Timber Utilization in Europe

Wood May Prove to Be the Most Important Basic Raw Material for Some Nations

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Photographs by Dr. A. Ebner

1928 and 1929 a movement was started to develop the markets for lumber and various wood products. Probably the most active single agency working in this field is the Timber Development Association in England which started shortly thereafter. A little later, similar timber development associations were organized in Belgium, France, Austria, Switzerland, and Italy.

Still later the movement gained great strength and influence in Poland, Czechoslovakia, Roumania, Finland, Sweden, and some of the other countries.

The outstanding feature of this general movement has been the fact that not only are lumbermen, including exporters and importers, interested, but forest engineers, governments through their forestry officials, engineers interested in wood construction, railway maintenance-of-way engineers, timber preservation specialists, and many other groups have interested themselves and combined their efforts for the greater use, protection, and development of the markets for wood.

To an American who has attended many meetings of the National Lumber Manufacturers' Association as well as regional manufacturers associations where discussions have been devoted to this subject for many years, it was somewhat of a surprise to learn that this movement has gained such headway in Europe. One naturally felt that with the concentrated populations and economic conditions which favored the marketing of lumber and other forest products, the problem of timber utilization would be pretty well solved. However, some of these countries which have been important importers are not utilizing their present timber growth. The outstanding example of this is France.

The movement has gained impetus and considerable support not only on the part of important lumber exporting nations such as Roumania, Finland, Sweden, Poland, Czechoslovakia, and Russia, but among the important lumber importing nations of Western and Southern Europe. England is an outstanding example of concentrated timber utilization where lumber is received from almost all important timber exporting nations. It is the great “cross-road” of international timber markets. Over ten million dollars are expended annually for
The Spessart region of Germany contains some of the finest oaks in Europe. They are cut on rotations of 300 to 500 years and the most valuable (largest) trees are used for rotary veneers. Stumpage values equivalent to $100 to $1,000 per thousand board feet are found in extreme cases. Only the state can afford to wait until trees reach large sizes before they are cut and marketed.

Noteworthy Developments

With this background of increasing interest in the use of wood, there have been the following noteworthy developments culminating in the summer of 1937:

1. The third annual meeting in Paris of the Comité International du Bois at which 29 nations were represented by some 96 delegates with over 200 in attendance. Three full days of sessions with evening banquets marked these meetings. There was enthusiastic and general agreement that wood needs wide advertising and propaganda not only in Europe but throughout the world. One was at once impressed by the high caliber of representatives present at these sessions. Outstanding were the lumbermen of all these nations, high government forestry officials, many leading exporters and importers, timber engineers, foresters, timber preservation specialists, and many others. The meetings were conducted in French, English, and German. Dr. R. Glessinger, executive secretary of the C. I. B. proved to be most facile and expert in his ability to translate immediately all of the papers and discussions and with a most accurate and amazing memory of all facts, properly interpreted with precision and presented in a very pleasant way.

2. The importance given to wood at the International Exposition at Paris. The outstanding feature was the Pavillon de Bois or wood pavilion, which was constructed entirely, both exterior and interior of wood. This contained a large and attractive entrance hall and a high ceilinged auditorium in which the meetings and French state government banquet were held, with many exhibits showing wood from the seed and reforestation periods up to the final use of wood as lumber and a myriad of other products. These were very attractively displayed and commanded wide interest on the part of the public as well as those particularly interested in wood.

Another feature of the International Exposition was the main entrance at the Pont de l'Alma or the Alma Bridge crossing the Seine River where a magnificent and extensive new cross-over bridge was constructed entirely of wooden members and two tall pylons about 200 feet in height were erected. These two exhibits were erected at considerable expense by the French government to point out the advantages of wood, not only in general construction but for various architectural designs and various forms of dwellings and interior finish as well as for chemical and miscellaneous products including wood gas, wood textiles (silk and wool), naval stores and a great variety of other products.

