timbers used in the state. Large amounts of rough lumber are used in the state annually. If to this amount is added the total material used in the ties, etc., it will be seen that Iowa ranks well among the states in amount of wood used annually.

The investigation has shown very conclusively that practically all of the lumber and lumber products which are manufactured through the wood-using industries come from outside the state. For a number of years, Iowa has been drawing her supplies of lumber from the north, the west and the southern forests. At the present time there is no striking difference in price between similar grades of southern yellow pine and Douglas fir for building purposes. The difference in freight charges from the various regions is compensated for by a variation in stumpage price.

In making a general survey of the woodworking industries of Iowa it has been noted that a large number of the wood-using industries which are found in other states are represented in Iowa. Naturally, industries serving the general building trade, such as sash, door and millwork factories and those furnishing planing mill products, head the list in amount of material consumed. The following summary of the wood-using industries of Iowa, however, will show that although relatively small amounts of wood are consumed in some industries, on the whole the state makes a creditable
showing with respect to the variety of wood-working industries represented.

Sash, Doors, Blinds, General Millwork and Planing Mill Products

The forty-nine establishments coming under the above classification which have reported in this investigation, show that approximately 100,000,000 board feet of various woods are manufactured into general mill work and planing mill products in Iowa each year. Individual establishments report an annual consumption of over 16 million board feet annually. These industries use many kinds of lumber but the most important are the following, listed approximately in the order of importance: Western white pine, western yellow pine, southern yellow pine, sugar pine, Douglas fir, cypress, red oak, spruce, gum, white oak, birch, redwood.

The prices for the different species varied widely but the average price paid for western white pine of $75 per thousand board feet at the mill will serve as an example of the cost. The southern yellow pine used in this industry was secured at an average cost of approximately $70 per thousand board feet.

It is interesting to know that the total amount of lumber consumed in these industries is apparently somewhat less than the amount consumed ten years ago when a similar investigation was made. At that time approximately 120,000,000 board feet were used annually by the planing mills and general millwork factories. This is accounted for by the fact that a number of establishments reported that they had not been running to full capacity during the twelve month period for which the investigation was made. During this same period the average price for the lumber used has increased nearly 100 percent.

Boxes, Crates and Baskets

Thirty-five establishments in Iowa have reported using a total of about 12,000,000 board feet of lumber for the manufacture of boxes, crates and baskets. Of this amount, approximately 1,750,000 or 15 percent comes from timber grown in Iowa. The Iowa grown woods which are used largely in these industries are the white elm, cottonwood, soft maple, ash, hackberry and some sycamore. Naturally, the woods from outside the state are those which may be secured at a relatively low cost and include southern yellow pine, red gum, cypress, northern pine, Douglas fir, birch, maple and yellow poplar. Southern yellow pine heads the list in amount used for boxes and crates. The prices paid for the material used
in these industries would average about $30 per thousand board feet although in individual cases as high as $110 was paid for some of the wood used.

The present report indicates that considerably more lumber was consumed in Iowa for boxes and crates ten years ago than at the present time. The average cost for the lumber used in these industries has increased from $13.58 in 1913 to approximately $30 at the present time.

**Tanks and Silos**

Reports received on this industry indicate that at the present time nine firms are engaged in the construction of wooden tanks and silos. Ten years ago nineteen firms reported in connection with this industry. This would indicate that the wood stave silo and the wooden tank have been replaced to a large extent by other types of silos and steel tanks.

The returns from the nine firms reporting in this industry show that about 2,000,000 board feet of lumber are consumed annually in the construction of tanks and silos. Ten years ago nearly 24,000,000 board feet were reported for these industries.

At the present time Douglas fir and cypress head the list in amount used. Smaller amounts of redwood and white pine are reported from some of the manufacturers. The Douglas fir was secured at a price averaging about $65 per thousand board feet, and the cypress at an average price of $85 per thousand. Ten years ago the average price paid for Douglas fir in this industry was $34.89 and for cypress $36.42. This shows that the price of Douglas fir used in tanks and silos has increased 86 percent in the past ten years while in the case of cypress, 133 percent in the same time. So far as the reports indicate no wood being manufactured in this industry comes from Iowa.

