

Matchbox Cover Design

*The evolution of and the influences on
the graphical design of Matchboxes*

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Abstract

The ability to make and use fire was one of the first steps towards the civilization of humankind. However, until the first half of the nineteenth century, the process by which fire was created was slow and laborious. When the friction match was invented, it revolutionised the production, application and the portability of fire.

In the last one hundred and fifty years, the match and the matchbox have remained relatively unchanged in terms of concept and construction; even the current methods of manufacture are similar to those originally employed. However, the graphic and typographic design of the visual and textual matter applied to the packaging has undergone considerable change throughout its history.

Existing literature on the subject of matches focuses largely on the industry and on manufacturing methods. Little attention has been paid to the way in which matchbox design has changed and the factors that may have been influential in its development. It is this omission that forms the purpose of this paper.

The early match industry was characterised by exponential growth in demand, as well as the number of producers, and fierce competition ensued. Functional quality was, to a large extent, uniform, and therefore graphic and typographic design became an essential part of the product's marketing. Designs evolved from being a simple notation of the manufacturer's name and location, to the use of unrelated objects as brand symbols with brand-specific design elements, often but not always, influenced by the contemporary design styles. The chosen subjects often reflected the aspirations of society at the time. The introduction of trademark protection laws was an important feature in the process.

Several thousand match brands have existed, but industrial consolidation as well as two World Wars and other societal changes have rationalised this number substantially.

Matches are now in terminal decline, having been rendered technically obsolete by disposable lighters. However, the history of matchbox design encapsulates the development of consumer product branding.

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The following acronyms are used in the captions to illustrations to specify the source of the image.

JMM – Jönköping Match Museum

MBL – ‘The Match, The Box and The Label’

MM – ‘The Match Makers’

MRA – Matchbox Redheads of Australia website

PC – Personal Collection (matchbox labels owned by the author)

RH – The Redheads website

SMA – Swedish Match archives

SMSM – ‘From Swedish Matches to Swedish Match’

VMM – Virtual Matchbox Museum website

Where illustrated, the brand name of the match has been given if this is possible. When the label has no name this is denoted by (n.n.)

Introduction

I.1 Why Matchboxes?

Matches have been in existence since 1827 and the matchbox, as it is known today, composed of a sliding-drawer within a sleeve, since the 1840s. Since their inception, matches have been one of the most ubiquitous consumer products in the World and, by the very nature of their packaging, have facilitated the widest range of graphic design and artistry. While there is ample documentation of the technical and commercial development of the match industry, there has been surprisingly little formal research into the evolution of matchbox design. Collecting match boxes and related items as a hobby is widespread, and there are a great many knowledgeable collectors, but there appears to have been no attempt made to identify the factors that may have influenced the designs on match boxes.

This paper attempts, albeit superficially, to address this omission.

The first matches to be produced and commercialised relied on friction between the match head and a rough surface to achieve ignition. In 1845, the industry's single most significant technical development took place, with the introduction of the 'safety match', which required that the match be struck on the box side to light. This development meant that the packaging itself became essential to the functioning of the product and as such, became an integral and indispensable part of it.

At that point, the basic functionality of the match had been developed to such an extent that it was unable to be significantly improved upon. Similarly, the structural design of the matchbox – given the part that it plays in the product's usage – has not been substantially changed at all in its 150-year history, making it one of the oldest unchanged forms of consumer product packaging that still survives today.

However, the graphical and typographical design that accompanies the matchbox has been in constant change throughout the life of the product, not only stylistically but also conceptually and purposefully. From being a simple identifier of origin, the marks that have been put on the packaging of matches have passed through the denoting of quality and signifying importance, to usage in advertising, propaganda, espionage and emotional manipulation; the forerunner of modern marketing techniques. The graphical element of match packaging also provides a relatively detailed record of culture over the last one and a half centuries, as the thousands of different designs that have been produced chronicle many world events, inventions, attitudes and fashions. They are also indicative of the many changes in the culture of design as well as that of business, being possibly one of the oldest forms of branding where the brand's graphic device bears little or no relation to the product itself.

Whether it be the matchbox label – the typically rectangular piece of paper that was stuck onto the larger surfaces of a constructed matchbox sleeve – or later, the matchbox cover – the sleeve with the graphical content printed directly onto it – there has been constant interest and value attached to them by 'philuminists', the name applied to the hobbyists who collect these otherwise ephemeral objects.

As the study of matchbox labels is most commonly practiced as a hobby, the greatest source of information on the subject of matches is available via the world-wide-web and contained on the personal websites of matchbox label collectors. Where history is concerned, these websites tend to focus on the industrial aspect of the match, however, they usually contain a great many images of the individual's collection and from these it is possible to gather information about the design of the labels. A problem that is seldom addressed and never resolved in any of the available sources is that of dating matchbox labels. The manufacturers who produced matches, practically never kept a record of the details surrounding the issuing of a matchbox label and any documentation that does exist often simply refers to a serial number. For this reason it is only possible to date the different labels relatively and affix an approximate date based on the few labels that have been independently dated.

Any attempt at a commentary on matchbox label design cannot avoid tracing the commercial development of the industry. Initially, the labels were intended only to give the identity of the producer – this was regarded as an assurance of functional quality, not least by the producers themselves – and this feature has never been totally abandoned by designers. As such, this paper includes an outline of the industrial evolution of the product in Europe and particularly in Sweden.

I.2 Why Swedish matches?

While the match was a British invention, it was Sweden that became the heart of the match industry. The early years saw a great deal of interest in the match in both Britain and Sweden but before long the Swedish match industry had far outstripped Britain in terms of the size and number of factories, and the quantity and quality of matches they produced. As a result of this dominance, the Swedish matchbox labels came to define what a matchbox label should look like and subsequently, most if not all matchbox labels produced elsewhere, are modelled on the output from the Swedish match factories. The economic importance of the match industry to Sweden – it was arguably the World's first truly multi-national business – is exemplified by the World's only match museum being in Jönköping¹, a city on the edge of lake Vättern, in Sweden. This museum has been a valuable source of information used in this paper. Understandably, virtually all of its exhibits are of Swedish origin.

Given this, many of the examples and evidence used in this paper are drawn, either directly or indirectly in the form of books, from Swedish Match AB, a company that is the successor to all the original Swedish manufacturers and is still the World's largest and most authoritative match producer.

¹ Pronounced "Yern-shep-ing"

History of the Match Industry

The invention of the match was, in common with most others, one born out of necessity. There had for centuries been a need for a portable means of creating fire, quickly and easily. Societal changes in the eighteenth and nineteenth centuries, such as greater mobility and the extension of tobacco usage, made the need for a convenient ignition mechanism all the more pressing. After the invention of a match product that was capable of commercial exploitation, during the first half of the nineteenth century, it took only twenty years for the match to reach a stage of product development that would remain practically unchanged throughout its life. The manufacturing process that was developed soon after the invention of the match has also remained much the same, although with considerable advances in mechanisation.

Despite its British birthplace, it was Sweden that became the dominant force in the match industry, and this is still the case today. Sweden had abundant supplies of the necessary raw materials and, it seems, had at the time the necessary collection of entrepreneurs and inventive engineers.

1.1 Early processes and materials

Before the invention of the match as it is known today, there were several attempts at creating a fire-making device to replace the ancient method of using 'tinder', defined as any easily combustible material¹, that began with the rubbing together of two sticks and culminated in the tinderbox. Various devices, of varying effectiveness and security, were introduced. One example was the 'Instantaneous Light Box', invented in 1824 by Henry Berry, which consisted of a stick, akin to a match stick, with a head composed of chlorate of potash, gum and sugar that had to be dipped into a bottle of vitriol and, when quickly withdrawn, would burst into flame. Another was Samuel Jones's 'Promethean match' invented in 1828 where a small bead of glass, containing a single drop of vitriol, was placed inside paper impregnated with chlorate of potash, gum and sugar. This was then rolled up inside a paper spill and when the glass was broken, usually with a pair of pliers, it burst into flame, lighting the spill. These devices and those like them were improvements to the laborious methods of lighting tinder to light a fire, but they were also highly dangerous and unpredictable and had no means of being improved upon².

The invention of the match is generally attributed to John Walker, a chemist of Stockton-on-Tees, County Durham in about 1826. He had been experimenting with explosives and the making of percussion caps for cartridges and was almost certainly aware of the experiments at the time that were in search of an easy way of making fire. When, apparently by accident, he scraped his mixing stick, which happened to be coated with potassium chlorate and antimony sulphide, on the hearth and it ignited, he perceived the idea of using friction as a means to ignite a chemical compound. His discovery led him to produce the first 'matches', which were initially made with a cardboard splint although pine veneer was later substituted. The matches were lit by being drawn through a folded piece of glass paper. He

1 *Collins English Dictionary*, ed. Marion Makins et al. (3rd edn., HarperCollins Publishers, Glasgow, 1994) p1614

2 Joan Rendell, *The match, the box and the label* (David & Charles Inc, USA, 1983) pp11–12



1.1 John Walker's original 'Friction Lights' with the entry in his ledger for their first sale, MM



1.3 *Congreves* – A box of German-made 'Congreves', MM



1.4 An example of the deformities caused by phosphorus necrosis, UNIVERSITY OF EXETER



1.5 J. S. Bagge's establishment, Sweden's first match factory, SMSM



1.2 *Lucifers* – A box made by R. Bell, complete with folded glass paper for lighting, MM

first sold his "Friction Lights" from his pharmacy on 27 April 1827 and they seemed to be highly successful (fig. 1.1). However, Walker never chose to patent his invention because he did not think it would be of benefit to the public.

Because of this, in 1829 Samuel Jones was able to launch his 'Lucifers', an exact copy of Walkers 'Friction Lights', in a blaze of publicity³ that quickly brought the product to many people's attention. As the friction match was unpatented, anyone could copy the idea and start selling their own matches, even under the name 'Lucifers', a practice that many people did in Britain and subsequently all over Europe (fig. 1.2).

Soon after its invention, the match saw the first of its improvements in 1833, when it was discovered that if the splints were dipped in sulphur before having the ends dipped in the igniting compound, then the flame took to the splint much more successfully. (This feature, now known in match manufacturing as 'flame transfer', is an important measure of a match's functional quality). Almost at the same time, one of the major developments in match technology took place in Germany when white phosphorus was introduced into the head compound. This type of match was termed the 'Congreve' (fig. 1.3), appropriately named after Sir William Congreve, the inventor of the war rocket. The white phosphorus ignited much more readily and was seen as a great development at the time. However, there were severe disadvantages to the consumer as these new matches not only ignited at the slightest friction, such as rattling in the packet, but the white phosphorus was fatally poisonous. Matches became the mechanism of choice among Victorian murderers and those contemplating suicide.

The worst side effect of using white phosphorus was, however, one that did not involve the consumer, but the match-worker. This came in the form of phosphorus necrosis, its common name being 'phossy jaw' (fig. 1.4), where the fumes of the phosphorus entered the lower jawbone through unhealthy teeth and rotted it away, causing extreme pain, disfigurement and a foul smelling discharge from the dying bone⁴. This ultimately ended in organ failure and death if the jawbone was not surgically removed. Those most prone to the condition were match-workers who had to stand over vats containing igniting compound to dip the splints, although any worker in contact with the matches with the heads applied could contract it.

