

# A History of Early English Adjustable Wrenches found in Australia

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## Introduction

Australia emerged from its infancy in the 1850s with the gold rush, then to be followed by the pastoral settlement and finally the agricultural boom. To take advantage of this economic expansion the government started building railways to service the large towns that had developed and haul the produce from the expanding agricultural industry. This rapid expansion in mining, construction of railways and in agriculture necessitated the requirement of imported machinery and with this the tools to maintain them. This coincided with a period of industrialisation in England aided by a developing market in the resource rich colonies, such as Australia.

The Adjustable Wrench, Spanner or just plain Shifter, which itself stems from the earlier English name Shifting Key or Spanner, evolved from the early blacksmiths or metalworkers need to grip, turn, twist and bend metal. This pre-history can only be pieced together from the gradual emergence of illustrations and descriptions hiding in art and science documentation of the distant past, certainly pre-1800. As the screw, nut and bolt, essential to the progress of the Industrial Revolution, became possible through thread cutting, whether by locally-made taps and dies or later lathes, so the tools to turn them evolved, often using the very same nut and bolt principle.

The names for Adjustable Wrenches and their component parts have continually varied and never settled, right from the start of Patents and Registered Designs, so the authors have had to create some new terms and relate them to old ones where appropriate. The term 'Wrench', in conjunction with some other qualifying word like 'Screw' or 'Key', was used in some earliest-known references in England and certainly travelled to Australia and America at that time, but the term 'Spanner' prevailed mostly in England as adjustable mechanisms became more sophisticated and

usually more accurate in function and precise in gripping. The term 'Shifter' is still used in the West of England and probably travelled to Australia from the important ports including Bristol.

The authors are focussing here on parallel-jaw adjustables or those handtools generally that are specifically designed to grip and turn a variety of square and hexagonal nuts on at least two sides. The obviously related Pipe Grip/Wrench is not addressed but in some attachments and combination tools that function is present.

The making of these tools progressed from blacksmiths to outworkers to factories. Sometime before 1800, some blacksmiths began to specialise in particular types, or even parts, of handtools: they therefore became outworkers to factors (non-making) or to manufacturers. The early pattern books issued by Wyke of Liverpool, Stubs of Warrington and Timmins of Birmingham show a very wide range of clock parts, machines and handtools. They could not have held complete stocks of such a range and, even if they did, the outworkers would still make a tool to their own design, *based on* the pattern book illustration. Therefore, surviving specimens of the earliest wrenches all differ in details: curve of the handle; thicker here, thinner there; ornamental knob style; proportions generally. Even looking into just one mass-manufacturer of the 20<sup>th</sup> Century, an analysis of the classic King Dick design reveals many changes from 1897 to 1950.

The question of whether a company in the United Kingdom was a 'Manufacturer', a 'Factor', or some of both, is still being answered. It is already clear from partial analysis of the Clyburn Pattern that many companies stamped their names on them, but all did not actually make the article; so, "made by" or "produced by" might really be "made available by". One of the few remaining handtool manufacturers in