## TRENDS IN FALLING PRACTICE

by P.N. Hewett

Mr. Holland's article in vol. 4, no. 3, concerning trials with a BOW blade on a chain saw, has suggested this short note on current trends in the use of chainsaws.

### Makes and Models.

There are currently some 70 different makes and models of chainsaw available in Western Australia, and business is fairly competitive. Only about ten of these saws are generally acceptable to professional fallers, and these saws represent only four or five manufacturers. It is of interest to note that the chainsaw has now captured practically all of the dry firewood cutting market, in lieu of the powered circular saw.

# Design.

Apart from the use of colours and chromium as sales gimmicks the design of all saws tends towards light weight, high compression, and high running speeds. (At least three manufacturers now claim to have the lightest saw in the World). These high speed, direct-drive saws often produce damaging High Frequency vibrations, and it has been estimated that at least 30% of regular operators in pine falling have a degree of trouble with nerve-ends in their fingers and hands. This "RANNAUD'S SYNDROME" is being investigated by a medical officer, but meanwhile, one manufacturer is selling an A-V (Anti-Vibration) handle for his saws. The A-V handle consists of a one-piece handle-bar and pistol grip which is mounted on rubber in much the same manner as engine mountings. Unfortunately, this handle is available for one model only and is expensive.

#### Cutter Bars.

The change-over from cross-cut saws and two-man scratch type chainsaws, resulted in the use of relatively long cutter bars on the first reliable one man chainsaws. Cutter bars of 36 inch and even 42 inch length were popular in the late fifties, even for small timber. The advantages

in cost, power output, and operator fatigue when using a minimum length cutter bar, has gradually been appreciated, and the general trend is towards cutters of 30° in hardwood and 18" in pine cutting.

Nose-wheel cutter bars come and go, and since the demand for these is largely a matter of taste, they seem destined to persist for some years to come. Salesmanship plays its part in this particular sphere, and it is now possible to buy cutter bars with names such as 'Duo-Tronic', 'Roll-o-Tronic', 'Perma-Hard' and 'Speed Tip', together with Microguard, Speedguard, and Microbit cutting chains. Little wonder is it that some of these fallers change their saw as often as they change their brand of cigarettes.

Although they are not exactly new, the BOW type cutter bars are beginning to arouse interest. The retailers are rather slow to realize this, and although three major brand names will supply Bow blades in the Eastern States, a check around Perth, in late October this year, revealed that two of the three local distributors of these saws claim that bow blades are not made for their particular product.

The Bow blade is widely used in the U.S.A., and in many shapes and sizes, but these can be conveniently classified into either "PLUNGE BOW" or "PADDLE BOW" saws, depending upon the degree of circularity which they possess. It is interesting to note that a Paddle Bow blade has been in use on Mallet cutting at Dryandra for the past eight years.

# WHAT'S NEXT .. ???

With the advent of tree harvesting machines in British Columbia, such as the BELOIT HARVESTER, the days of the chainsaw may well be numbered. It seems likely that within 5 years in the U.S.A., ten years in the Eastern States and perhaps twenty years in Western Australia, chainsaws will be replaced by a type of Secateur. This secateur, powered by a small hydraulic motor, could simply clip the tree off at butt and crown ready for tree-length snigging. Other alternatives are felling with high pressure water jets, which have already been used experimentally in the U.S.A. for sawmilling, or the use of a form of LASER BEAM, which is rapidly being developed for a wide range of peaceful uses.

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# Ermata ... Vol. 4, no. 3.

Our attention has been drawn to a misprint in Mr. McCutcheon's article in the September issue. The paragraph on Method of Preparation should read as follows...

"Saplings were felled and docked in the bush by chainsaw, debarked with an axe ... mainly by shaving at that time of the year, and transported to H.Q. where pointing was most conveniently done by two men".

EDITORS.