During the first years of the match industry, a great many match-workers were afflicted with phossy jaw, owing to the appalling working environment in which they operated. The typical match factory was very small, often simply the size of a medium sized house (fig. 1.5), and consisted of anywhere between one and a dozen workers, often children, making matches entirely by hand in cramped and poorly ventilated conditions and for a very small wage. There were literally hundreds of these tiny establishments, facilitated by the ease with which a match factory could be established and an almost total lack of industrial regulation; there was no need for any highly technical

³ Joan Rendell, p14

⁴ Wikipedia, *Phossy Jaw* [online encyclopedia], <<http://en.wikipedia.org/wiki/Phossy-jaw>> accessed 01/04/2004

equipment, the process was simple to understand, the raw materials were reasonably cheap and there was an abundance of labour. These very small match manufacturers never lasted much beyond a few years, usually because of a lack of profit due to competition from other small-scale producers and the larger manufacturers.

The first match factory in Sweden was that of J. S. Bagge in Stockholm. He began with one employee making dip matches of the kind invented by Henry Berry in 1824 but by 1840 was making phosphorus matches. The world's first large scale match factory was opened in 1845 in Jönköping, Sweden by the brothers Johan Evard and Carl Frans Lundström. By 1846 they were the largest match manufacturers in Sweden (fig. 1.6) and were already accounting for nearly a third of the matches produced in the industry. By the time the Lundström brothers started distributing their matches in Britain (via Bryant & May) in 1850, their Jönköping Match Factory was producing 66% of the industry's total output.



1.6 The Lundström brothers' Jönköping Match Factory c. 1850, SMSM

1.2 The Establishment of an Industry

Facilitated by the Victorian age of entrepreneurship, the match industry quickly flourished and the match became a much-valued commodity. With this came the need to improve on the technology of the match, to make it safer for production and consumption. The solution to both of these problems came at the same time in 1844 from the scientist Gustav Erik Pasch, at the J. S. Bagge match factory in Stockholm. Pasch invented what is now called the 'safety match'. This involved taking out the phosphorus from the head of the match and putting it on a strip on the side of the matchbox which left the match head containing potassium chlorate but no phosphorus, the two chemicals needed for ignition. Therefore, only when the match head was struck against the strip on the side of the box would a small amount of phosphorus mix with the potassium chlorate and, catalysed by the heat of the friction, ignite. This protected the consumer from accidentally igniting an entire box of matches.

The other development made by Pasch was the substitution of the white phosphorus with the newly discovered red phosphorus which was practically non-toxic and far less volatile. This removed the possibility of using matches as a poison or causing the horrific phossy jaw. This factor was the origin of the term 'safety match'.

Despite this breakthrough, the safety match was not immediately successful⁵. In 1855, the Lundströms bought the patent and won a gold medal at the World Exhibition in Paris but it was not until the late 1860s that it became profitable to manufacture safety matches. A cheap method of manufacturing the red phosphorus had been discovered and the mechanisation of the production process had developed significantly. Soon after this, the safety match became highly successful as a consumer product, largely due to the efficiency of the match itself, and the developments achieved in manufacturing and distribution. Its dominance was assured by the

⁵ A. Jansson, W. Loewe, C.M. Rosell, *From Swedish matches to Swedish Match* (Wahlström & Widstrand, Sweden, 1997) p15



1.7 Alexander Lagermann's continuous match machine, SMSM



1.8 The Bryant & May match factory at Bow, MM

prohibition of the use of white phosphorus in many European countries during the 1870s. This was firmly established in 1902 with the Berne Convention banning the use of white phosphorus globally.

The Lundströms' Jönköping Match Factory was at the centre of many of the match's other developments including, in the 1860s, the introduction of dipping the match splint in paraffin, instead of sulphur, which improved the transfer of the flame to the stick and removed the stench of burning sulphur. Another improvement to the chemistry of the match came in the 1870s with the impregnation of the match splints with monoammonium phosphate, to prevent the splint from burning completely and forming ash, (rather than only charring which keeps the match head on and prevents afterglow).

Coinciding with improvements to match chemistry were developments to the manufacturing process, and in particular the mechanisation of the industry. The first introduction of automation was in the 1840s with a planing machine to turn veneer into splints. This was followed in the 1860s by machines to put the individual splints into frames for dipping in ignition compound. The most prolific inventor of match-making machines was Alexander Lagermann at the Jönköping Match Factory, where he began by making a box-filling machine in 1880. After this, he set about mechanising all other aspects of the process, culminating in 1892 with his 'continuous match machine' (fig. 1.7). This machine was fed with impregnated splints, separated them, heated them, dipped them in paraffin and then in the head composition, dried the matches and finally packed them into boxes. This was not only quicker and therefore cheaper but also produced products of much greater consistency. In addition, chemical emissions from the manufacturing process could be extracted more effectively. The output began at 200,000 matches per hour and by 1930 improvements had taken this to 1.5 million. With further improvements such as electricity and better engineering methods, this had risen to 2.5 million per hour in 1996.

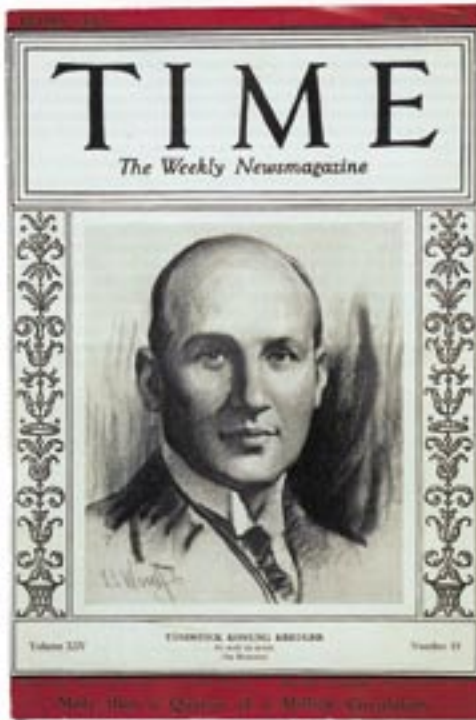
In 1861, 8,000 million matches were produced each year in Britain, all at very small factories in terrible conditions⁶. This was the year when Britain's first large-scale factory was constructed, by Messrs Bryant & May in Fairfield Road, Bow (fig. 1.8). Bryant & May were grocery merchants in the City of London and had been appointed as sole distributors for matches by the Lundström brothers' Jönköping Factory. The new factory was intended to produce safety matches because the Lundström brothers were refusing to supply Bryant & May with their safety matches; this was due to a legal problem the brothers had encountered earlier when supplying the matches to a French distributor. However, the brothers helped to design and build the factory and, because it was based on Swedish factory design (the best being the Jönköping Match Factory), it was large, clean, and bright.

At the same time, the Swedish industry was consolidating as smaller manufacturers succumbed to the fact that the larger units could make far more matches of a higher quality and then sell them for less. The dominant manufacturers in Sweden by the middle of the nineteenth century were Jönköpings Tändsticksfabrik AB, founded in 1845 by the Lundströms, Örebro Tändsticksfabrik founded in 1847, and Wenersborgs Tändsticksfabrik in 1847. As the century progressed the Lundströms' company remained the largest producer of matches while the other two gave way to Jönköpings Westra Tändsticksfabrik AB which was founded in 1881 and Tändsticksfabriks AB Vulcan in 1868⁷.

At the turn of the century, the match industry in Sweden had matured to the stage when large-scale consolidation was appropriate – for reasons related to

⁶ Patrick Beaver, *The Matchmakers* (Henery Melland Ltd, London, 1985) p35

⁷ A. Jansson et al., pp162–191



1.9 Ivar Kreuger on the cover of *Time Magazine* in 1929, SMSM

cost saving and perhaps to the avoidance of excessive competition. The two largest companies, Jönköping and Vulcan, and the middleweight Uddevalla, joined to become Jönköping och Vulcans Tändsticksfabriksaktiebolag. When Jönköpings Westra joined them in 1903 they became the worlds largest match producer, accounting for 80% of Sweden's match exports.

The Jönköping-Vulcan amalgamation went well until the First World War, when it apparently became necessary to 'choose a side' in the conflict. Although Sweden was neutral, several manufacturers covertly allowed their allegiance to be known, in the hope of achieving favourable trading terms with their chosen side. Jönköping-Vulcan, however, did not do this and soon began running out of materials because they became blocked by both sides. Additionally, supply lines to the crucially important export markets were severely disrupted. In contrast, a medium sized match company, Aktiebolaget Förnade Tändsticksfabriker, had fortuitously chosen to supply the allies and so had very few supply problems. This company, which grew substantially during the war years, was under the management of an ambitious and talented young engineer. His name was Ivar Kreuger (fig. 1.9).

Kreuger had set his sights on the acquisition of Jönköping-Vulcan because it was the biggest match producer and because it would allow him to expand beyond his current capacity. As Jönköping-Vulcan was in financial trouble it could not resist Kreuger's approach and the two companies merged in 1917 to form Svenska Tändsticks Aktiebolaget (STAB), with Kreuger as managing director⁸.

His first strategy was to expand massively, in order to counter the post-war explosion of match factories throughout Europe and elsewhere which were potentially damaging to STAB's dominance. To accomplish this, Kreuger borrowed vast amounts of money, either to buy these factories or to build new ones. It was an unprecedented phase of international expansion – the company built five large factories in India, for example, within the space of seven years.

Initially the company was massively profitable and Kreuger utilised some of the cash surplus to make loans to sovereign governments – particularly those that had been drained of finances during the war – in exchange for a guaranteed match monopoly. By 1932 STAB had match monopolies in many countries and owned their previous competitors in other countries, bought largely with money raised on public markets in the USA.

This position became unsustainable as economic conditions started to deteriorate towards the middle of the 1920s. Some of the national governments to whom Kreuger had made loans actually defaulted and his only option was to raise even more public debt in the USA.

The Wall Street crash in 1929 put an end to that and so the STAB group tried to rely only on Swedish finance. This proved to be inadequate and STAB headed towards bankruptcy. An investigation into their financial workings was launched and pending an interview, Ivar Kreuger shot himself in Paris on 12 March 1932.

After Kreuger's death, the STAB group was put into 'administrative receivership'. The Swedish authorities wanted to avoid a liquidation, as this would have had wide-ranging consequences that would damage international trading relations and the STAB shareholders. Through careful management, disposals, factory closures and diversification through buying companies outside the match business, STAB slowly recovered and was able to pay off its debts. By 1948 it was in a position to pay shareholders a 5% dividend.

1.3 Present day Matchmaking

Matches made today are produced following the same principles as were developed during the first half of the nineteenth century, although there have been significant improvements in the efficiency of the manufacturing process and the functionality of the match. These developments include the cut splints being blown to the head-dipping machine, modern chemistry being used to stabilize the flame, ash, and pH and, in 1990, the removal of all heavy metals and sulphur from the match head, making matches an environmentally friendly product.

Aspen was the wood used to make the splints from the beginning because it is strong, resin free, and straight fibred so it can be peeled and chopped into splints at high speed. It also has the necessary porosity, is easy to polish and does not fluff. It has a good colour and grows quickly. Aspen is widely available in the Swedish forests and has remained the number one choice for match splints.

The process from a felled tree to a finished box of matches typically takes the following form: the log is mechanically debarked and then cut to manageable sizes called billets. These are then peeled into a veneer which is cut into splints, which are then impregnated (using either a bath or a spray), then dried and polished to remove any splinters. The next stage is to filter out any irregular splints, after which only 40–50%⁹ of the original log is still destined to become a match (the rest is waste used to fire the boiler to make steam). The good splints are then inserted into a carrier, heated to be more receptive to paraffin, dipped in paraffin and then heated again to dry the paraffin. The tips are then dipped into the head compound, dried once more and the heads lubricated with kerosene oil or paraffin wax to prevent wear from rubbing each other, before finally being packed into boxes¹⁰.