New Vision of Wood's Importance

3. The announcement by Dr. J. A. von Monroy, head of the new four-year plan for Germany that wood is very likely to become the outstanding and most important basic raw material of the future, certainly for Germany. To an American accustomed to a super-abundance and great array of basic raw materials which have made this country the rich and powerful nation that it is, it is at once apparent that many of the European nations are exceedingly poor in basic raw materials. From wood, at least in Germany, many products are be...
Motor truck logging is the common practice in the woods as it is in most regions of the United States. Power for the cross-haul loading is supplied by the truck engine. Tree lengths are commonly cut and hauled because of lower handling and transportation costs. These are cross-cut at the mills to suitable lengths to supply the local demand.

ing made which are intended to make that nation independent of foreign sources of supply. Coal is the only basic material of which there is an over-supply in Germany. It is lacking in iron, wood, oil, rubber, textiles, copper, and other materials which it must import at great expense. About one-third of its wood requirements must be imported. Under Dr. von Monroy, a new vision of the importance of wood in the economic structure of Germany has been unfolded. The nation is enthusiastically and actively carrying out its program of self-sufficiency, particularly in the matter of many of these raw materials. From wood, gas, and alcohol, are being derived as a source of fuel to substitute for the very expensive gasoline which must be imported at enormous expense. Gasoline may cost (in our money) from 50 to 70 cents per gallon or more and already over 6,000 trucks and passenger cars are being operated by wood gas with wood stations supplying gasoline stations in many parts of the nation. Not only wood silk but wood wool is being made from spruce and beech. This is an attempt to reduce the enormous quantities of wool which must be imported from Australia and to some extent silk from Japan and to a limited extent cotton from the United States. Up to 35% of the uniforms used for the army and the work camps comparable to our own CCC organization, as well as the railway and street car conductors and many other uniforms, are now being made of wood wool. Even ordinary suits and overcoats are being made, at least partially, from wood. There are 27 new factories now being constructed in Germany for the manufacture of wood wool and food for cattle, and swine, and many other products. The wide ramifications of these products are amazing to an American accustomed to an abundant and relatively cheap supply of timber products. This program affects their whole plan of national forest management very directly because they are finding they can use much smaller materials from the forest than heretofore and therefore rotations formerly from 80 to 150 years in length are being materially reduced.

European and American Conditions Contrasted

The per capita consumption of lumber and other forest products is very much lower in Europe than in this country. Tradition and custom are important factors in the consumption of wood. Relatively little exterior construction such as in dwellings, barns, or buildings of any kind is fashioned from lumber as is customary throughout the United States. People build their houses for greater permanency there. It is estimated that probably 80 to 90% of all wood grown in Europe outside of Russia is utilized efficiently, whereas only 34% of the trees felled in our forests is ultimately utilized.

Contrasts between European and American Conditions

1. There are relatively few important species produced in Europe. Scotch pine and Norway spruce, known respectively as redwood and whitewood in the British markets or as Swedish pine and spruce, comprise about 70 to 80% of all lumber and other forest products in Europe. Other species are of considerable importance but not comparable with these two in volume. Three other species are of considerable importance and utilized than in this country. Most of their timber is grown under a systematic plan of forest management whether owned by private individuals, governments, states, or other forms of ownership.

2. Trees are much smaller when cut and utilized than in this country. Most of their timber is grown under a systematic plan of forest management whether owned by private individuals, governments, states, or other forms of ownership. It does not pay to wait too long to grow these trees. Generally the rotations (length of time elapsed before the tree is cut) are from 80 to 140 years or more. It does not pay to wait until the trees reach large size. However, these small trees are generally straight, symmetrical, sound, and produce lumber of good quality although containing many small tight knots. In other words, an American would look upon much of this lumber as No. 1 common and No. 2 common boards whether in softwoods or in hardwoods.

3. Knots are not considered as serious defects. One commonly finds knotty lumber in beautiful palace floors, doors, trim, interior finish, panelling, and in other forms. We in America must abandon the idea that knotty lumber is defective, undesirable, either from an aesthetic or practical viewpoint.

