INFORMATION SHEET 9

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PIT-SAWING
in Western Australia

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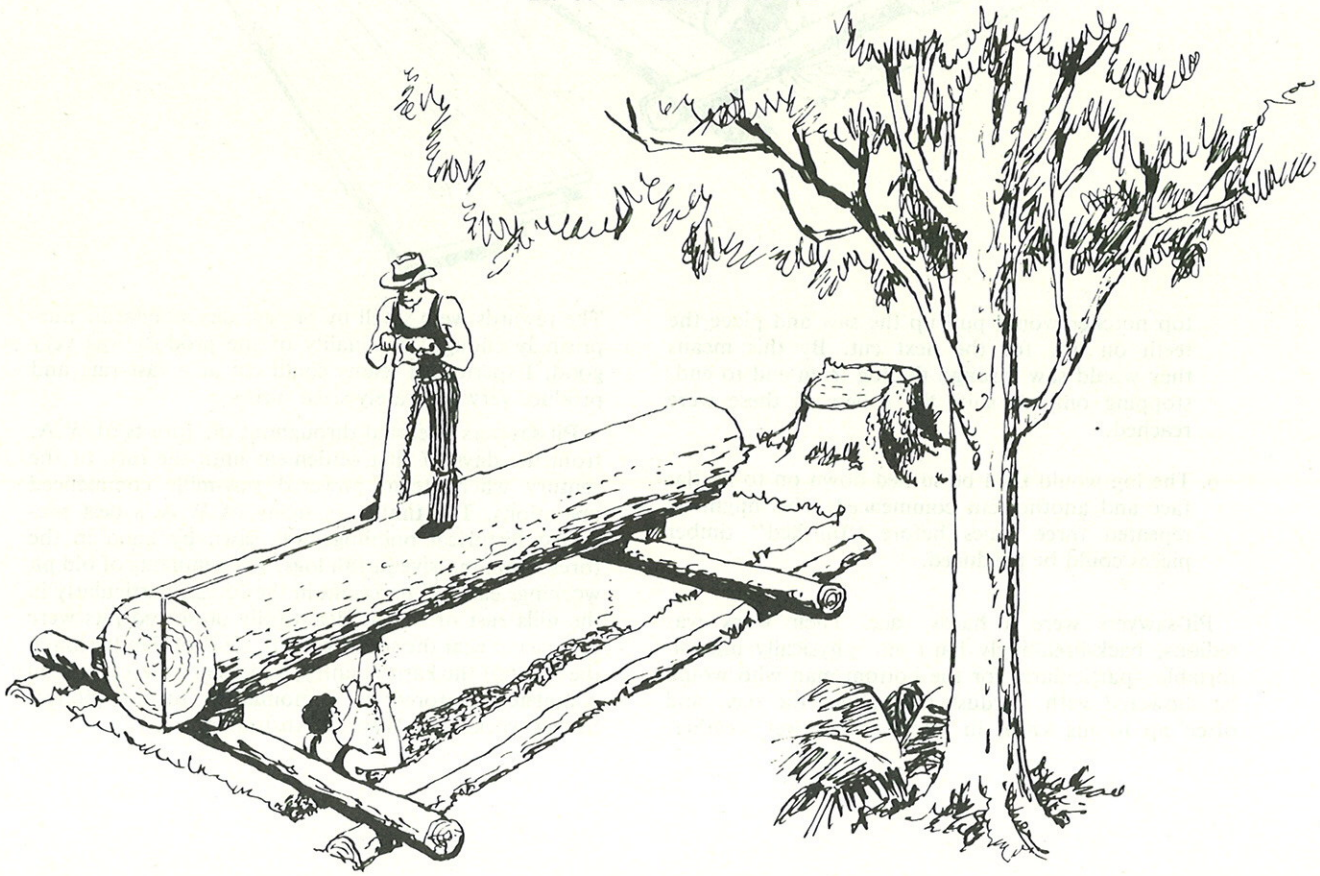
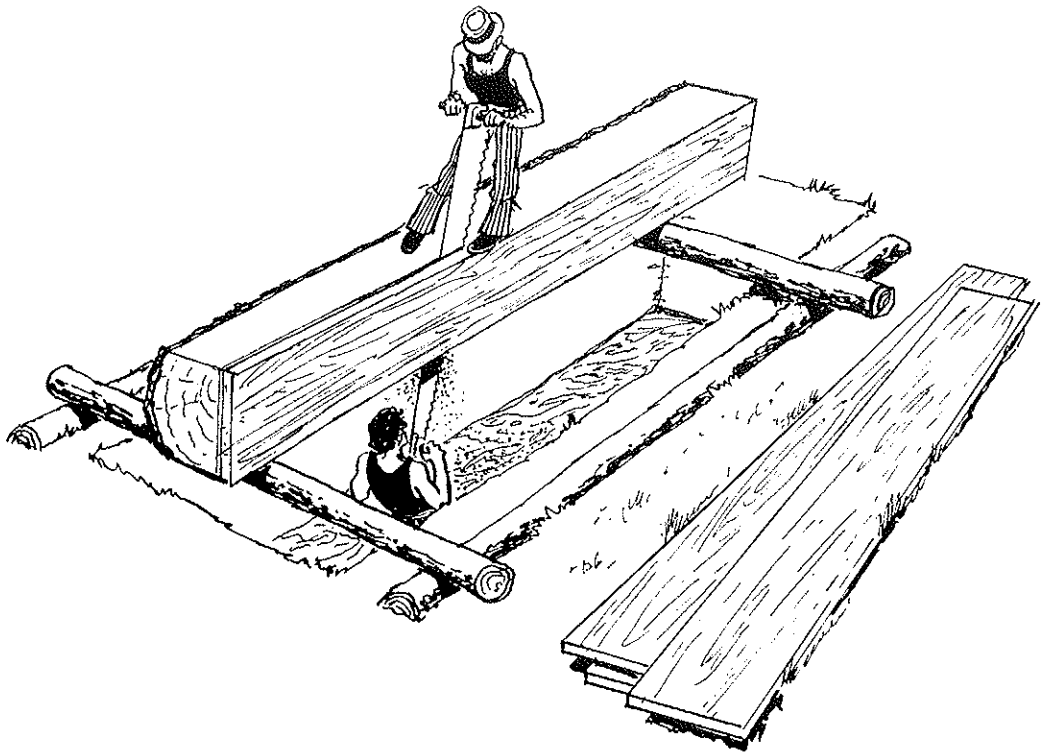


