



TOGETHER
for a sustainable future

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4 August 1970

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Director of the Programme
Colombo, Sri Lanka
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11-10-1970

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Director of the Programme

- Inspector of Works, Ministry of Works, Republic of Sierra Leone
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MANUFACTURING IN THE FUTURE

With modern furniture, the designer is not free to indulge in whimsy. Most designs are restricted to a few standard sizes and are made on a one-off basis, or made in small quantities of some large design, as designs are made to suit the individual.

All materials used in the manufacture of furniture on a large scale, are dependent on an assured supply of timber which cannot at present meet the demand. However, the present production of timber from the near future might be able to meet the demand.

Man-made panel products such as plywood, chip-board, laminated and insulation boards etc. are used extensively for furniture and joinery construction. With the variety of timbers used in this country, and the tremendous amount of waste timber from felling to its finished product stage, some attention must be given to this field, when one considers the quantity of materials used, instead of burning them.

A general Product Trade Fair is organized annually by the "Daily Mail Trade Fair" and participated to by most of the furniture and joinery industries. To boost furniture production in such a market, a Trade Fair should be organized at the present time to promote the standard of furniture production in the country.

FINISHING MATERIALS

Formerly honey-wood finishes were made by dipping the wood in a solution of turpentine to which a color was added and then applied by hand.

Imported materials now used for finishing wood

Sahagony wood filler, oak and mahogany stains and French polish by most of these furniture and joinery manufacturers have now largely replaced the former type of finish.

There are three types of methods of application used:-

- (1) By hand polishing,
- (2) By hand brush,
- (3) By spray gun.

TABLE 1

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In fact, it is possible that

DISCUSSION

There are two types of

- (i) Natural
- (ii)

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TYPICAL VEGETATION IN

Botanical	Latin	English	Grade/Clean
1. <i>Erigeron</i> ...	<i>Erigeron</i>	I
2. <i>Chenopodium</i> ...	<i>Chenopodium</i>	I
3. <i>Plantago</i> ...	<i>Plantago</i>	II
4. <i>Lactuca</i> ...	<i>Lactuca</i>	I
5. <i>Chenopodium</i> ...	<i>Chenopodium</i>	I
6. <i>Portulaca</i> ...	<i>Portulaca</i>	I
7. <i>Thymus</i> ...	<i>Thymus</i>	I
8. <i>Urtica</i> ...	<i>Urtica</i>	I
9. <i>Thymus</i> ...	<i>Thymus</i>	IV

Now other
 would be placed
 investigation of these

WOODWORKING - MACHINERY

Although most furniture is made by hand, and by hand methods now, there are still some machines that are used, some made by hand.

The choice of machinery is determined largely upon the type of furniture and job order. Generally, machinery can be economically justified in the home of the manufacturer. The improvements by utilizing machinery is the high accuracy of work with accuracy of manufacture.

At present, the following machinery is being used in the country.

1. Planer
2. Patent sawmill
3. Band saw
4. Kerosene engine

Local farmers also extract timber as roughly finished products due to the tools which they use. These are a few axes and chisels, while for cutting the logs into merchantable sizes the pole saw is used.

These sawmills are used to cut down the trees. Chain saws are used extensively and after being cut, the logs are transported by tractors to the sawmill where they are sawed out to different lengths and sizes.

Machine layout must be given particular consideration, for example, the shop must be well illuminated both naturally and artificially and, of course, well ventilated. There must also be sufficient space for the movements of materials, especially with the long lengths of timbers used.

Most of the machine workshops currently operating in the country lack the above, and worst of all, the machinery is neglected, in fact, they tend not to be used. The Chief Inspector of Machinery is playing an important role in this regard as all machinery workshops are inspected periodically.

ADHESIVES - GLUEWORK - JOINERY - GENERAL USE

For many years glue provided a most useful and lasting together pieces of wood carving in ancient furniture which shows that adhesives have been used for a very long time.

The Egyptians utilized an Arabic resin, asphalt, and resin from trees were used to decorate their wooden carvings. In fact, like the ancient Chinese made adhesives from the mastic tree, the juice of which was made sticky to catch birds.

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- a) Rubber types - If
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- b) ... types -
... ..
- c) ... types -
... ..

On the other hand, the use of adhesive in the construction of furniture
its durability, and the fact that it is not necessary to use a large
amount of adhesive in the construction of furniture, and the fact that the
stand the test of time, and the fact that it is not necessary to use
joints.

Recently, the use of adhesive in the construction of furniture has been
scale in the use of adhesive in the construction of furniture, and the fact
adhesive in the construction of furniture. The use of adhesive in the
possibility of using adhesive in the construction of furniture, for kitchen,
dining table, and chairs, etc.

