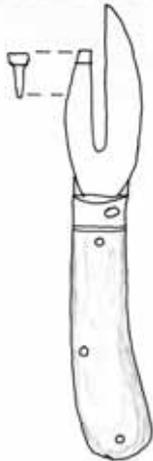




Lifting the lid on the tin can opener

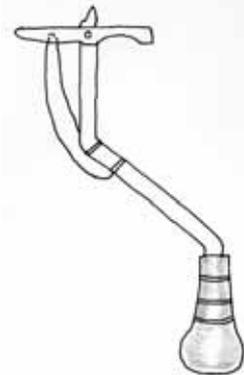
A French chef and confectioner called **Nicolas Appert** developed a successful process from 1795 for preserving food in airtight bottles by boiling to sterilise them. Appert's process was patented in England by **Peter Durand**, a London merchant, in 1810, who included the provision for using "**tin canisters**". The rights to the patent were purchased by the engineering firm of **Donkin, Hall & Gamble** who subsequently set up the world's **first canning factory** in London in 1813. The new tin-coated wrought iron cans provided a convenient means of supplying British and foreign soldiers and sailors, explorers and travellers with familiar preserved meats, fishes and vegetable foodstuffs, away from home.

At first, so much effort was expended on preserving the contents of these handmade cans from spoilage that little thought was initially given to how the contents of the tins would be removed. Early cans were opened near the top by using a **hammer and chisel**, as one extant tin from the 1820s advises on a paper label. One can also envisage, for example, soldiers opening cans with a **bayonet**, or **hunting knife**, or using **gunfire** as a plausible solution.



Lever opener design by Robert Yates, 1855

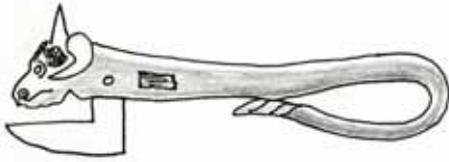
It would be another twenty years before tinned foodstuffs were consumed even in small quantities by the general public. By the 1850s machines were being used to manufacture tins from thinner sheets of steel. The **simple claw-shaped or lever type of can opener** was first patented in Britain and America during the 1850s. First in Britain was **Robert Yates**, a cutler and surgical instrument maker of Trafalgar Place West, Hackney Road, in Middlesex. His patent for 'lock and lever knives, &c.' is dated **13 July 1855** (No.1577), and incorporates a lever knife for 'cutting or ripping open preserved provision cases' and other uses. This is of the now familiar construction with curved blade with a jaw and a projection with shoulders 'forming an efficient bearing or fulcrum in use'.



E J Warner's lever opener, 1858

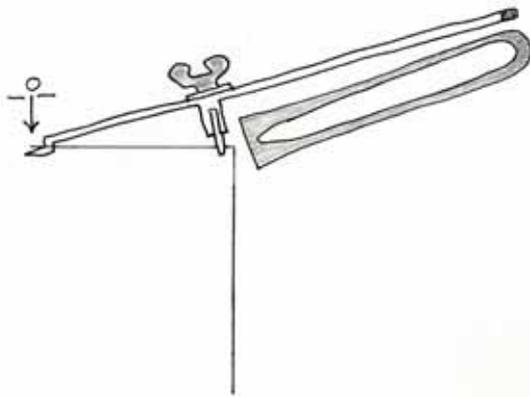
Three years later, in **1858**, a similar lever opener was patented in America by **Ezra J. Warner** of Waterbury, Connecticut, and adopted by the US Army during the Civil War.

Domestic can openers were supplied in the 1860s with cans of ‘bully beef’. ‘Bully beef’ was pickled beef. Usually this was shredded beef in a gravy (bouillon) to fill the gaps. The openers were made of painted (often red) cast iron in the shape of a **bull’s head**, the handle finished in the form of his tail. A two-part steel blade was fastened to the bull’s neck; one short vertical spike rising from the head intended to pierce a hole in the lid, and the other a cutting blade (under the chin of the



Bull's head can opener, 1865

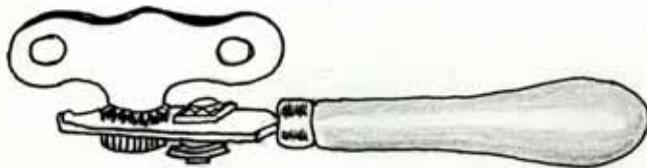
bull) for see-sawing round the rim of the tin. Bull’s head tin openers were produced up to and into the 1930s. Another design might be a fish head.