4. Lumber is produced from a large number of small but permanently located sawmills. This gives stability of employment and logs from a given drainage unit.
or of a certain region are generally fed into these small sawmills which in some cases have been operating for a hundred or more years in the same locations. There is one mill that was established in central Italy in 1550 which is still operating in the same old water-driven fashion.

5. Lumber is generally sawed much more accurately and more carefully air-seasoned before shipment than in this country. The use of dry kilns is not nearly as prevalent as here but their lumber is well-seasoned, carefully stacked, and very accurately sawed in gang saw mills.

6. The per capita consumption of lumber and forest products is exceedingly low as compared with conditions prevailing in the United States. With lumber high in price and construction pursued with a greater sense of permanence, it is only natural that one is impressed by the lack of wood in exterior construction. However, in spite of this situation, wood is still widely in demand for car and ship construction, for flooring and interior finish, for boxes, for temporary structures, furniture, and many purposes for which wood has been demonstrated to be a much better material than any other.

7. In spite of the intense development of forestry, many countries are important importers of lumber and some of them look upon American lumber as the most desirable. Countries such as Norway, Sweden, Finland, Russia, Czechoslovakia, Poland, and Roumania have a great excess of forest supplies but generally Great Britain, France, Belgium, Holland, Germany, the Mediterranean section, etc., import large quantities of forest products.

8. Economic conditions permit the growth and use of timber on an intensive basis. One finds many peasants using the smallest twigs and branches for fuel. This means complete use of all available forest produce. Forestry in Europe was born on a wave of fear of a fuel famine. When coal was discovered about 1850, the forests were changed into lumber producing units. Now again it seems possible that through the development of plywood, pressed wood, chemical utilization, wood gas and alcohol and other products, the whole program of forestry may be again changed.

The Importance of Wood in Our Future Economy

In the United States we are accustomed to take our rich and varied resources for granted. Our forests have been largely the source of lumber supplies much needed in the building of structures and homes for our westward extension and to house a rapidly-growing population. Conditions in Europe are interesting because they point the way towards possible future developments in this country. While lumber is and always will be of first importance in the structural and building economy of the nation, our timber resources may be

Lands Forfeited to State

Cut-over Forest Land Comprises Bulk of Tax-Delinquencies

A study of the types of land forfeited to the state for non-payment of taxes in four representative counties of Mississippi (Tunica, Quitman, Washington, Issaquena) shows that cut-over forest land comprises more than eighty per cent of the land forfeited.

Under Mississippi law, three classes of land are recognized for taxation purposes: "cultivated" land, "timbered" land, and "uncultivated" land. The second class includes only land bearing merchantable timber, while the third includes cut-over forest land and abandoned crop or pasture land. In these four counties, however, there is very little abandoned agricultural land.

The following table shows the land area owned by the State in a series of selected townships in each of these counties, and the percentage of the total in each of the three use-classes, as of January 1, 1936:

<table>
<thead>
<tr>
<th>County</th>
<th>Area in Acres</th>
<th>State Title Fire timbered Forested</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tunica</td>
<td>15,237</td>
<td>1.9 47.4 27.4 29.5</td>
<td></td>
</tr>
<tr>
<td>Quitman</td>
<td>53,039</td>
<td>4.1 60.9 20.2 3.3</td>
<td></td>
</tr>
<tr>
<td>Washington</td>
<td>12,795</td>
<td>4.1 60.9 20.2 3.3</td>
<td></td>
</tr>
<tr>
<td>Issaquena</td>
<td>26,390</td>
<td>4.1 60.9 20.2 3.3</td>
<td></td>
</tr>
<tr>
<td>Total area</td>
<td>77,062</td>
<td>3.2 65.7 20.2 3.3</td>
<td></td>
</tr>
</tbody>
</table>

Most of this timber is of unmerchable species.

The reason for the generally low percentage of timbered land in state ownership is that merchantable timber is usually removed prior to delinquency. High taxes are particularly for drainage purposes, may be the holding of most cut-over land highly unprofitable, and most of these forfeited areas lie within drainage districts.