

## A Plea for the More Extensive Planting of Ash.

By HUGH GAVIGAN

ASH is one of the best woods in the world for sports goods, tool handles, oars, light wheels, furniture or any purpose in which wood is subjected to shock or strain.

It is the opinion of many, particularly of the organisers of our national game—hurling—that there is likely to be an increasing scarcity of ash suitable for hurley-stick making in the country.

The writer would like to put forward some proposals which might help to solve the problem and which may be of interest to foresters.

When required in its largest possible sizes, ash requires reasonably good, calcareous soils but there is evidence that ash suitable for the manufacture of hurley-sticks can be grown satisfactorily on some peaty soils in the west of Ireland.

### *Ash on Peat.*

Apropos of ash on peat, some observations on a 40 year old plantation in Co. Clare, less than 4 miles from the Atlantic Ocean may be of interest.

On sloping ground of varied aspect, with peaty soils six inches in depth, ash and silver fir were planted in 50/50 mixture, while lower down on damp, deeper peat Sitka spruce was planted pure. Although frost, insects, disease and birds caused set-backs and several severe Atlantic gales took their toll, present-day average dimensions are as follows:

Sitka spruce: 10-15 ins. Q.G.B.H., 50-70 ft. high

Ash and silver fir: 6-10 ins. Q.G.B.H., 30-45 ft. high

Forking, due possibly to lack of pruning in its early stages, or to insect attack or damage of other kinds, has resulted in the failure of a considerable number of the ash to produce clean, straight stems of reasonable length.

Where undamaged the Sitka spruce trees stand approximately 12 feet apart—open enough to permit undergrowth development.

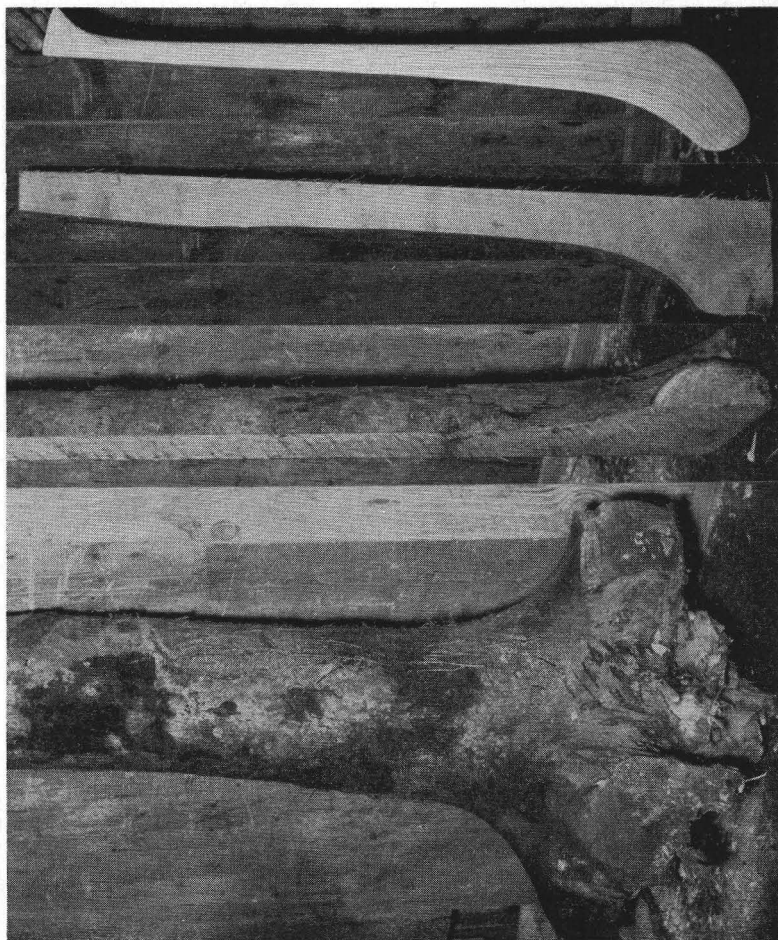
The ash being a prolific seeder started effective natural regeneration about eight years ago, and seedlings of the species can now be found well beyond the boundary of the original ash area. It has invaded the Sitka spruce ground where a thick layer of spruce needles overlying 2 feet of dampish peat has failed to halt its progress. The better conditions in the spruce ground have produced vigorous saplings: some up to 12 feet in height.