This is the procedure followed today by Swedish Match AB, (the company name was changed from STAB in 1979, to avoid the obvious translational problems encountered with Svenska Tändsticks Aktiebolaget). Swedish Match AB is now the world's only global match producer, and therefore the biggest, with matches sold in over 100 countries. Most, if not all, of the world's other match manufacturers use the manufacturing method outlined above, with varying degrees of mechanisation.

From soon after the beginning of the match industry, matches have been a necessity of modern life. There is virtually no human society, irrespective of their degree of civilisation, that does not use matches – the product is one of the most ubiquitous commodities ever produced. While the concept and chemistry of the match have remained largely unchanged over time, with no fundamental differences between the respective manufacturers, it has been the branding and the packaging design applied to the matchboxes that have shown the greatest degree of variation and provided the widest scope for graphical creativity – perhaps more than any other consumer product.

⁹ Approximately 1 million matches.

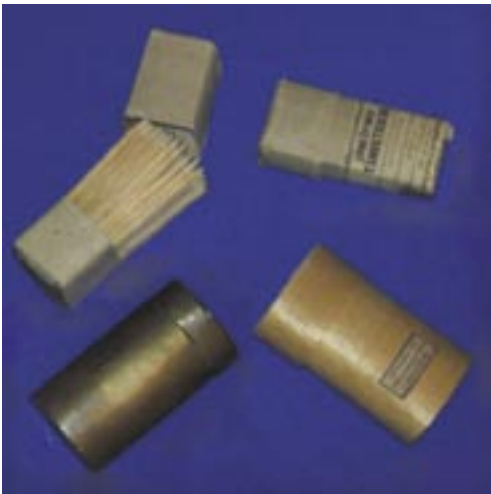
¹⁰ Swedish Match Resources, Quality and production issues, (unpublished) pp 1–

Chapter 2

Matchbox Production



2.1 (n.n.) The name of the factory embossed on the side of a paper capsule, JMM



2.2 (n.n.) Brass and wooden match containers, JMM

The varying methods for the production of matchboxes over time have been largely determined by the demand for the product and the technological limitations of the time. Similarly, the shape and materials used in producing match containers and packaging have also been a reflection of the society for which they were made. For this reason an understanding of the impetus behind matchbox production and how a matchbox is actually produced is indispensable to the effective evaluation of the graphic design of the matchbox cover. To this end, it is necessary to describe the progression of the match container from its earliest form, the paper capsule, through its development to the multitude of shapes and colours that the present day matchbox exhibits, and to include all the help and hindrance that the process has received along the way.

2.1 The processes

When the production of matches went from a small-scale business venture to larger commercial production the first matches and containers were made entirely by hand. The first containers were paper capsules onto the side of which the factory name was embossed (fig. 2.1). These paper capsules were the most common form of match packaging at the time but oval tubes of brass or chip and turned wooden boxes were also in use (fig. 2.2).

However, during the late 1840s Per Anton Segelberg at his factory in Örebro instigated the production of a new, and now typical, matchbox, composed of an inner tray and an outer sleeve. The boxes were made of the same wood veneer as the match splints and were held together by a paper covering that was wrapped around the box and glued in place. A paper label was then attached to the front of the box. This proved to be a highly successful design, not least of all because the sides of the outer sleeve provided a suitable area for the striking surface to be applied. This was especially useful with the introduction of Gustaf Erik Pasch's invention of the safety match, patented in 1844, and its necessity to have a reliable striking surface. The box was widely copied, notably by the Jönköping Match Factory, although the paper capsules continued to be used by various factories until at least 1872.¹

While the rest of the match industry was rapidly becoming increasingly mechanised (see ch. 1), the process by which the matchboxes were being made was still almost entirely by hand. This was done outside of the factory at the homes of the employees and usually involved the entire family. One of the out-workers would go to the factory and collect the pre-cut wooden box components, sheets of paper and the flour or other substance used for making the glue. The boxes were then assembled at home and taken back to the factory where the label was applied and the strike surface painted on. A wage would be paid to the outworker determined by the number of completed boxes. A good worker was able to produce in the region of 1,000 boxes during a ten-hour day.

By 1855, the first steps were taken towards mechanising the matchbox production process with the introduction of a machine in the Jönköping Match Factory, for cutting the paper used to hold a matchbox together. With

¹ In 1872 a safety-requirement report on the Qvarnå Match Factory describes the matches as being 'packed in capsules of rag paper...The capsules were packed and labelled in fifties'. A. Jansson et al. p55

the exception of a machine to apply the strike surface compound to the outer sleeve of safety-match boxes in 1873, Alexander Lagerman did not turn his attention from improving the match manufacturing process to improving box production until 1881 with the invention of a machine to make the outer sleeve of the box. This invention dramatically lowered the costs of labour involved with the box making process to around 25% of what it had previously been. Due to the more complicated nature of making the inner tray of a matchbox, his designs for a machine to do so were not completed until 1888. The amount of out-sourced work at the Jönköping match factory rapidly declined when the inner-tray machine was put into operation and by the turn of the century it was practically nil. The same developments took place in most other match factories throughout the world including those of Bryant & May, who also reached a state of fully automated matchbox production in 1888.



2.3.1 A letter to a lithographic printers about the design of a new brand, SMSM

By 1848, matchbox labels were being ‘turned, engraved, stereotyped and printed’² by external, non-specialised printers. This arrangement produced mixed results. Because match manufacturers lacked experience with printing, it was most often the printers who ultimately ‘designed’ the labels to the match manufacturers’ requirements. The match manufacturers also lacked the skills needed in the ordering of printing. At worst, the match manufacturers ordered designs in general terms, providing no sketches and only vague written instructions, and then waited to see the printers’ proofs before giving any further input. In this way, many letters of correspondence could be exchanged between the match manufacturer and the printer before a final design was settled upon. Matters could be further complicated if the match manufacturer was producing a consignment of matches for a third or even fourth party³.

When a printer was supplied with sketches, they were usually of a ‘rough and ready’ approach that provided the essential elements that the match manufacturer wanted to include on the label but still required the printer to construct the design. An example of this type of practice is shown in a letter dated in 1894 from A. Zachau, founder of the Uddevalla Match Factory, to Norrköpingslithografen, a lithographic printers, about the design of a new label ‘The Condor’ (fig. 2.3.1 & 2.3.2). An image of a condor, taken from a



2.3.2 Detail of the above letter, SMSM

² A. Jansson et al. p57

³ A. Jansson et al. p55



2.4 An un-cut sheet of 'Swan Vestas' outer sleeves, PC



2.5 The reel-fed offset litho press, in this image, with an empty spool that holds the card to be printed, PC



2.6 The strike-surface applying gravure roller, PC

zoology book, was attached to the letter which contained the text to go on the label and brief instructions such as 'clear colours and fine arrangement of the label as a whole'. 'The Condor' was to become one of Uddevalla's great brands.

Sources, such as the correspondence mentioned above, indicate that the external designing and printing of the labels was commissioned by some match manufacturers until at least 1894. However, the lack of records concerning the designing and printing has made it impossible to track the development of the process beyond this with any certainty. At some point, the printing moved into the establishments of the match manufacturers, as this is the practice commonly employed today. It can only be assumed that the printed matter continued to be designed by the printers until the emergence of the graphic designer as a separate profession. However, the printer as designer role still exists in the form of in-house graphic designers at the matchbox printing works.

To take a typical example of the modern process of making matchboxes, the box production line at the Swedish Match Vetl nder factory begins in the prepress unit with the outer sleeve of the matchbox. A client is able to send artwork in Portable Document Format (PDF) that has been designed to a PDF template supplied by Swedish Match. This, or the artwork produced internally, is then set-up in the prepress unit to repeat the design the required amount of times as is necessary to fill the width of a sheet of card (fig. 2.4) and the printing plates are then created using Computer To Plate technology. Depending on the type of print run required, the plates are put on to either a reel-fed or a sheet-fed machine.

The reel fed machine⁴ has several sections, the first of which is a four-colour, offset litho section and prints at eighteen kilometres per hour (5m/s), on to a reel of card weighing half a ton (fig. 2.5). The printed sheet then travels through a section where the striking surface compound is applied using a gravure roller with a mould of the strike surface impressed into its surface, and regulated by running it against a doctor blade that scrapes off any excess (fig. 2.6). The card then progresses to the cutting section where it is cut longitudinally into strips the width of the matchbox (fig. 2.7), then laterally to form an unfolded matchbox sleeve or 'skillet'. It is then creased and finally stacked into bundles which are ready to be put in to the outer box-forming machine.

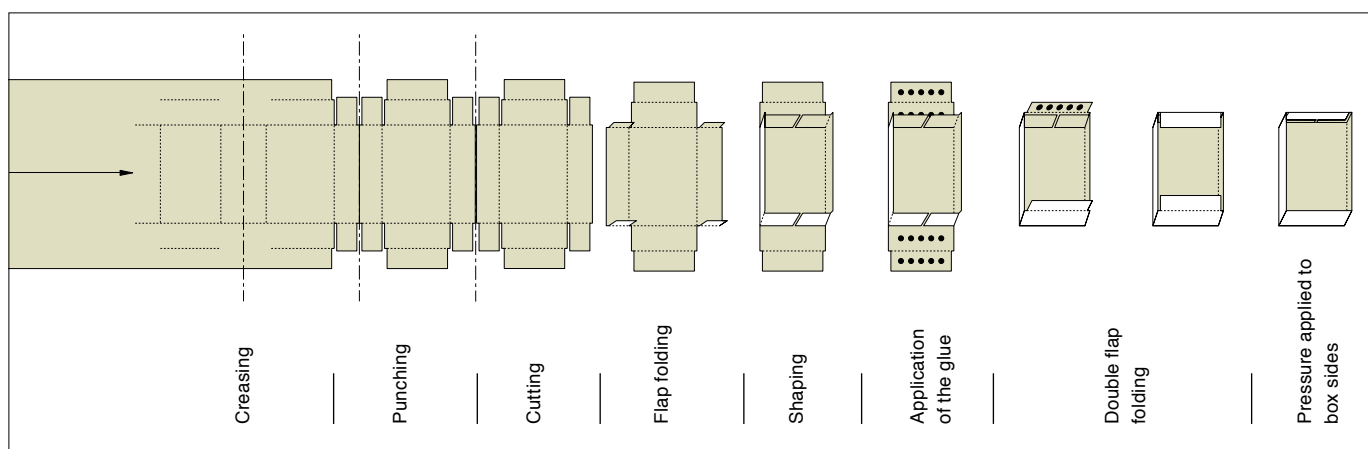
Producing sheet-fed matchboxes involves the same process but with a normal sheet-fed offset litho printing press and separate machines to apply the striking surface and to cut and crease the skillets. The sheet-fed press is mostly used for shorter print runs as it prints at a slower rate to the reel-fed 'Chambon' press and the printing plates are much easier to change. The sheet-fed press also has a superior quality of printing because the high speed of the Chambon press interferes with the registration of the print.



2.7 The machine that cuts the printed sheets longitudinally to the width of a matchbox, PC

⁴ This is a Chambon offset web package printing press and can be used for printing and producing any type of packaging. It is made by Konomi-Chambon

When they are ready, the pre-folded skillets are fed into the outer sleeve folding machine, which applies the glue and folds the skillets around a bar with the same dimensions as the inside of the outer sleeve, at about 1100 per minute⁵. The completed outer sleeves are then automatically conveyed to the continuous match machine where they meet the inner trays that have already been stamped out, formed and glued (fig. 2.8) by a machine at a similar rate to the outer sleeves.



2.8 The Inner-tray construction procedure,
AFTER A DIAGRAM IN SMA

2.2 Production problems

The production of matchboxes was not always a straight-forwards process, however, the numerous problems encountered gave rise to solutions that were to drive the development of the matchbox. By 1914, match manufacturing had become a well-established and important industry. However, the onset of the First World War was to have serious consequences for the British and international match industry as it initiated an increasing shortage of raw materials through the reduction of foreign imports, notably timber. This led to national match shortages, intensified in Britain by an outright ban on all imported matches.

