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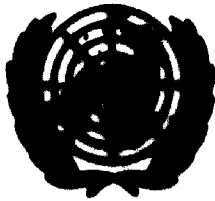
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**BRIEF REPORT ON THE DEVELOPMENT OF WOOD INDUSTRY
IN ITALY DURING THE LAST DECADE 1/**

by

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The development of the construction of machines for wood working was probably determined by the need of supplying the wood industry and first of all, obviously, the national workshops. Therefore, it seems useful to us to give, in a preliminary way, a summary of the development of wood industries in Italy in the last decades.

1) Sawmills and Joinery Work

Sawmill production has existed for several centuries; every valley, every human community had, as a matter of fact, to transform the trees into assortments for construction, tools, transport means, etc. This production has, therefore, been scattered into a large number of small activities, having a clear handicraft character, almost up to the end of last century. Starting from this date a slow but regular trend is noted towards concentrating the enterprises which, however, are still too many, and have a general organization which is not as much rational as could be hoped for. The main causes of this situation are to be found in the extreme fragmentation of the land property (which is the cause of very limited exploitations of woods) and in the orographic situation of the areas of forest production, which are separated one from the other, unless one goes down to the plain following very long runs.

Starting from the period 1950 to 1955, which has really marked the starting point of the "boom" of Italian wood industry, the sawmills were compelled to face new requirements caused by the larger and larger importation of large diameter logs from the tropical forests. The small head saws used up to that time, which were sufficient for cutting coniferous logs and poplars, had to be replaced with other machines capable of sawing logs with diameters up to 1m - 1.20 m. Several Italian companies have devoted themselves to this problem of sawing large logs, with excellent results.

The introduction on a large scale of tropical woods in the Italian factories has also had the double effect of accelerating the concentration of the enterprises and of causing the installation of large sawmills close to the harbours where the logs imported from overseas arrived.

2) Plywoods

This industry started in Italy at the end of First World War and beginning with 1950 grew rapidly on a parallel basis with the poplar cultivations. As a matter of fact, up to 1955-1960 the greatest part of Italian plywoods were made with poplars. However, the better volume yield of the large logs of tropical woods and, at the same time, the difficulty in obtaining poplar logs suitable for peeling have obliged the plywood manufacturers to use tropical woods at an increasing rate, while, in order to work these logs, it was absolutely necessary to use machines specially conceived for such a purpose.

Finally, the increasing and unrestrained demand for blockboards, sandwich panels or multiply panels, which allow reaching thicknesses of 20 to 25 mm and more, has induced the manufacturers to face this problem with all implications related to it.

The details on modern peeling machines and presses will be supplied by another speaker.

3) Bladed veneers

The production of thin layers of decorative woods, to be applied on the surface of plain woods or on panels, has a great importance in Italy and, while formerly it was necessary to have recourse to the manufacturers of foreign countries to get some good slicing machines, nowadays the Italian industry is manufacturing excellent machines provided with really original ingenuities.

4) Fiberboards and Particleboards

The first of these industries, which are chiefly using waste of sawmills and some soft broad-leaved woods (poplar, alder, willow) has not had a large expansion in Italy, even though for certain uses the fiberboard are to be preferred to the plywoods. On the other hand, the fabrication of ~~particleboards~~ particleboards, which was favoured in the years between 1960 and 1970 by an abundant production of poplars, which is the element that supplies a first class raw material for this type of panels, has developed at an impressive rate.

In 1953 the first factory for this product was opened, in 1960 there were nine of them, in 1965 they were 37 and 42 in 1970, with an overall production exceeding 1.000.000 cu.m per year.

Although some production lines are provided with machines built in other countries, it is, however, opportune to underline that other plants are using machines, presses and equipment units made in Italy.