The proper treatment of these clumps of natural regeneration is now a problem. Gradual thinning to one stem per sq. foot, side pruning of promising saplings and cutting back of malformed stems are under trial. Coppice shoots may never produce first-class hurley

sticks, but saplings having suitable low-level bends are encouraged with the hurley-stick market in view. By such operations it should be possible to establish productive ash groves by natural seeding relatively cheaply.

*The Manufacturer's Angle.*

As it is important that the grower be conversant with some of the



Composite picture showing different stages in the manufacture of a hurley-stick.

- (1) Ash butt 9 ins. top diameter.
- (2) Approximately a quarter of the same butt containing material for 3 "Senior" hurleys.
- (3) "Plank"  $1\frac{1}{8}$  ins. thick.
- (4) Finished product—Senior hurley.

technical problems which confront the manufacturer who utilizes the timber, the writer recently paid a visit to a small "spare-time" hurley-stick factory, and learned that for the purpose of hurley manufacture the most desirable material is a butt with a top diameter of 8 to 12 ins. having four large, well spaced roots. The trees must therefore be uprooted, not felled in the normal way.

The butts are first broken down on a rack bench. With the narrow end of the log facing the saw in the usual way it is cut straight through the centre, halving two of the roots. A further cut through each half gives 4 pieces roughly equal in size and as near as possible to "quarter-sawn" sections. By means of a push-bench saw these quarters are further broken down to  $1\frac{1}{8}$  inch "planks" which are immediately stacked for air seasoning. The accompanying composite picture shows the different stages in the manufacture of a hurley-stick.

Hurleys are usually produced in three sizes:—"senior", "minor" and "juvenile" which are  $37\frac{1}{2}$ , 36 and 35 inches long respectively. The largest size usually weighs about 20 ozs. The manufacturer likes to get 4 foot long butts to allow for the cutting off of the end which usually splits in seasoning. To overcome warping, which may also take place, he cuts the planks to a thickness greater than may seem necessary.

A good quality stick should have straight grain from the top to the "bas" curve from which point the grain should curve evenly to the end. The wood should, preferably, be white in colour, free from knots and blemishes and possess a good "spring". Quite clearly only good quality fast-grown, young ash trees could be expected to yield such products. Defective hurleys including discoloured or ripple-grained ones usually have to be sold at much reduced prices.

The writer saw some hurleys made from medium sized ash trees of approximately middle age grown on a good limestone soil which were of the unpopular, reddish, ripple-grained, brittle type while ash grown on peaty soil had yielded sticks having few of these defects. It would seem that peat induces a shallow rooting system—three or four main roots running close to the surface. Better quality, heavier soils favour deeper roots with—from the hurley manufacturer's point of view—objectionable tap roots which make the tree more difficult and costly to uproot and play havoc with the grain. For various reasons a butt 8 inches in diameter which should produce ten first-class hurleys may yield 2 or 3 only, or possibly none at all.

### *The Importance of Sports Goods.*

In the writer's opinion the value of sports goods, especially hurley-sticks, in the everyday life of the Irish people is incalculable. At the moment we are catering for a relatively small "hurling public," something approaching rock-bottom populations in 20 counties out of 32, plus a very small export market. The trend in demand for ash for hurleys is upward, and it is imperative that this demand be satisfied.

The following suggestions are offered, therefore :

(1) To meet short-term needs in hurley ash, natural underwood regeneration of ash should be encouraged by relieving suppressed saplings and the greater use of secateurs and pruning knife.

(2) To meet long-term needs, apart from the good mineral soils on which it normally thrives, ash should be considered as a possible choice on some of the more alkaline peats. In addition it should be planted on knoll tops and along marginal rows so that besides providing a source of supply in themselves these plantings take maximum advantage of the wind to spread its abundant seed crops.