The effects of the First World War in Britain were not entirely negative as it was the war that prompted a small innovation in the form of damp-proof matchboxes for use by soldiers in the trenches. As the match industry began to return to normal after the war, the issue of the timber shortage was addressed with the establishment of aspen plantations in Scotland in 1920 and again in 1930. However, by 1938 another World War seemed inevitable and companies like Bryant & May in Britain started to accumulate essential supplies and also began looking for ways to save timber and use alternatives⁶.

Early on in the second war, many industries, with a need to conserve raw materials, began the downscaling of their products. The same was true of the match manufacturers with almost all large, fancy or colourful matchboxes in Britain being withdrawn, mostly never to return. This and the supplies amassed before the war enabled the British match industry to carry on production as normal and even to step up production to account for the loss of imported matches. This was not the case for all countries during the war and it was via wartime philuminists and the quality of the few international matchboxes they acquired that the condition of an otherwise inaccessible country could be determined. For example, a British label collector received a small amount of matchbox labels smuggled out of Bulgaria. The labels included those produced before the war which were well-printed with colourful designs. The labels then became monochromatic with plainer designs that included the state insignia and little wording; then the labels

5 Michael Cox, 'Match Making' (from *Ullmann's Encyclopedia of Industrial Chemistry*, 6th edn., Weinheim 2002), <<http://www1.swedishmatch.com/matches/sida.asp?moreID=158&categoryID=158>> accessed 01/09/2003

6 Patrick Beaver, p 92



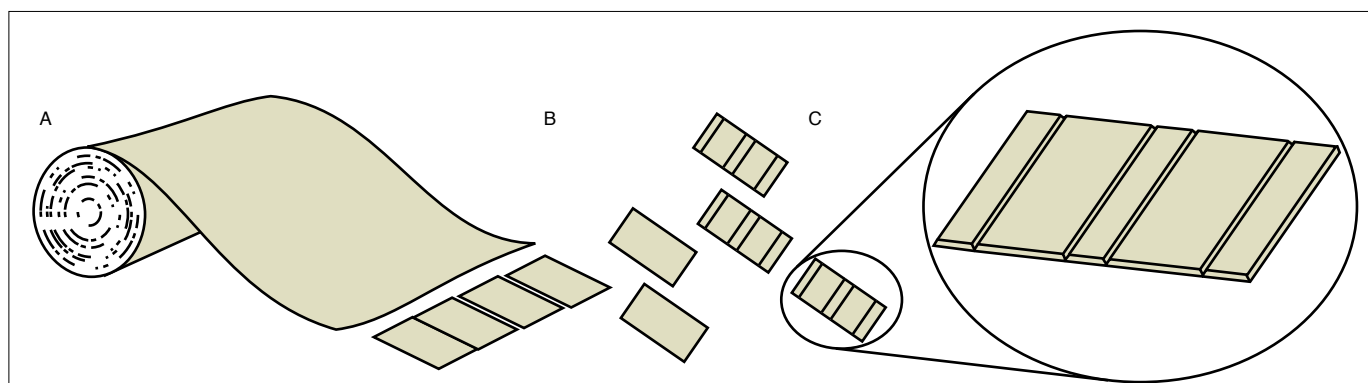
2.9 (n.n.) A wartime matchbox from Eritrea made from a picture postcard, MBL

appeared on poor quality paper with only the state insignia applied with a rubber stamp; and finally they used only unprinted oddments and scraps of paper⁷.

Another country that faced adverse matchbox manufacturing conditions was Eritrea in North Africa, which was invaded by Italy in 1936. After the Italian invasion, Eritrea was left impoverished and lacking in many basic raw materials so matchboxes began to be made from Italian picture postcards. The postcards were cut to shape and held together with strips of poor quality paper that had been hand-printed in red or black⁸ (fig. 2.9).

The use of cardboard as a matchbox material was not solely limited to Eritrea during the war. In Holland in the early 1940s the Dutch National Match Factory, due to severe Nazi controls on all industry, began using cardboard instead of wood for the boxes. Also, at around the same time in Britain, the necessity to conserve wood led to the same conclusion which, in turn, inspired the Swedish company Svenska Tändsticks Aktiebolaget (STAB), one of the largest match manufacturers in the world. This proved to be one of the most significant advances in matchbox production.

Wooden boxes were complicated to assemble because the logs of wood had to be 'peeled' (on a lathe) into a veneer, then cut to shape and rebated so that the edges of the box met to form a right-angle (fig. 2.10). A printed, paper sheath stuck on to the outer box and the inner tray had its sides and bottom stuck together with paper and glue⁹. Cardboard matchboxes have a much higher production rate because they are easier for machines to make and handle. Cardboard boxes have less spillage than wooden boxes and also nullify the need to sort the peeled veneer into that to be made in to boxes and that destined to become splints. All this, coupled with the cheapness of the raw product, greatly reduced the cost of matchbox production.



2.10 Making a Wooden-box skillett

- A. Peeling the veneer
 - B. The cut box-web
 - C. The box web with rebate
- AFTER A DIAGRAM IN SMA

The benefits of using cardboard as the sole material for making matchboxes were quickly realised and when, after war in 1949, Bryant & May started producing all-cardboard boxes for safety matches, it marked the demise of the wooden matchbox. However, Cardboard was substituted in stages and, in Britain, it was up until the 1970s that wooden boxes were still being made¹⁰.

It was also during the 1970s that the latest fundamental innovation in matchbox production was realised and involved the implementation of a technique that had been known earlier but not used. This was the printing of the label and strike surface directly onto the outer box instead of making the box first and then applying the label. This was only possible with cardboard. However, by printing directly onto the box, the quality of the printing could not be as high as printing onto a paper label due to the high speed needed in production. This therefore also marked the demise of the highly ornate

⁷ Joan Rendell, p29

⁸ Joan Rendell, p29

⁹ A. Jansson, p55

¹⁰ Wooden matchboxes are still being made in parts of Eastern Europe (especially in the Baltic region) and in countries with a high level of humidity such as Brazil.

matchbox label as it was no longer feasible to maintain the same level of detail on the cardboard boxes as had appeared on the paper labels.

In 1964 a German match manufacturer started making boxes out of plastic but, although it was tried elsewhere, it never caught on.

In the present day, the same amount of matchboxes produced in one minute is slightly more than that produced in an entire working day when the matchbox was first produced, about 150 years ago. However, since the production of that first matchbox in the 1840s, composed of a sliding inner tray and an outer sleeve, the essential construction of a matchbox has not changed at all. Not only does the consistency of this packaging design supply a usefully regular platform for the evaluation of the graphic design of the matchbox covers but it has also provided matchbox cover designers with an extensive precedent for their designs, the value of which may not have been fully realised.

Chapter 3

Matchbox label design: 1827–1950

The design of matchbox labels, from their very beginning through to the end of the nineteenth century, was a process of developing practical design theories in order to deal with the medium and to establish traditions and styles that would appeal to the match buying public. This hundred and twenty-year period was one in which the functional qualities of products made by almost all the competing manufacturers became virtually identical. This ultimately led to the only other variable factor, the packaging, becoming the primary selling point and therefore the basis of competition, although initially not all the match manufacturers recognised its effectiveness. With the onset of the World Wars and other variables in the cultural climate of the first half of the twentieth century, the practices and traditions of making, marketing and selling matches were profoundly changed. This, in common with many other commodity products, had a significant impact on the design of matchbox labels.



3.1 (*n.n.*) – Factory name applied with a stamp, SMSM



3.2 (*both n.n.*) – Early boxes with instructions, JMM

3.1 Early matchbox label design factors

The first matchbox labels were, as with any product packaging from a fledgling industry, of a rudimentary nature. By definition, the very first match packaging was that applied to the friction matches invented and sold by John Walker in Britain in 1827. There are, however, no definitive examples of Walker's products and so they cannot be commented on (a few are reportedly in circulation amongst philuminists, but they are probably fakes¹). Most of the very earliest match packaging took one of two forms; they were either very simple capsules with the factory name or location and often 'Tändstickor'² applied with a stamp (fig. 3.1) or they had more wording, including the name and location of the manufacturer, and instructions on how to use the matches (fig. 3.2). These forms of packaging could not be said to have been 'designed', graphically or typographically, as the wording on the packaging was there as a matter of necessity and appears to have been simply fitted on as the printer thought best at the time. This changed quickly, and within a few years of the industry having been established, matchbox labels started to be structured and designed with much greater consideration.

The beginning of matchbox label design was significantly influenced by the lack of copyright law at the time in Sweden. When matches started to be produced around 1830, there were no 'trademarks' in the match industry; only the manufacturers name and the place of manufacture were put on to the box. This implied that the same design and often the same wording could be used by different manufacturers from different localities³. Initially, this did not prove to be problematic due to the fact that the match factories were primarily supplying only their local markets; the same market rarely saw two similar or identical designs from different parts of the country. However, the introduction to Sweden in 1856 of steam power, and consequently steam-powered trains,⁴ enabled the shipment of goods to a much wider geographic area. This in turn led to the sale of matches from different manufacturers of different qualities in boxes that were virtually indistinguishable from each other by consumers. This was obviously detrimental to the company making

1 Joan Rendell, p 21

2 The Swedish for 'matches'.

3 A. Jansson et al., p55

4 Marco van Uden, *A brief Swedish railways overview* [website], (updated 2001), <http://mercurio.iit.unipi.it/misc/swe_hist.html> accessed 27/01/2004



3.3 *Jönköping Original* – The original Jönköping Original's label, (actual size) SMSM



3.4 More Jönköping Original Plagiaries, JMM



3.5 (n.n.) – The cartouche style label, SMSM



3.6 (n.n.) – A double-oval style label, SMSM



3.7 *Excelsior* – The double oval with pictures, SMSM

the better-quality matches but it was beneficial to those making the inferior matches to be associated or even mistaken for a manufacturer of superior matches.

The best example of this plagiarism in the match industry, and possibly in all of industry, is that of the matchbox label issued from the match factory owned by the Lundström brothers in Jönköping that has become known as the 'Jönköping Original' (fig. 3.3). This is the first label used at the factory and to begin with, was the only brand produced. Because the quality of the 'Jönköping Original' matches was so high, every match manufacturer would have liked to have been associated with it. This resulted in over 450 known imitations of the label being produced by different match producers⁵. Due to the extent of this plagiarism, the 'Original' design came to be seen as a generic design of matchbox labels. This was obviously not the view taken by the Jönköping Match Factory or the courts when, in 1884, Sweden introduced an effective Trademark Protection act⁶.

As copyright laws tightened, manufacturers were forced to make their plagiarised labels original or face the penalties of being sued. To successfully create a label that could be called 'original' they simply found any 'thing', – any object, item, concept, or personality that had not already been taken – and used it as the identity or trademark for a label, often by merely incorporating it into the previously plagiarised design (fig. 3.4). This resulted in hundreds of different labels being produced because each time a new label was introduced a different 'thing' had to be used.

While the 'Jönköping Original' label was not the only registered proprietary label to be defended successfully in court, it was the only label to go through this process and yet still exert a significant influence on future matchbox label design. The elements of its design – the predominantly typographic appearance, the positioning of the medals and the positioning and layout of the text – became a defining style for other matchbox labels.