**Vehicles and Vehicle Parts**

Twenty firms manufacturing vehicles or vehicle parts have reported using a little less than 3,000,000 board feet of lumber. A variety of timber is utilized in this industry. The woods making up the larger amount of material are the red and white oak, southern yellow pine, gum, ash and elm. Smaller amounts of Douglas fir, cottonwood, maple and hickory are used.

Ten years ago the state consumed approximately 17,000,000 board feet of the various woods in the vehicle industry. At that time hickory headed the list in amount used, making up nearly 20 percent of the total. At the present time the hickory being used by the twenty concerns reporting, amounts
to less than 1 percent of the total wood used in this industry. The reason for this is apparent since each year hickory is becoming harder to secure. The hickory which went into this industry 10 years ago was secured by the Iowa industries at an average cost of $24.94 per thousand board feet. At the present time the average price paid for hickory is about $110 per thousand board feet. Red and white oak which were secured 10 years ago at an average price of $48 per thousand board feet, cost the present manufacturers an average of $80 per thousand board feet. Southern yellow pine which was purchased in 1913 at an average cost of $28 per thousand board feet, was purchased during the past year at an average price of $75 per thousand in this industry.

Woodenware and Novelties

For the year 1922, eight firms manufacturing woodenware and novelties reported. Ten years ago 9 firms were listed. At the present time the annual consumption of wood in these industries amounts to only between 2,000,000 and 3,000,000 board feet. Ten years ago the industry reported 17,000,000 board feet. At the present time white ash heads the list among the species in amount of wood consumed, although this species makes up only 20 percent of the total. Ten years ago the ash used for woodenware and novelties in the state made up 93 percent of the total.

The other woods which are used in considerable quantities in this industry are Norway pine, spruce, yellow pine, white oak, walnut, elm, and hard and soft maple. The reports in the present investigation show that the white ash was secured at an average cost of about $60 per thousand board feet. In 1913 in the same industries the ash was secured at an average price of $26.45.

Agricultural Implements

Nineteen Iowa firms report various woods used in the manufacture of agricultural implements. The total consumed in this industry amounts to between seven and eight million board feet which is almost identical to the amount used ten years ago. The principal woods reported are southern yellow pine, Douglas fir, and white oak, with small amounts of birch, elm, maple, gum and hickory. A comparison of average prices paid for the different woods shows that in many cases the present price is over 100 percent greater than in 1913 when a similar study was made.

Furniture

Seventeen Iowa farms report the manufacture of various items of furniture (not including chairs). A census of this industry taken 10 years ago showed that twenty firms
were engaged in this industry. It is rather surprising to know that at the present time this industry is consuming about fourteen million board feet of lumber in the state while ten years ago the amount consumed was only a little over six million board feet.

The principal manufacturers are now located in the Mississippi River towns in eastern Iowa. A long list of woods find a place in this industry. Among the more important are the red gum, black walnut, the oaks, southern yellow pine, soft maple, as well as a number of less important species. A note on present prices paid for lumber will show the great increase during the past few years. At the present time red gum is purchased at an average price of about $50 per thousand board feet. This same wood was secured in 1913 at $19.44 per thousand. During this same period white oak has increased in price in this industry from $41.00 to an average of about $70.00 per thousand feet and black walnut from an average of $35 per thousand board feet in 1913 to an average of $120 as reported by the present manufacturers. Ten years ago practically no walnut was being used for furniture while at the present time black walnut comes in very prominently in this industry.

Fixtures

Seventeen Iowa firms report the manufacture of fixtures, such as counters, cabinets, partitions and other nonmovable furnishings for rooms and stores. During the past year this industry used between four and five million board feet of lumber. This is a little less than was reported ten years ago. At the present time white and red oak make up a large percent of the total wood used,—in fact a higher percent than they did ten years ago. Other woods which are used to a considerable extent are red gum, black walnut, cypress, mahogany, yellow pine, Douglas fir, birch and basswood. The white oak in this industry was secured at an average price of about $135 per thousand board feet. The same species in 1913 was secured for manufacturing the same equipment at an average price of $58.50 per thousand board feet. This was an increase in price for this wood during the ten-year period of 130 percent. The present investigation shows that there are eleven fewer firms reporting in this industry than there were ten years ago.

