



Many Inventions



IT has often been said that New Zealanders are an inventive race, that the know-how of the first pioneers still survives in suburban back-yard, in cow-bail and sheep-shed, manifesting itself in a brilliant ability to improvise with such materials (like bale-wire) as would otherwise lie uselessly around the New Zealand landscape.

This ingenuity, sprung into full bloom from the earth of the first turned sod (presumably still under the fingernails of all real New Zealanders) is in fact open to question. Like many another nation's patriotic attempts to claim a higher level of inventiveness for their people, it will not stand up to a close investigation.

Perhaps this fond belief in our brightness is part of our general inheritance from Britain, for the British, it has been said "suffer from the delusion that they are, and always have been, a highly inventive people, whose ideas are frequently stolen by other nations."

There is, however, an excellent reason why the British should delude themselves in this fashion. Their possession of a workable patent system long before any other nation (antedated only by the system of grants practised in the Republic of Florence) not only ensured the preservation of centuries of weighty evidence, but made inventiveness worthwhile to begin with.

For the popular view that the patent system was a consequence of an upsurge of inventiveness is only a half-truth; the system in fact, by encouraging the upsurge in the first place, laid the foundations of our modern world. It was—as Abraham Lincoln once remarked—an invention itself, and perhaps the greatest of all time, for "it added the fuel of interest to the fire of genius in the discovery of new and useful things."

The British system—and the fundamental kernel of our present patent law—dates back to 1623, in which year the British Parliament, sick of the monopolies resulting from the haphazard granting of exclusive rights to Royal favourites and others by the Crown, passed an Act called the Statute of Monopolies. This declared that grants for the sole buying, making, using and selling of commodities were contrary to law, with the exception of "letters patents and grants of privileges for the term of fourteen years or under, hereafter to be made of the sole working or making of any manner of new manufactures within this realm, to the true and first inventor and inventors of such manufactures . . ."

The merits of a patent system were soon recognised by other nations, and though by 1800 there were only Great

Britain, France and America with formal patent laws, by the end of the century there were nearly half a hundred nations so equipped.

One of this half-hundred was New Zealand, English patent law becoming applicable here immediately after our annexation to New South Wales.

As can be expected, the colonists initially were far too busy hacking a home out of the wilderness (and hacking at and being hacked by the original inhabitants) to start inventing things, and twenty years were to pass before the first two patents for inventions were granted by the Governor for the Crown. These were the Anderson Pipe Patent and the Purchas and Minnis Flax Patent. In that same year, 1860, New Zealand's first Patent Act was passed by Parliament, and the legal machinery made ready for the future blossomings of antipodean genius.

A PATENT OFFICE, as anyone examining its records soon discovers, is a faithful mirror of society. Here, in the many superseded, unnecessary, or too revolutionary patents are the worlds that might have been, and beside them those patents that fortuitously or by some hidden evolutionary law made the pattern of our everyday existence. Looked at altogether, this multitude

of inventions reflects all the wants and preoccupations that perennially engage the human ego, the wants that are urgent or important and those that are trivial or downright weird. This is as true of New Zealand as elsewhere (and specifications from overseas countries in the N.Z. Patent Library enable a close comparison to be made) for apart from some preoccupations stimulated by the local scene, our patents follow the general pattern.

Just as there was reason for the preoccupation of early English inventors with new "Wayes of Makeinge Gonnes," with raising sunken ships, and with methods for draining land (there were so many of the latter that one would assume a good half of Britain was under water in those days), so is there reason for the early New Zealand obsession with flax and gold. It was not until later that cows and sheep became our prime movers, and the field of agricultural patents the pasture in which our inventors thrive.

Flax and gold were two things that New Zealand had a lot of, and though everyone knew what could be done with the second, the future of flax was an open question. Apart from making rope what else could it be used for? Once machines had been devised to efficiently beat, shred and batter it into

amenability, the inventors turned to ways of utilising the result. One such brainwave was "The New Zealand Eureka Knife Polish" which involved quantities of sandstone, soap, and the ubiquitous Phormium Tenax, all roasted together in a kiln.

If there was no problem in utilising gold, there was a problem in how to get it in the first place. Most New Zealand inventors attacked this in the conventional manner, with suggestions for improvements to mills, sluices, and the like. Others sought to approach it from a different angle. One ingenious miner devised "an invention for digging, sluicing, and blasting under water, without communication from above the bottom of seas, lakes and rivers." This was a kind of submarine with "provision" (unspecified) for holding three men at the bottom for twenty-four hours. Whether one was ever built, and launched in fevered secrecy on some Southern river, will always be a mystery—three miners would in any event hardly have been missed in an age of unreliable parochial statistics.

Equally fresh in approach was a stonemason's invention, in 1880, for a "Gold and Sand Extractor." This consisted of a boat with a large hollow pipe passing through its bottom, the pipe so mounted that it could be thrust down

RIGHT: An airship with "propellers so arranged . . . as to produce elevating, propelling, retarding or depressing effects, or some of these together"