There were two other styles of matchbox label that emerged to dominate label design in the latter half of the nineteenth century, both being a variation on the same theme. One of them is the decorative cartouche label that appeared very early on in the history of matches and usually consisted of an ornate cartouche on a patterned background with the name of the label (usually the factory, its location and "Tändstickor") printed inside the cartouche (fig. 3.5). The other is similar in concept but has a double oval instead of a cartouche with the name of the label printed in the middle of the double oval (fig. 3.6). Later, a picture of the factory or a depiction of the brand appeared in the middle, with the text positioned inside the double oval (fig. 3.7). These three styles of label became the dominant standards for matchbox label design in the second half of the nineteenth and early part of the twentieth centuries. There was also a further device that became extremely popular, this being the use of an outer frame of alternating light and dark fields which first appeared in 1847 (fig. 3.6 and 3.7).

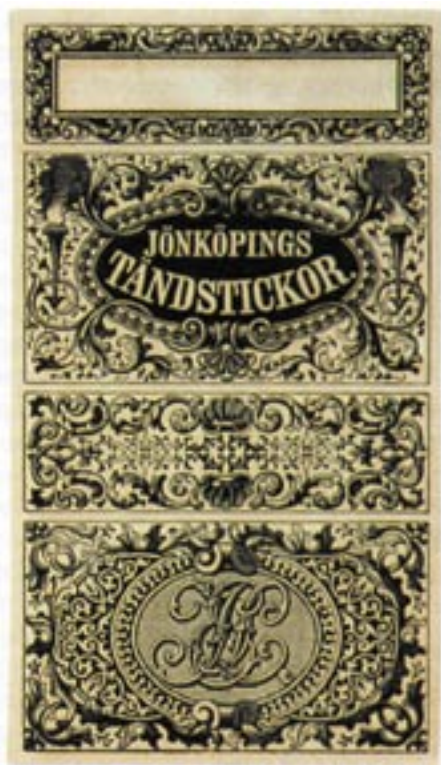
The use, from early in the match industry's history, of these relatively sophisticated designs can be attributed to the timing of the invention of the match. The early nineteenth century's industrial revolution, during which match products began to be commercialised, inspired typography and printing to become much more ambitious than they had previously been. Designers of matchbox labels were no exceptions to this trend, and produced comparatively complex designs after only a very short period of establishment. The use of the cartouche and the double oval devices on

5 Interview with Bo Levander – Curator of The Jönköping Match Museum, Jönköping, Sweden, 10/07/2003

6 A. Jansson et al., p55



3.8 *Salongs* – The first typefaces to be used, JMM



3.9 (n.n.) – Vegetative forms could look effective, SMSM



3.10 *Cigar matches* – Labels could also look terrible, SMSM



3.11 *Jönköping Original* – Jönköping Originals at actual size, (actual size) SMSM

consumer product packaging was already widespread – it was considered to be modern and fashionable. As it was invariably the printers who designed the labels, the designs reflected what the printers were familiar with and had available to them. The frequent appearance of vegetative patterns and the almost universal use of a border on matchbox labels, was because they were popular on other printed material in other fields. Their applicability to match boxes was taken for granted. Additionally, the use of a border around the design meant that there would be an edge area that was un-printed, which allowed for a degree of tolerance of inaccurate cutting and slitting of the skillet.

3.2 The specifics of matchbox label typography

The typography of early matchbox labels was also dictated by what was fashionable, and hence available, at the time. Typefaces that were in popular use such as Bodoni, Didot and others of a similar ‘modern’ serified style, were the ones first applied to matchbox label design (fig. 3.8). They were initially set in a similar style to that of the Classical period (1780–1830) when the typefaces were created. However, soon after, with the onset of the era of Historicism (1850–1890)⁷, Classical typography became incorporated into the revived antiquated forms of vegetation and architecture that symbolised the Gothic and Roccoco periods. This formalising of the design could produce the desired result – an important looking product of quality and stature (fig. 3.9) – provided a confident and informed draughtsman or printer produced it. If it were not, the label could become awkward and confused (fig. 3.10) although matchbox label design probably required this sort of experimentation to find what would work best on a label.

Beginning in 1848 with a heading on the ‘Jönköping Original’s’⁸, it was eventually realised that the typeface that worked best was (usually bold) condensed grotesque as this was the typeface that, when used, would fit more words on to the label and still retain legibility. The use of serified typefaces, especially those of the modern variety with very fine serifs and a high contrast between thick and thin strokes, proved to be unsatisfactory. Given the small area available for print on a matchbox, the fine strokes and serifs became lost and would also have required finer printing – a factor that was incompatible with the requirement for higher volumes and higher print speeds. The grotesque or sanserif could be printed at a lower quality, and therefore at a lower price, or seen with poorer eyesight, as it did not contain the detail of the serified typefaces. Again, the ‘Jönköping Original’ label is an excellent demonstrator; it shows good use of the grotesque typeface and, by its final version in 1867, it contained 19 words, including the captions under the medals, all of which are easily legible (even the wording inside the 4 medals, is legible) (fig. 3.11). This could also be a contributing factor to the extent of the plagiarism it incurred; not only was the product of a high functional quality but it also carried a corresponding standard of label.

Other typefaces used on contemporary matchboxes also took into account the problems of printing detail at a small size and proved to be logical choices when a diversity in typeface was called for. The square-serif, introduced in 1817 in London and later to be called Egyptian, was initially used as an advertising type⁹, but was particularly well suited to matchbox typography (fig. 3.12). The equal weighting of the stems, strokes and serifs meant that there was nothing in the typeface that would disappear if the printing or viewer were not up to standard. Another typeface that frequently appears is that known as Estienne which was particularly favoured by the Vulcan Match Factory (fig. 3.13). This type works because the serifs are so small;

7 F. Friedl, N. Ott, B. Stein, *Typography – When, Who, How* (Könemann, Köln, 1998) p 60

8 A. Jansson et al., p 63

9 Alexander Lawson, *Anatomy of a Typeface* (David R. Godine, New Hampshire, 1990) p 309



3.12 *Serpent and secretary bird* – Egyptian types were also used, (actual size) pc



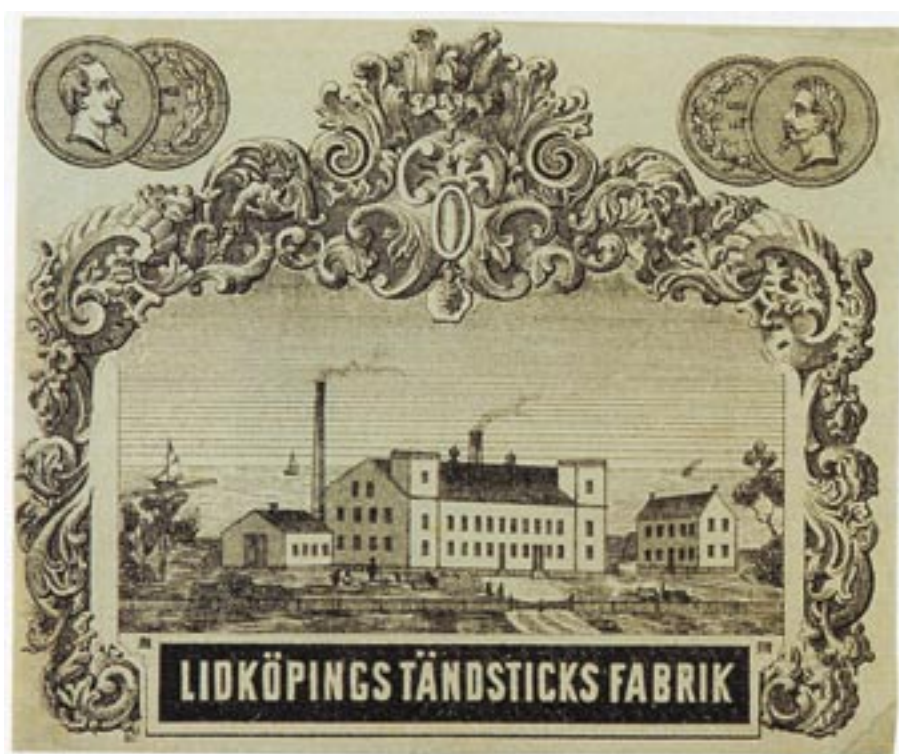
3.13 *Household matches* – A Vulcan Label using an Estienne typeface, (actual size) pc



3.14 *The Tiger, Luxus and Lightship* – Some decorated types used on matchboxes, (actual size) pc

if the printing or eyesight is not of sufficient quality, the body strokes are able to support themselves and the serifs, which are intended to have only a very minimal presence, may be diminished but will still occur, albeit barely. Essentially, the type will still be legible without fragmenting. Of course, every conceivable typeface has, at some time, appeared on a matchbox label. The recognition and exploitation of the need for types specifically designed for advertising purposes meant that the proliferation of increasingly extravagant and fantastical typefaces abounded and, consistent with the generally chaotic state of nineteenth century typography, this was inevitably applied to matchbox labels. Among the most common of the advertising types used on matchbox labels were three-dimensional types, typefaces with drop-shadows, and decorated types, mostly of a grotesque or Clarendon style (fig. 3.14).

The appearance of condensed grotesque on matchbox labels largely coincided with the introduction of pictures on labels – the two did not come about until around the middle of the nineteenth century but both soon began to dominate. The very first pictorial label was actually produced in 1830 by N. Jones & Co. in England and consisted of an Englishman and a Scottish highlander smoking with coiled serpents breathing fire. It was printed in pale green but at the time was considered vulgar, the more fashionable designs involving typography and pattern only¹⁰. The first widespread use of depictive labels was in the 1840s with a picture of the factory inside a cartouche (fig. 3.15) which was printed on the wrappers used to package a quantity of matchboxes for distribution to shops, for sale either individually or as a quantity still in the wrapper. This continued the association of quality with the manufacturer.



3.15 From a wrapper used to wrap matchboxes, SMSM



3.16 (*both n.n.*) – Pictorial labels before they became brands, SMSM

3.3 Establishing match brands

Whilst the use of a picture of the factory on matchbox labels was common up to and including the 1840s, it was with the introduction of the concept of branding that matchbox design began to establish itself properly. The purpose of the trademark was, initially, to distinguish the manufacturer, so that the buying public would know who had made the product and, most importantly, remember to buy more if the quality was superior to that of the competition. However, it was during the middle of the nineteenth century that, as the quality of matches from different manufacturers became of an increasingly high and uniform standard, the match industry shifted the marketing emphasis. The emphasis went from attempting to give customers a degree of assurance by claiming manufacturing excellence, to gaining and maintaining a loyal base of customers through branding. The challenge was to develop a set of brand characteristics that would appeal to and attract the customer in a way that was not exclusively related to quality, but rather encompassed a range of both functional and emotional features that customers could identify with, and depend upon. Whether the nineteenth century manufacturers were as sophisticated in their planning as this implies and able to equate brand loyalty with repeat purchases, cannot be proven but, regardless, this is what occurred.



3.17 *The Locomotive* – The emergence of the brand name, (actual size) PC

The matchbox labels initially changed from containing pictures of the factory to using a picture or some other graphic device as a trademark, but branding the box with the name of the manufacturer and the location of manufacture continued (fig. 3.16). In the case of the 'Jönköping Original' plagiaries, this was possibly an attempt to apply some originality to the label while maintaining the association with the quality of the original. Following this, with the exception of the very large match manufacturers who regarded their reputation for quality as part of their products' brand strength, the name of the manufacturer and the location of manufacture gradually disappeared from the label. In their place came the name and the graphic depiction of the unrelated item chosen to be 'the brand' (fig. 3.17).

The identity of the brand, aimed at the contemporary consumer, was intended to appeal to people who lived during an era in which the social climate was defined by modernity and progress. The relevance of the brand, therefore, had to be immediate. Given this, the vast array of match brands can be grouped into categories and themes that reflect the dynamic interests of the public in the latter half of the nineteenth century.