Lyman's rotary can opener, 1870

The first **rotary can opener** with a cutting wheel was invented in **1870** by **William W Lyman**, of Meriden, Connecticut (US patent 105,346 dated July 12, 1870). Rotary can openers were being made by the American firm of Baumgarten in the 1890s. A **table-mounted rotary version**, the ‘Blue Streak’ was patented in 1922 and made by Turner and Seymour of Connecticut.

Lyman’s wheel blade by adding a **second**, serrated or toothed **wheel**, called a “**feed wheel**” or “**turning gear**” to ride below the rim of the can and rotate the can against the cutting wheel. By squeezing the rim between the two wheels, the Star maintained a firm and steady grip on the can. This was another basic development that made can openers easier to operate.



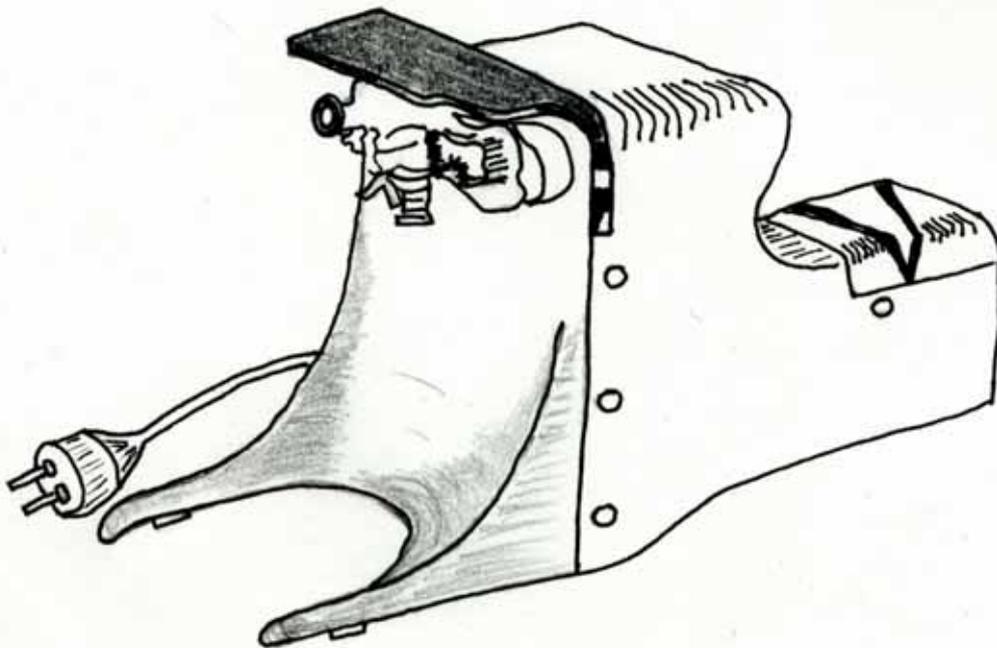
Feed wheel can opener, c. 1930

In 1927 a **wall-mounted can opener** was marketed by Central States Manufacturing Co. of St. Louis, Missouri.

In 1931 the **first can opener** – called the “Bunker” – to use the **concept of “a pair of pliers”** or **pivoted handles** with which to hold the can in one hand while a key-type handle geared to a cutting wheel is turned with the other, was introduced by the Bunker Clancey Company, Kansas City, Missouri, a firm acquired by Rival Manufacturing Company, also of Kansas City, in 1938.

Also in 1931 a patent was issued to Preston C. West of Chicago, No. 1,834,563 dated December 1, for a **portable electric can opener**. BUT none are known to have been made.

The **first electric can openers** were introduced in America in 1956. Two Californian companies introduced electric can openers in this year. Klassen Enterprises of Centreville brought out a wall-mounted electric model for which a patent was applied for on March 26, 1956, and issued on April 23, 1957 under No. 2,789,345. Udico Corporation, Santa Monica (acquired in 1972 by the Cornwall Corporation of Boston) brought out a combination electric can opener and knife sharpener for which a patent was applied for on December 4, 1956, and issued on August 4, 1959 under No. 2,897,589. Little was heard of the Klassen unit and it apparently failed to develop consumer acceptance. On the other hand, the Udico was brought out just in time for Christmas sales and met with immediate success.



Udico early electric can opener, 1950s