ADHESIVE IN FURNITURE

In all furniture, the use of adhesive in the construction of furniture, templates
and formers are necessary, and the use of adhesive in the construction of furniture
can easily be applied to the use of adhesive in the construction of furniture,
aid.

ADHESIVE

Temperatures in the use of adhesive in the construction of furniture, and the
insects in the construction of furniture, and the use of adhesive in the
powder past bottles (the use of adhesive in the construction of furniture).

ADHESIVE IN FURNITURE

There are two types of adhesive in the construction of furniture:

- 1) Tar oil type
- 2) Water bond type

These types of adhesive are both used in Sierra Leone.

Applications-

- 1) Hard wood wood
- 2) Soft wood.

The former is used extensively in the construction of furniture, and the latter is
at present only used by the use of adhesive in the construction of furniture.

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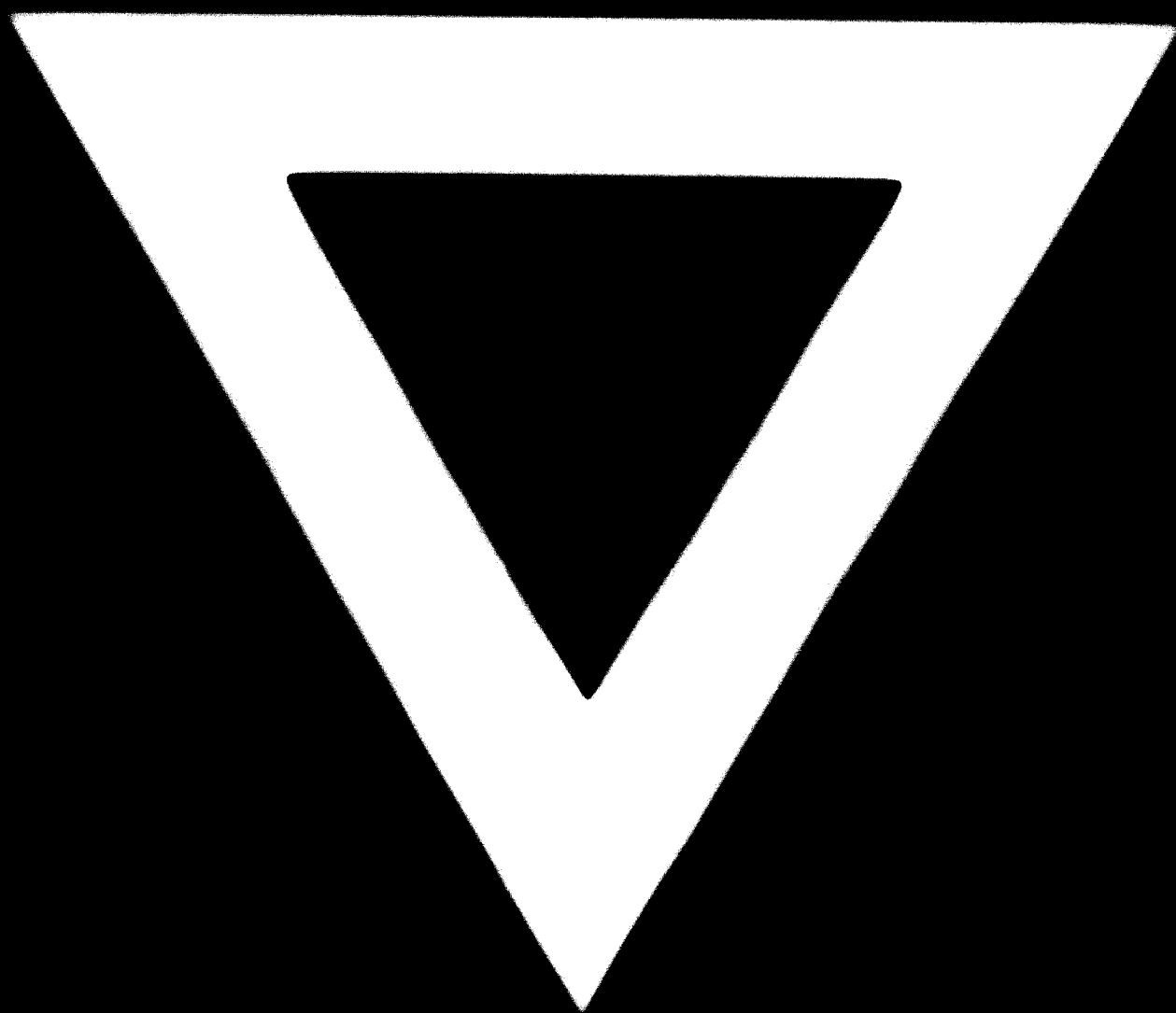
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