Technological innovations were a very popular subject for creating new brands. Names such as 'Aeroplane Special Safety Match', 'The Automobile', 'Telephone Matches' and 'The Telegraph Safety Match' (fig. 3.18) appeared as the machines and devices themselves were invented. The evolution of steamships can be almost completely charted by matchbox labels as ocean-going vessels progressed from simple wind propulsion via countless numbers of sails to combinations of sails and steam, to ships using only steam and beyond



3.18 *The Telegraph & Aeroplane* – Technology inspired label brands, (actual size) PC



3.19 *The Ship, (n.n.) and The Dreadnought* – The evolution of steam at sea, (actual size) PC

– ironclads, submarines and eventually Dreadnoughts all become matchbox labels (fig. 3.19).

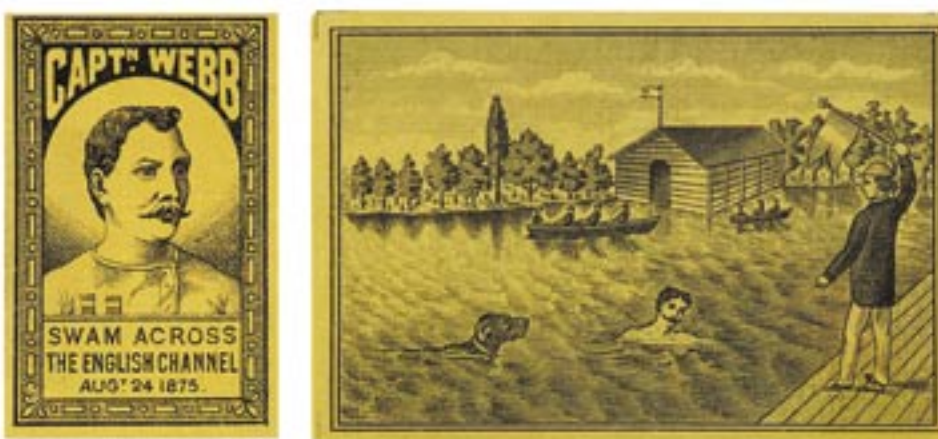
The exotic was also a great passion of the Victorian era, largely facilitated by the technical innovations and inventions referred to above. Faster and safer means of travelling such as trains and steam ships, together with faster and more accurate means of communication such as the telegraph, the development of the photographic camera as well as the increasing speed and quality of printing presses, all served to fuel the Victorian imagination and awareness. They also served to enhance national pride and belief in the Empire. Matchbox labels depicting animals, plants and peoples from far-off, foreign lands exploited the Victorian interest in touring and travelling and



3.20 *The Palmtree, La Llama & The Negro Post* – The exotically themed matches, (actual size) PC

excited the desire to explore and experience the unknown (fig. 3.20) – even if such activities were far beyond the means of most of the population. Labels that used animals or plants (botany) had the additional benefit of being not only generally attractive and therefore inoffensive, but also specifically appealing to the export markets from where the subject of the label originated and were almost guaranteed not to be misconstrued.

There were also matchbox labels that were based on significant events that took place, such as the swimming of the English channel by Captain Matthew Webb on 24 August 1875¹¹ (fig. 3.21) or the Olympic games of the early twentieth century. These events were seen at the time as being



3.21 *Captain Webb* – Two different labels commemorating the swimming of the Channel by Captain Webb, (actual size) SMSM

triumphs and great achievements that caught the imagination of the public and were therefore wholly consistent with branding objectives.

Royalty and celebrities of the time were also frequently turned into match brand names. 'Victoria Matches made in Sweden' and 'Jubilee Matches' were popular in Britain (fig. 3.22), while Swedish royalty made numerous appearances on the front of

11 Alan Phillips, *Famous people from the Telford area* [website], <<http://www.telfordlife.com/Capt%20Webb.htm>> accessed 09/01/2004



3.22 *Diamond Jubilee, Victoria and King and Queen* – Royalty also had their own labels, SMSM



3.23 *Kali (top) & Durga (bottom)* – Religious themed labels, SMSM

matchboxes in Sweden as did any King, Queen, Prince or Princess of a country where matches were made or exported to. Benjamin Disraeli, one of Queen Victoria's Prime Ministers, also featured on a label, as did the Duke of Wellington, Arthur Wellesley, who defeated Napoleon at Waterloo. The use of these people and personalities tapped into the nationalism and patriotism of a country which, at the time, yielded strong emotions and therefore could be relied upon to market matches effectively. Religion featured heavily on labels for export markets like India and China, where hundreds of labels could be created to cater to the many deities, prophets and eminent beings that form the indigenous religion and philosophy (fig. 3.23).

Another, curious group of labels were the 'threes' labels which used the ancient mythological, theological and philosophical significance of the number three. There were literally hundreds of labels on which the subjects are depicted in a group of three. Some of the 'threes' labels have an obvious connection to the number, for example 'The Three Kings' and 'The Three Rings' both feature in Christian mythology (the three rings often being used to symbolise the trinity of the Father, Son and Holy Ghost). However, some, such as 'The Three Cocoa Pods' or 'The Three Legged Pot', appear to have no meaningful connection with the number whatsoever. Some examples that together demonstrate the diversity of this theme of matchbox branding are: The Three Fish, Monkeys, Mussels, Kings, Jolly Minstrels, Storks, Crowns, Shields, Slippers, Paddles, Dice, Torches, Lancers, Legged Pot, Lions, Cocoa Pods, Girls, Bells, Birds, Steamers, Globes, Pipes, Plumes, Rings, Tarbouches¹², and Stars (fig. 3.24). 'The Three Stars' originated in 1887¹³ and is the most famous of the 'threes' labels. It is now one of the oldest registered trademarks in continued use.

By 1900 matchbox label design had become well established as a highly productive branch of commercial graphic art, with a vast array of labels, although their design was still largely based on the early 'Jönköping

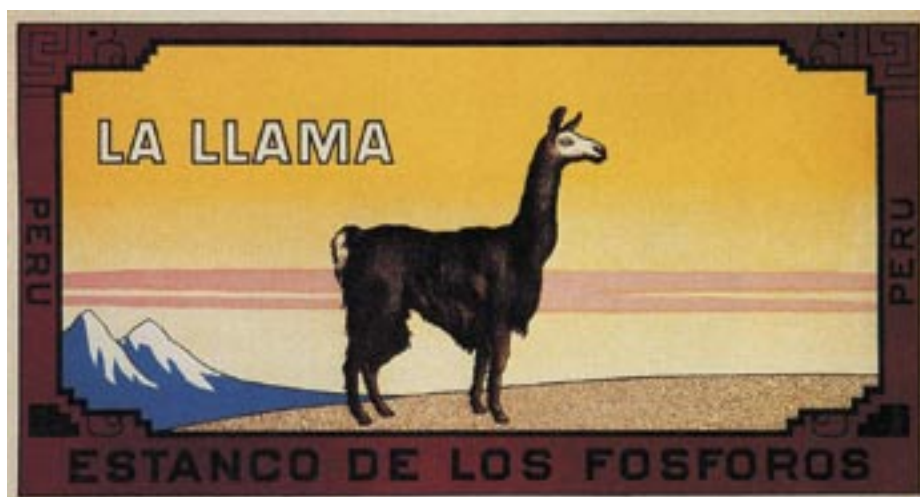


3.24 A few of the 'three's' matchbox labels, PC

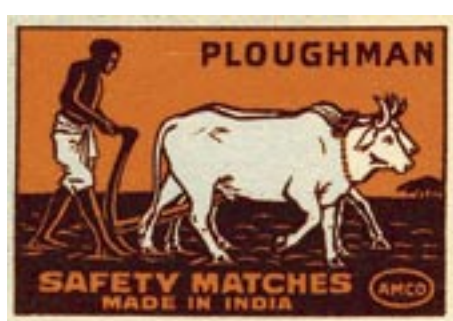
¹² A round, flat-topped hat made of red felt with a tassel attached to the top.

¹³ Swedish Match, *Selected products* [website], (updated 2003),

<<http://www1.swedishmatch.com/matches/sida.asp?moreID=143&categoryID=143>> accessed 02/02/2004



3.25 *La Llama* – The late art nouveau label for ‘La Llama’, (actual size) SMSM



3.26 *Ploughman* – A label of Informative Functionalistic design, (actual size) PC



3.27 (*n.n.*) – A label set in the style of Futurism, (actual size) SMSM



3.28 *La Petite* – An art deco label, (actual size) PC

Original’, cartouche or double-oval labels. As the functional quality of the actual matches from different manufacturers became ever more uniform, the attractiveness and pertinence of the label became the primary selling point, a trend that was a forerunner of modern advertising. This was to become especially important in the twentieth century.

3.4 Label design during 1900–1950

At the beginning of the twentieth century, matchbox label design was still generally adhering to the traditional cartouche-styled formats that were established nearly fifty years before. However, while some labels had effectively remained unchanged, others, particularly new brand introductions, incorporated some of the contemporary trends of the new century into their design. This tendency for the design of some brands of match to remain steadfastly traditional and others to adopt elements of a contemporary style of design would persist throughout the field of matchbox label design, up to the present day.

The first contemporary stylistic adoption by matchbox label designers was that of art nouveau, a style that lasted from about 1890 to 1914. The practice was usually to apply the new type and typography of the period, as well as the contemporary trends in the treatment of pictorial matter, to the classic layout with its borders and decoration. This was probably done at the time solely to appeal to the fashionable public, rather than for the symbolic, philosophical and artistic merit of the movement. This is well demonstrated by the label for ‘La Llama’ (fig. 3.25), which is in a late art nouveau style. The label for ‘La Llama’ has the name of the brand in an asymmetric position on the label and set in a moderately bold, roman sans serif, a feature not normally associated with art nouveau and suggests the misuse of a popular style purely for commercial and production expediency. The picture behind the brand name is in the art nouveau style as is the depiction of the llama. The scenic backdrop is in a similar style to the Japanese art that originally inspired the movement. The heavy border, albeit decorated in an art nouveau style, is a legacy of the traditional Victorian matchbox label design. Other stylistic movements that influenced contemporary matchbox label design were informative functionalism, futurism, and art deco (fig. 3.26, 3.27, 3.28 respectively).

The reluctance to produce cutting edge label designs, however, was limited only to branded match products produced by the manufacturers for sale through normal retail channels. This was not the case for matchboxes used for ‘customer advertising’.



3.29 *Ypres* – A WW1 label to commemorate the battles at Ypres, MBL



3.30 (*n.n.*) – A WW2 label to help national security, MBL



3.31 *Pilot Match* – A WW2 label used to help with the war effort, MBL



3.32 Commemorative labels for the concentration camp at Oostakker, MBL

Advertising on matchboxes began in the late 1800s, and was generally commissioned by businesses related to smoking, the assumed principle use of matches. Initially, cigar and tobacco manufacturers would pay to advertise their products on the back of branded matchboxes. However, towards end of nineteenth century, the advertising became more diverse as other businesses realised there were actually two main users of matches (the other being housewives) and so advertisements appeared for products such as soap and baking powders¹⁴. It was soon realised that a match box bearing an advertisement offered a relatively high number of opportunities for the consumer to see the advertising – the number broadly equating to the number of match sticks contained in the box – and that this high exposure of the advertising message could be obtained, by the advertiser, at a fraction of the cost of other advertising media. This led to the entire matchbox being used for advertising, not just the back, and because the entire production batch of matches were already sold to the client, the match companies had no interest in what the labels looked like. The labels that were produced therefore took a wide variety of forms and styles, largely dependent on the nature and marketing direction of the business that was advertising, but also influenced by the ephemeral nature of the advertising matchbox and, hence, the diminished consequence of having a controversial or bad design. Another factor that produced a diversity of advertising matchbox labels was that the advertisers were inexperienced at designing matchbox labels and therefore did not adhere to the traditional formats.