5) Wood Wool Panels

This industry is considered in various countries, a second class one, but, in our opinion, it is able of doing really precious services to the developing countries, because it can contribute to the solution of the prefabrication problems of cheap houses or, more generally, of any kind of constructions. These panels are obtained by wood wool mixed with mortar, cement or any other mineral agglomerative; after the setting of the agglomerate (helped and accelerated in oven) the block is submitted to a frame gang saw which makes the panels in the desired thicknesses. It is therefore an installation of little importance about which it is possible to add some detail further on.

Perhaps it is good to remember that the wood wool (called "viruta" in Spanish and "excelsior" in North America) has some other important uses, for instance in the packing area for padding or to locate and protect fragile objects, glasses, etc.

6) Furniture and Joinery for Indoors

After the World War, this group of industries has had a remarkable growth, which is strictly connected with the radical modification of the aims, structure and organization of work. As a matter of fact, in past times the operations were limited to coping, more or less exactly, furniture, doors or windows with characteristics which, according to the different regions, had been consecrated by centuries of tradition. It was essentially a handicraft work, almost a routine one, where the craftsmen gifted with artistic ability had the possibility of emerging and even of leading teams capable

of supplying a very limited market with first class products. The economical and social evolution which took place after the war has oriented furniture and interior fittings production in general towards entirely different bases.

The problem which arises today is not that of making luxury furniture for mere flots of multi-millionaires, on the contrary, it is that of making available for the middle class and the labourers some thousands of pieces of furniture pleasant to use, functional and not so much expensive. All this can only be obtained through a deep study of the problem and a thorough application of the principles of industrial organization, beginning from the research for more suitable machines and for co-ordinating them within the production lines, and ending with the most advanced techniques of finishing and preservation of the parts to be assembled in other places; moreover the market and transport research shall not be forgotten, together with the most effective advertising and promotion means.

This new type of product has made inevitable the evolution of Italian furniture production towards the disappearance of a great number of joinery shops or small laboratories and replacing them with a real production of large factories with hundreds or even thousands of workers.

The manufacturers of wood-working machines have been able to take advantage of this development, by abandoning the obsolete concepts and exploiting the latest discoveries of modern technicians. The evolution mentioned above has also considered the modification of raw materials under a double point of view: the replacement of the Italian woods or of those imported from Europe with the tropical woods, and the widespread use of panels (especially chipboards) in place of solid wood.

The repute gained by Italian furniture throughout the world is a clear proof of the progress made in this field, which we hope you will be able to remark in the next days.

7) Packaging

Package consumption is very high and requires a large amount of

current wood. In order to keep prices within acceptable limits so that competition of plastics does not affect this market too much, this fabrication which had once been of the handicraft type, exclusively hand made, is presently made by machines which are not only capable of sparing any worker's physical fatigue, but also of adapting themselves to the most different requirements, which go from the large cases and loading pallets, to the boxes for cheese, bottles, cakes, dried fruits, etc.

From time to time advertisements of raw materials other than wood state that the age of wood, which is an obsolete material, is finished and that it is necessary to have resort to all more modern things: metals, different alloys, plastics, etc. At the same time the people engaged in ecology promotion shout everywhere that nature is disappearing and that it is necessary to think of a drastic reduction of forest exploitations. It seems to us that both the first and second statements are made deliberately without taking into account the objective elements which are in any case undeniable.