Laundry Appliances.

This classification includes a number of power washing machines manufacturers as well as a few other types of manufacturing plants. At the present time thirteen manufacturing establishments have reported, which is four more than
in 1913. The wood used at the present time amounts to about 4,000,000 board feet as against about 5,500,000 in 1913. Of the present amount used nearly 2,500,000 is cypress, indicating clearly the value of this wood in the manufacture of washing machines. Ten years ago this same species made up approximately 90 percent of the total used in this industry. At the present time red gum ranks second in amount of wood used with a total of about 700,000 board feet. Other woods which find a place in this industry are the white ash, soft maple, birch, yellow pine, elm, basswood, white oak, white pine, Douglas fir and sycamore. It is interesting to note the difference in prices paid for the two most important woods in this industry. The cypress ten years ago was purchased by the laundry appliance manufacturers at an average price of $26.40 per thousand board feet. Last year this same wood was purchased at an average cost to the manufacturer of about $70 per thousand board feet. The red gum which was secured in 1913 at a cost of $26.62 per thousand board feet, was purchased last year at an average of $45 per thousand board feet.

Car Construction

Only two firms in Iowa report the use of wood in car construction. These firms, however, report a consumption of nearly 4,000,000 board feet which is slightly less than the amount used ten years ago. Southern yellow pine heads the list in amount consumed, making up a total of nearly 2,000,000 feet. Douglas fir comes second with a total of about 1,600,000 feet. White oak and yellow poplar make up most of the balance. The investigation shows that the yellow pine was secured at an average cost of about $45 per thousand board feet and the Douglas fir at an average price of $54.00.

Casket and Coffins

Eight casket and coffin manufacturers in Iowa reported in connection with this study. This would indicate that the coffin business is on the increase in Iowa since only six firms reported in 1913. The present total consumption of wood in this industry amounts to approximately 7,000,000 board feet as against a total of 5,000,000 board feet in 1913. The principal woods now being used are cypress, western white pine, and red oak with smaller amounts of black walnut, red cedar and basswood. The average price paid for the cypress during the past year was $46 per thousand board feet. This price is relatively low and is accounted for by the fact that a poorer grade of cypress is used in this industry than in many of the others. The western white pine was secured at an average price of approximately $40 per thousand board feet which also
indicates that a low grade of this species finds a market in this industry.

**Refrigerators and Kitchen Cabinets**

The present annual consumption of wood used in the manufacture of refrigerators and kitchen cabinets amounts to about 5,500,000 board feet. This same industry used about 3,500,000 board feet ten years ago, showing a considerable increase in this industry. The number of firms reporting are five which is just half as many as reported in the study made in 1913. This indicates that the smaller manufacturers have either consolidated or gone out of business. A considerable variety of woods find a place in this industry. Among the more important are the red and white oaks, spruce, southern yellow pine, Douglas fir, hard maple and cypress, with smaller amounts of birch, ash, cottonwood, gum, elm and black walnut. All of the woods used, except a few thousand feet of cottonwood, are shipped in from outside the state.

**Dairymen’s, Poulterers’ and Apirists’ Supplies**

The firms included in this classification are largely those interested in the manufacture of butter tubs, incubators, churns, etc. Ten manufacturers reported for the year 1922, which is an increase of five firms since 1913. The present consumption of wood in these industries amounts to approximately 6,000,000 board feet which is almost twice the amount reported for these same industries ten years ago. Of the total, ash makes up nearly 3,000,000 board feet or approximately 50 percent of the total. This wood was secured ten years ago in this industry at an average of $25 per thousand board feet. At the present time the manufacturers are paying an average of $45.00 per thousand.

Other woods which are used prominently in this industry are the red wood, Douglas fir, yellow pine, western white pine, cypress and cottonwood. All of the wood reported for this industry comes from outside the state.

**Handles**

Seven firms reported manufacturing handles of various kinds during the year 1922. This is an increase of three over the firms reporting in 1913. The reports indicate, however, that only about a million and a half feet of lumber are now being used in handle manufacture in Iowa. Ten years ago the amount of timber going into this industry amounted to over 2,000,000 board feet per year. Hard maple heads the list in amount in this industry, making up a total of about 350,000 board feet. The balance of the amount is fairly equal-
ly distributed between gum, basswood, birch, hickory, ash, white oak, cottonwood, and beech.