The advertising of products on matchboxes was a huge success and the effectiveness of this medium was exploited by the governments of the time for propaganda and public notice purposes during the two world wars. During World War 1, matchbox labels were mostly used in passive propaganda with slogans such as ‘encourage home industries’ and the names of famous battle-scenes such as ‘Ypres’ (fig. 3.29). World War 2 also saw matchbox labels used as propaganda but more aggressively, with slogans such as ‘Don’t talk about ships’ and ‘Beware of spies’ (fig. 3.30). There were also pictures of the military, armed soldiers charging to battle, battleships and guns, all intended to stir up patriotic emotion among the population, along with other slogans intended to help with the war effort. One such example, curiously unopposed by the manufacturers, was ‘Use matches sparingly’ (fig. 3.31).

After World War 2, commemorative matchboxes were launched, sometimes in order to raise funds for war related charities, but also just to commemorate what had happened, as in Belgium which had a series of labels to commemorate the Nazi atrocities in Oostakker – a concentration camp for political prisoners (fig. 3.32). War certainly helped the further diversification of matchbox label design, as it did in almost all areas of design and culture.

3.5 The life of a label

In the early part of the twentieth century, thousands of different labels were in circulation, each one being, in effect, a brand. However, it was around 1930 that this practice started to decline and would eventually result in most of these brands disappearing. The stock market crash in 1929 was one of the contributing factors to the reduction in the number of brands. At the time of the Wall Street Crash, Svenska Tändsticks Aktiebolaget (STAB) was at its peak (see Ch. 1), having a monopoly of match production in many countries. When the stock markets crashed, the group became massively in debt and ultimately, following the suicide of the managing director Ivar Kreuger, the company was put into administrative receivership. This led to large-scale reductions in the scale of its operations, the selling or returning of many of

the factories it owned, and many other cost cutting initiatives. Inevitably, this led to a decrease in the number of brands produced by STAB and the factories it had once owned but was now no longer capable of financing.

Another factor in the reduction of brand numbers was related to the emergence of another portable fire-making device: the cigarette lighter. The first lighters appeared in the late 1800s, they were fuelled by gasoline or methanol and lit automatically at the push of a button¹⁵. These were not portable, nor reliable and were not a severe threat to the match industry at the time. It was in 1932 that the first real alternative to the match emerged when the 'Zippo' was launched as a gasoline, wick and flint-wheel, pocket lighter¹⁶. This became extremely popular and its convenience and functionality were quickly copied by other manufacturers (Ronson being a notable British participant in the portable lighter market). For the first time in its history, the match industry faced external competition and as a result, the proliferation of match brands became a hindrance to a match manufacturer. Brand rationalisation was recognised as a means of achieving production cost efficiency.

Other factors in the decline of the number of different brands include the requirement throughout the entire industry to downscale all operations during the first and second World Wars in order to save on cost and raw materials. This led manufacturers to cease production of their less successful brands and any brand or packaging that was expensive to produce. By so doing, this may also have led to the concept of brand loyalty becoming fully understood, owing to the diminished choice of different brands and the subsequent emergence of particularly successful brands of match.

One brand of match that was particularly successful in Britain was 'Swan Vestas'. The wax-vesta, named after Vesta, the Roman god of the hearth and household, was a type of match made from a wick, usually cotton but latterly made of paper, that was dipped in wax. The 'Swan' brand originated in 1883 when the Collard & Kendall match company in Bootle, Merseyside, introduced 'Swan wax matches' which were pure white and one of the sturdiest wax matches available¹⁷. When the Diamond Match Company took over Collard & Kendall in 1895, the production of the wax-vestas remained but two years later in 1897 they introduced 'Swan White Pine Vestas' which had a round wooden splint, intended to appeal to smokers as this burns better in the open air¹⁸. They were marketed alongside wax vestas to try and capture some of that audience. In 1901 Bryant & May amalgamated with Diamond and launched an intense advertising campaign for Swan matches, presumably to promote the new design of the box.

The new design replaced the previous label which had been rather clumsy, printed in red or mauve on white paper (fig. 3.33) and this had, in turn, replaced a fairly generic matchbox label design (fig. 3.34). The new label



3.33 *Swan White Pine Vestas* – The label for Swan when Bryant & May first became involved with it, MM



3.34 *Swan* – The original label for Swan, MM

15 Swedish Match, *History of Lighters* [website], <<http://www.swedishmatch.com/eng/index.asp>> accessed 09/01/04

16 Zippo *Zippo lighters: dates in history* [website], <<http://www.zippo.com/about/history/30s.html>> accessed 09/01/04

17 Patrick Beaver, p117

18 Beaver, Patrick p117



3.35 *Swan White Pine Vestas* – The first version of the newly designed Swan Packaging, MM

was a much more accomplished design (fig. 3.35) and it proved to be the model that almost all subsequent redesigns relied upon – its layout, colour, principle typeface and general concept was to remain basically unchanged for over a century. It was printed in red, green and yellow and the brand name set in an Estienne style of typeface, positioned in the red field on the right with the depiction of the swan reversed out of the green field on the left. This arrangement has always remained the same, with only a few, late twentieth century exceptions. Certain details were subjected to change from time to time. These included alternating between serif and sans serif for the secondary typeface that was used for the other text on the box such as ‘British made’, ‘Bryant & May’ (and, after 1906 when the name changed from ‘Swan White Pine Vestas’ to ‘Swan Vestas’, a slogan appeared on the front saying ‘The Smokers Match’). Other aspects of the design that were periodically changed were the picture of the swan, which was re-drawn for every redesign, and the direction and angle of ‘Swan Vestas’ (fig. 3.36)

There were variations to the main theme such as ‘Royal Swan Vestas’, which were produced in 1914 with multicoloured heads to the matches and packed in a svelte, flocked box with gold leaf lettering. However, like many extravagantly packaged brands of match, this was withdrawn at the start of World War 2. The standard ‘Swan Vestas’ were in no danger of being dropped as, by the 1930s, they were Britain’s best selling brand of match¹⁹, being not only of very high quality and reliability, but also being unique in functional design, graphic design and containing many more matches than normal boxes. This was still the case in 1950 by which time the label had settled down to an effective and well-proportioned design (fig. 3.36) that had seen little change in the previous ten years. This consistency still obtains today.

The period of time between the inception of matchbox label design in the 1830s and the turning point in the fortunes of the match industry in around 1950 saw the birth, the rise and the beginning of the fall for match producers. This period was one in which competition between match manufacturers went from the simple production and sale of matches at the lowest price, to the production of the highest quality matches, to the production of the most attracting packaging and most effective branding. The marketing mix for all manufacturers ultimately became a combination of all these factors.

Cost pressure is not a new phenomenon to the match industry – raw material and cash shortages during the two World Wars caused severe problems, as well as innovative solutions, in manufacturing. The emergence of cheap disposable cigarette lighters during the last twenty years has resulted in steep declines in match consumption, and those match manufacturers who survive will have done so by continuing those practices of producing very high quality, strongly branded products at the lowest possible price.



3.36 *Swan Vestas* – Various changes in the design of the Swan labels up until the 1950’s version (bottom right), SMA

Present Day Matchbox Cover Design

The design of most matchboxes produced today remains broadly the same as when the brands were first created. To some extent, the marketing has developed from that previously of merely producing an attractive label, to exploiting the now antiquated design as a signifier of the age of the brand and hence its quality. There are exceptions and some newer brands of match have adopted the traditional selling technique of providing an attractive and contemporary label. The difference today is that the newer brands have changed their design significantly during the life of the product in response to the perceived consumer demand for modernity.



4.1 *Swallow and Three Stars* – Modern matchbox covers that have remain practically unchanged, (actual size) PC



4.1 Today's Match Brands

Geographically, the largest producers of matches today are in Asia, and in particular India and China. However, the only global match company and by far the biggest match producer, in terms of output and quantity of brands is Swedish Match AB, based in Stockholm, Sweden and manufacturing in Europe, South America and Asia.

Swedish Match's range of matches is primarily of a traditional cartouche style design, of the type that has prevailed from near the very beginning of the match industry. Many have remained very largely unchanged from the beginning of their existence - such as 'Three Stars' and 'Swallow' (fig. 4.1) - while others have been given a very modern update, such as 'Cook's Matches' and 'Union Match' (fig. 4.2) and many of their other European brands. To a large extent, the modernisation, particularly of the West European brands, has been facilitated by modern printing technology, but was also intended to give the brands appeal to contemporary consumers, a trend that has appeared throughout industry.



4.2 *Cooks matches (reduced from 120×66mm) and Union Match (actual size)* – The modernized version of an old design, PC

At the end of the 1990s, Swedish Match embarked on a project known internally as "Nirvana", one objective of which was to create a premium range of match products in each European market differentiated from the competition, and from 'own label' products, by very high functional and aesthetic qualities. The selling prices also reflected these differentials. The graphic design of the products was recognised as being of crucial importance to the success of the Nirvana project. While each country's traditional brand name was retained, the company sought to project similar brand images and characteristics – 'images of warmth and cosiness coupled with security and reliability'¹ – across all European markets. In several markets, this process abandoned all the traditional design elements, although in some (for example 'Swallow' in Holland), consumer

1 Interview with Graham Jones – President of Matches World Wide, Swedish Match, 15/02/2004



4.3 *Feudor* – A modern matchbox cover design, (actual size) PC



4.4 *Millennium Firework matches* – A modern commemorative box design from Switzerland, FEUDOR WEBSITE



4.5 *Diamond kitchen matches* – Diamonds standard brand identity, DIAMOND WEBSITE

research indicated that the cartouches and scrolls were too important to be eliminated. In such cases, the traditional design was substantially refreshed rather than being radically altered.

The design of some brands of match such as 'Feudor' (fig. 4.3), sold in Switzerland, and 'Redheads' sold in Australia, have been very different to the traditional format of matchbox label design for many years. Notably, the confines of the borders and even the confines of the front panel of the box have been realised and largely abandoned with the matchbox cover being used as a whole. This is also the case for some collectible or commemorative boxes of matches (fig. 4.4), a trait that echoes this type of matchbox from earlier in the twentieth century.

Other European match manufacturers, such as Solo in the Czech Republic and KM Match in Germany, also have brands of match that are in the traditional cartouche style of design with brands such as 'The Scissors' and 'The Key', although in these cases no attempt has been made to up-date the designs (the principle competitive factor used by such producers being low prices). An increasing trend is towards a purely pictorial box, usually featuring photographs of anything from parrots to snow-covered chalets, thus removing any linguistic or cultural barriers that may result from exporting. There is a disadvantage in this approach, in that a photograph cannot be registered as a trademark and in any event conveys nothing to the consumer about the product itself. Most if not all match manufacturers in Europe have a collectibles range that usually consist of wraparound pictures and, again, the subject matter can vary dramatically from the works of art of artists such as Monet or Rembrandt to scenic pictures of mountains or cities. Again, the utilisation of such images – printed as they are in large quantities at very high speeds – has been facilitated by modern printing technology.

The American production of matches is very different to that in Europe. This is largely due to the preference for book matches over boxes of matches, which can presumably be attributed to the invention of book matches taking place in Philadelphia, Pennsylvania, in 1894 by Joshua Pusey, a lawyer who considered the matchbox to be too bulky a container for matches². While the largest producer of matches in America is the D. D. Bean Company, producing nearly 4 billion book-matches per annum, the Diamond Match Company is the sole producer of box matches. Diamond, in contrast to its past, now only produces one brand of matches but in a range of different sizes³. The brand design is its own corporate identity, which it also uses for its toothpicks, clothes pegs, and plastic cutlery. This conforms to a standard design used for some of Diamonds other products and consists of the Diamond logo on the left of the package and the name of the product on the right (fig. 4.5). There are other brands of box matches available in the USA, these being imported from Chile, China and Turkey and almost invariably carrying the retailer's own brand. Graphic design on matches has largely been abandoned in the USA as a competitive measure – the dominant consideration is the selling price.

