

It is particularly noteworthy that wherever the heather presents itself as the natural herbage, the Scotch fir is the tree which springs up, whilst on grass land the larch, and even the spruce, already stated to be comparatively rare in this part, are more frequent. It is from observing this natural result that Mr. Thomson arrives at his conclusions as to where to plant the several species, as noted under the head of "Plantations," and the results fully justify his doing so.

In the Cranish enclosure, Duthil district, there is a fine growth of natural Scotch fir and spruce, with a little larch, and at the foot of Bengulapin there is a considerable extent of Scotch fir and birch, both self-sown.

Cattle, goats, sheep, &c., are, of course, rigidly excluded from the enclosures for the first ten years, and Mr. Thomson is fortunately not much troubled with rabbits or fallow deer.

The whole process is very similar to what we are doing, or trying to do, in Madras, under the name of "railway fuel reserves," but in this country there is not much danger from fires, though they have occurred, and Mr. Thomson appears to have no difficulty as to cattle trespass, rights of way, &c. He impounds any cattle found within the enclosures, and experiences no trouble nor delay in getting human trespassers adequately punished. Such offences are consequently very rare.

Woods.—These are of all ages, from the scattered park trees near Castle Grant (Lord Seafield's residence), and some old veterans, probably 150 years old, in the Abernethy district, to the young woods of 15 years old.

There is not, however, so far as I could judge from so short a stay, much extent of mature wood ready for or requiring a clean cut, though there is an ample supply of thinnings of all ages.

Birch is the only hard-wood tree which occurs in any quantity, and it is little felled at present.

In thinning the coniferous trees, no rigid rule is laid down. They are generally gone over first when from 15 to 17 years old, and any sickly trees, or those which are affecting injuriously the growth of others, thinned out; but there is little or no sale for such first thinnings, as no hop poles are required, as in the south of England.

After the age just mentioned, the woods are gone over periodically, and a certain number of trees marked for thinning, and sold standing, in convenient lots, by tender or private bargain.

When none but mature trees are left standing (there are rarely 200 to the acre, and the wood is from 60 to 80 years old), there is what is termed a "clean cut," the trees being sold standing, as above, and the purchaser bound to remove them within certain dates, paying in advance for each lot before removal. The ground is then allowed to lie fallow until the natural herbage returns, as already described.

In selling thinnings, the felling and sometimes the pruning are done by the proprietor, to prevent damage to the standing trees. In a clean cut, the felling is almost invariably left to the purchaser. All felling, except in the case of saplings, is done with the cross-cut saw, which saves great waste in timber, and the use of which we should lose no time in introducing and making universal in the Government forests of India.

As each tree is felled, it is the duty of the forester to stamp the stump with a hammer, bearing the proprietor's initials, which he keeps in his possession, and can thus see if any unmarked tree has been felled, and the wood manager can, in like manner, check the felling and number of trees removed. In some cases the butt of the tree removed is also stamped.

This system, with some modifications, might, I think, be adopted with advantage in India, and the year might be added to the stamp.

The timber trees (coniferous) in Strathspey are divided, for the purposes of sale, into three sorts, namely, timber, spars, and props.

Under the former are classed all trees eight inches and more in diameter at twelve feet from the base.

Spars include all which are under eight inches and over five inches at twelve feet from the base.

Props are those below five inches at twelve and not less than three at six feet from the base. Anything below this is not classed.

Mr. Thomson gives the price of Scotch fir in Strathspey at 6d. per cubic foot all round, and larch at 1s. per cubic foot, but the demand for the latter is greater than the supply. At these rates all expenses of felling, carting, &c., are borne by the purchaser.

In a recent sale of thinnings, in Tomienour Wood, Mr. Thomson paid for felling and pruning (on contract) 5s. 6d. per hundred trees, and received for,—

							s.	d.
Scotch fir, timbers	...	...	...	...	...	...	3	6 each
„ spars	...	...	...	...	...	...	1	3 „
„ props	...	...	...	...	...	...	0	8 „
Larch, timbers	...	...	...	...	...	...	5	0 „
„ spars	...	...	...	...	...	...	3	6 „
„ props	...	...	...	...	...	...	1	0 „

These rates, though not high, are very remunerative. I saw the thinning going on in the above wood and elsewhere. The trees selected were marked by a blaze on each side, on one of which the proprietor's initials were stamped. There is little or no pruning, and Mr. Thomson does not remove the lower (dead) branches from the trees. He is particularly fortunate as to game, there being very few rabbits, and his greatest enemies are the squirrels, which do a good deal of damage in severe winters, by eating the bark right round a young tree or branch. Even these, however, he is allowed to have shot, and pay a reward to the keepers of so much per tail.

Roads and Paths.—In all the new plantations Mr. Thomson is laying off paths about a yard wide, fit for dragging, and which may be widened and made into cart roads as required. There is no particular gradient maintained, and in many places they would be found too steep for our dragging or carting purposes in India. The paths generally run in parallel lines round and up the hill side, ascending to the very top even of Bengulapin (*i.e.*, 2,000 feet above the sea), and are intersected by cross paths. By the adoption of this system, much trouble will eventually be saved, as we know by experience, the difficulty of making paths or roads through a thick forest or plantation in which it is