The first Europeans to settle in Western Australia in 1829 found majestic forests of jarrah and karri growing in the south-west of the State which had scarcely changed over a period of perhaps 2000 years. They quickly realised the value of the hardwood timber which could be cut from these trees and a rudimentary sawmilling industry soon developed. However, the quality of the product was usually very good. Sawn timber was the first export from the "Swan River Colony".

In those days, logs were sawn into timber pieces (such as floor boards, rafters, weather boards, etc.) by manpower, using an ancient process called *pit-sawing*. The first mechanical sawmills, powered by steam, did not appear in W.A. until the 1840s. The pit-sawing method was as follows:

1. A suitable tree was selected in the forest and felled, using axes and cross-cut saws. The bole (or "stem") of the tree was cross-cut to a desired length, to produce a log.
2. Near the fallen log a large trench (or "pit") was dug. Its dimensions were about 2 m deep and up to 10 m in length. If necessary, the pit walls would be shored up with timber slabs and a drain dug to carry away water from the pit floor.
3. Wooden rollers, fashioned from the boles of small trees were placed crossways across the pit and the log levered up on to them. Wooden chocks were hammered in to keep the log steady.
4. The sawyers used a piece of twine rubbed in charcoal to mark the line of the proposed sawcut along the top of the log. The leading sawyer (or "top notcher" as he was called) stood on the log to align the saw along the cutting line. His mate stood in the pit holding the other end of the saw.
5. Pit-saws only cut on the downward stroke. The man in the pit pulled down on the saw, producing the cutting power. At the end of each stroke, the



top notcher would pull up the saw and place the teeth on line for the next cut. By this means they would saw through the log from end to end, stopping only to shift the rollers as these were reached.

6. The log would then be turned down on to its flat face and another cut commenced. This might be repeated three times before "finished" timber pieces could be produced.

Pit-sawyers were a hardy race. Their work was tedious, back-breakingly hard and physically uncomfortable—particularly for the bottom man who would be showered with sawdust throughout the day, and often up to his knees in water during wet weather. The rewards were small by present day standards. Surprisingly enough the quality of the product was very good. Experienced teams could cut at a fast rate and produce very accurately sized pieces.

Pit-sawyers operated throughout the forests of W.A. from the days of first settlement until the turn of the century when steam powered saw-mills commenced operations. The timber in many of W.A.'s best preserved historical buildings was sawn by hand in the forest from massive jarrah logs. The remnants of old pit workings can still be found in the forest, particularly in the hills east of Perth. Beautifully preserved pits were discovered near the south-western town of Pemberton in the heart of the karri country, and one of these has been completely restored as a monument to the pioneer timber workers of Western Australian forests.

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