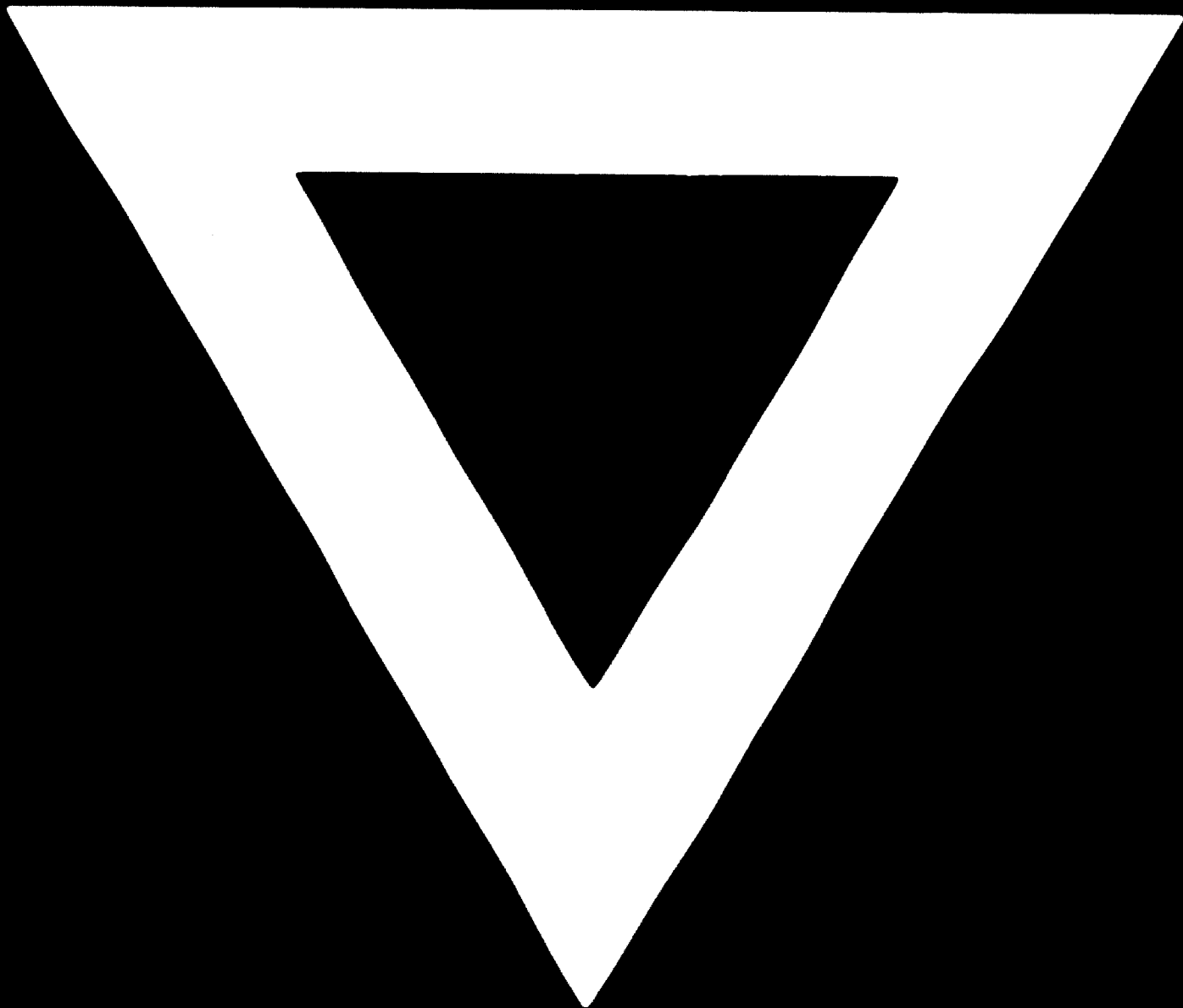
To the supporters of nature to the bitter end we say that forest exploitation, if kept within limits and rules rationally established by management, will not have any ill-conceived result: we wish to perpetuate wood employment and for this reason we are the first to state that the forests shall be kept in their full integrity and improved whenever possible.

To the defamers of wood we say that nobody is thinking to dispute that the furniture and fittings for a clinic are more rational if made with metal or plastics instead of wood; moreover nobody will consider a wooden floor more appropriate than ceramics inside a bathroom. But at the same time it shall be acknowledged that there is no raw material so warm, intimate, so pleasantly varied - one could almost say "alive" - as wood: it is the wood that imposes itself in the home rooms where the family lives: the dining room, bedroom, library....

And it is just thanks to the wood industry, for the improvement of which we have all assembled here, that we will be able to perpetuate and make more tight the bond of wood to man's life, from birth to death.



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