An interesting point in connection with this industry is that over 200,000 feet of the wood reported originates in Iowa. This is about 14 percent of the total. The average price paid for the hard maple during 1922 was about $85 per thousand board feet. In 1913 this same wood going into the manufacture of handles was secured at an average price of $24 per thousand board feet. This would indicate an average rise in price during the ten year period of about 250 percent for hard maple. During this same period the average price paid for hickory as reported has increased from $25 per thousand board feet in 1913 to approximately $135 per thousand in 1922. The growing scarcity of the more valuable woods is responsible for this high increase in price. All of the other woods used in this industry also show a relatively high increase in price over the figures of 1913.

Elevators

Two manufacturing establishments report a total consumption of a little over 1,000,000 board feet. This is somewhat less than the amount of 1,775,000 reported ten years ago. The principal woods used are the Douglas fir, white pine, yellow pine, maple and hemlock, which make up 95 percent of the total wood used.

Chairs

Chairs are usually manufactured in establishments making only this one product and for this reason the chair manufacturers are given a separate classification from those making other kinds of furniture.

Four firms reported on their operations for 1922 with a total consumption of nearly 1,000,000 board feet. This amount corresponds very closely with the total in this industry during the year 1913. The red oak and red gum, with a total of about 350,000 board feet each make up about three-fourths of the total wood consumed in this industry. The other woods reported are the white oak, elm, walnut and birch. Nearly 200,000 board feet of the total are reported as coming from Iowa sources.

Ships and Boats

Naturally, Iowa is not a large boat building state. However, several firms report using a total of about 100,000 board feet in this industry. These firms are all located in Mississippi River towns. During the past ten years the amount of wood consumed has decreased from about 535,000 board feet to the above amount indicated. The principal woods used are Doug-
las fir, white oak, white pine, and southern yellow pine, which make up over 90 percent of the total used.

**Cigar and Tobacco Boxes**

Five firms reported using approximately 1,000,000 board feet of wood in the cigar and tobacco box industry in Iowa. Tupelo gum heads the list in amount consumed, making up a total of about 500,000 board feet. Red gum comes second in the list with about 250,000 feet. Smaller amounts of yellow poplar, red cedar, Spanish cedar and basswood are used.

**Musical Instruments**

About 8,000,000 board feet are reported by manufacturers of musical instruments. This figure is probably somewhat in excess of the amount of lumber actually going into musical equipment since the firms reporting are probably using some of the lumber in the manufacture of products other than musical instruments. A large amount of the wood in this industry is used in the form of veneers. The principal woods are mahogany, walnut, oak, birch, red gum, hard maple and chestnut.

In the report prepared in 1913, less than 100,000 board feet were reported as being used in the manufacture of musical instruments.

**Miscellaneous**

This classification includes a great variety of products which could not well be classified under other headings or such items being manufactured by only one or two establishments which would not justify listing in a separate classification.

Approximately 1,750,000 board feet are consumed in this miscellaneous class. As might be supposed practically all of the woods used in the different industries are represented. Douglas fir and southern yellow pine head the list in quantity used.

**Summary and Conclusion**

One of the most striking points out in this recent study is the great increase in prices paid for the different kinds of woods entering the various woodworking industries of Iowa. In many instances the increase in price during the past ten year period is well over 100 per cent. Some of the woods which played an important part in the industries over a decade ago have almost dropped out of consideration due to the fact that they are becoming extremely scarce. Another point which has been noted is the replacement of the more valuable timbers by so-called "inferior woods" in some of the industries. It will be noted also that the northern white pine which was still used extensively in 1913 has practically been
replaced in the woodworking industries of Iowa by the western white pine, the sugar pine, and the western yellow pine.

Although the material used in the wood-using industries of Iowa is being received as a general thing from more distant points, yet it is interesting to know that there is practically as much wood used in Iowa in these industries at the present time as there was ten years ago. The records of the past ten years show a high mortality for many wood-using firms especially the smaller operators. However, many of the firms dropping out have been replaced by others and at the present time the state has many wood-using industries which are apparently on a permanent basis.