Asia has a large number of match companies and has the largest consumption of matches in the world – with India being foremost in both production and consumption. However, only 18% of the Indian match industry is mechanised with the remainder still being made by hand; the cottage (or semi-mechanised) industry making 15% of the total match production and small-scale industry producing 67%⁴. The longest established match producer

2 BBCi *Matches: a story of light and dark* [online encyclopedia], (published 02/10/2002), <<http://www.bbc.co.uk/dna/h2g2/A805349>> accessed 12/02/2004

3 Diamond Match, *Diamond Brands – Matches* [website], (published 2003), <<http://www.diamondbrands.com/matches/index.html>> accessed 16/02/2004

4 J.C. Tandon, *The safety match industry in India* [website], <<http://www.fao.org/docrep/X5860E/x5860e05.htm>> accessed 12/02/2004



4.6 *Geyes Plastic Cardboards* – A generic label that could be used for anything from chocolate to motor-oil, GEYES MATCHES WEBSITE



4.7 *Swan Vestas* – The most significant redesign was still very similar to the versions preceeding it, SMA



4.8 *Swan Vestas* – Another redesign, again, very minimal changes, SMA



4.9 *Swan Vestas* – The 100 year anniversary box combined design elements from the very earliest boxes, SMA

is the West Indian Match Company which began operation in 1924 and represents the entirety of the mechanised sector of the industry. The small-scale match companies are relatively new and their emergence echoes what happened in Europe during the nineteenth century. Because of this, they tend to produce labels that appear to be a modern invention of the matchbox label, often of a generic design, similar in concept to that of Diamond, and could be equally applied to virtually any consumer product (fig. 4.6). Even when the label is designed with regard to the historical precedent of matchbox labels, the results still appear inexperienced. Often they combine features of the traditional labels with twentieth century design elements such as typeface, colour gradients or, in the case of 'The Bull' by Frontier Match, a combination of the cartouche style with the bull logo of the Chicago Bulls national basketball team. In this case, the intended brand image is not immediately obvious.

4.2 Maintaining the tradition

The design and branding of matchboxes has traditionally been slow to change and even in the consumer driven culture of today, the design of many brands of match have changed very little over their history. According to the "extensive consumer research in several countries in Europe and overseas" undertaken by Swedish Match, the older match brands generally "signify quality, strength, reliability" and this is why the design of the boxes has remained relatively unchanged, despite the current waning of brand loyalty in the younger consumer demographic⁵. The use of traditional designs for matchbox covers is still regarded as being appropriate, not least because the average match user is of an older generation and it is this demographic that has grown up with the product and is familiar with it. Perhaps the most obvious example is 'Swan Vestas', a match traditionally used in pipe smoking, which is no longer fashionable and therefore not practiced among young people⁶. Of all the UK's match products, consumption of 'Swan Vestas' is in the steepest decline. This is somewhat ironic, given 'Swan Vestas' history of being the most successful brand ever introduced to the UK market.

The design of the 'Swan Vestas' box has remained broadly the same over its history and is instantly recognizable due to its striking colours and strong layout. While there have been some minor changes to the design, they have only been very slight in comparison to other brands of match. The biggest upheaval of the design was in 1959 when the swan turned to face right, into the box, and became much more stylized. The primary typeface was changed to Century roman with an upper case 'S' and lowercase 'wan' (fig. 4.7). This remained the same over the next twenty years with only some slight changing in the weight of 'The Smoker's Match' that was now at the bottom of the front, although by 1984 this had become set in an ornate and swirling script. It was also at this time when 'Swan' became initial and small caps Century condensed but the design remained otherwise identical to the 1959 redesign (fig. 4.8).

In 1983 a centennial box was issued that combined the 1900 picture of the swan as used when the brand was owned by Diamond, and the 1905 type layout, issued under Bryant and May (fig. 4.9). This was printed in red and green on a white or yellow background and this was presumably intended to use the original 1883 design while maintaining the reference to Bryant and May, who were still in operation in 1983.

The next redesign was by the company now called Flydot, who reintroduced the less stylized, more realistic illustration of the swan in white, swimming

5 Dan Herman, *Short term brands revolutionize branding* [website], (published 2001), <<http://www.allaboutbranding.com/index.lasso?article=289>> accessed 17/02/2004

6 Interview with Graham Jones – President of Matches World Wide, Swedish Match, 15/02/2004



4.10 *Swan Vestas* – The next version had a much more illustrative swan, SMA



4.11 *Swan Vestas* – A creepy picture of the Houses of Parliament in the background, SMA



4.12 *Swan Vestas* – The latest version of the label has returned to a more original typeface, (actual size) PC

on water against a background of foliage (that at some point had a slightly sinister background of the houses of parliament) (fig. 4.10 and 4.11). Up to this point, all these redesigns would still be recognizable to someone from 1905. The details had changed but the whole had remained almost exactly the same, save for the placement of the secondary text.

It was the 1990s that saw a very radical departure with only the red and green fields remaining. The entire layout was completely changed to one that seemed to revive Victorian principles of design. 'Swan' was set in italic and went diagonally from one side of the box to the other, black was introduced to a drop shadow and multiple banners and patterns were introduced. This design was intended to inject new life and interest into the brand, while always recognising the product's historic legacy. It failed and after a very few years it reverted back to the traditional format – again with a very stylized picture of the swan and a primary typeface more similar to the original, with very small triangular serifs (fig. 4.12). The secondary text on the front, 'the original' and 'made to the highest quality since 1883', were both in Gill sans italic as was the text on the back. This reversion was much appreciated by consumers and has lasted until the present day.

All of these redesigns show that the original design of the box was not only successful due to its individuality but has become indicative of the quality of the product and – importantly to its traditional consumers – the dependability of 'Swan Vestas' to deliver what the user has come to expect. The history of the product has always been found to be good and promoted as the best and this has been mirrored in the history of the design; to the consumer, any deviation from the design means a deviation from the product and any deviation from 'the best' can only be worse.

4.3 Changeable Labels

There are certain distinctive and successful matchbox labels that have changed their design repeatedly and quite often significantly. These are generally relatively new brands and for this reason it is not only in their interests to change but it is also practically possible, due to the fact that they do not have a long-established design tradition to maintain. This lack of a significant history means there is no well-established guarantee of quality, other than that of the manufacturer, and it is therefore the design of the packaging, the brand identity, that sells the product. To redesign the label in order to keep up with contemporary changes in design style and cultural climate enables the brand to appear modern and interesting to new audiences while simultaneously appearing updated and improved to the established audience.

'Redheads', the dominant brand in Australia, is an example of a brand that has changed its design relatively frequently throughout its product life. While the overall concept has remained the same, the design has varied considerably, so much so that design changes have become an accepted, and expected, part of the brand's personality. Amateur artists in Australia compete to produce the next 'Redheads' design and significant P.R. activity results from these competitions. This is in contrast to 'Swan Vestas', where the successful changes were essentially subtle and the one radical change was rejected by the consuming public.

Bryant & May first produced Redheads in Australia in 1946. The name is derived from the colour of the striking head on the match and from the outset, the brand identity was represented by an illustration of a woman with vivid red hair (fig. 4.13). She quickly became known affectionately as



4.13 *Redheads* – The first label issued in 1946, (actual size) VMM



4.14 *Redheads* – The first redesign in response to a change in hair fashion, (actual size) VMM



4.15 *Redheads* – The third design in 1971 saw a complete overhaul of the label, (actual size) VMM



4.16 *Redheads* – This redesign solved the 'hair-style' problem, (actual size) VMM



4.17 *Redheads* – The present day label, (actual size) PC

'Miss Redhead'⁷. The product was advertised to Australian servicemen, still stationed in Europe at the end of the war, with the line "...welcome home, boys, the Redheads are waiting for you!"

The standard box label has had four redesigns in its sixty-year history although there have been many different sets issued for collectors, as well as several commemorative sets, which usually entailed a comic or otherwise interesting variation or pastiche on the design of the standard box. The first redesign of the original came in 1958 and saw an updating of the hairstyle on Miss Redhead to reflect the contemporary fashion (fig. 4.14). The rest of the label remained otherwise the same with the brand name 'Redheads' set in a presumably custom script, with what appears to be Gill Sans uppercase used for all the secondary text.

The third version was issued in 1971 and again saw changes that updated the design and the elements of the design to keep up with what was fashionable at the time (fig. 4.15). The hairstyle again changed to one that was popular while the face was re-drawn using the then popular style of illustration often found in psychedelic art and design that was a reinvention of Art Nouveau. The typographic design of the box also changed, somewhat bizarrely, to reflect the popular trend of functional typography by using a vertical or portrait orientation of the box with a very structured layout and a functional sans serif that appears to be Helvetica. This radical departure from the previous version, which was still very much adhering to the Victorian principles of matchbox label design, greatly improves the appeal of the label. The change in typography produces a much more coherent and confident appearance to the label while this is contrasted by the softer and, as is inherent in that style of illustration, sexier rendering of the Miss Redhead character.

The next redesign came only four years later in 1975 when the background of the box became completely red and in the process, fully absorbed the hair (fig. 4.16). This was done to solve the problem of the rapidly changing hairstyles of the time which otherwise would have involved redrawing the character every few months depending on whether hair fashion dictated it be 'backcombed, cropped, bobbed, layered, left to fall long, curled, or permed'⁸. This redesign also had the benefit of giving the product a greater visibility on the retail shelf. The text was redesigned to be more in keeping with what would emerge to be called new functionalism⁹; less formal than functional typography while maintaining the utmost clarity and structure. The Helvetica remained and the use of such a functional and robust typeface facilitated the black type being able to stand out from the red while the white brand name was sturdy enough to be clear and easily legible.

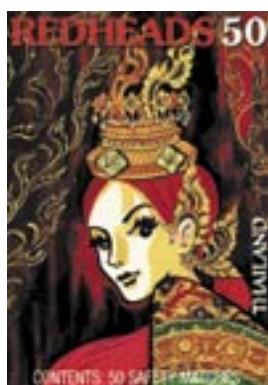
In 1998 when Swedish Match bought Bryant & May (Australia) Pty, the box received its latest redesign. The label design returned to the landscape format and the typeface used for the brand name changed to a modulated serif face yet remained reversed out of the red background (fig. 4.17). This has greatly reduced the legibility of the brand name because the thin strokes are very thin and disappear into the red while the space between the letters is very small and blends the vertical strokes of some of the letters, such as the 'D' and the 'H', together. The reintroduction of a border could also be considered another step backwards as it has greatly reduced the impact of having a solid red matchbox. Perhaps this was the traditional influence exerted by Swedish Match on its newly acquired subsidiary.

8 Michael Sones, *Hairstyles In The 1970's* [website], <<http://www.50connect.co.uk/50c/hair.asp?article=8245>> accessed 24/03/2004

9 F. Friedl et al., p 24



4.18 *Redheads* – One of the ‘Play it safe with a Redhead’ set, (actual size) MRA



4.20 *Redheads* – A finalist in the ‘International Redheads’ competition, (actual size) MRA



4.19 *Redheads* – A finalist in the ‘Artistic Redheads’ competition, (actual size) MRA

In addition to the standard brand design, there have been many specially designed sets of boxes which have usually consisted of a playful variation of the standard brand. These have included the Miss Redhead in a nurse’s hat (fig. 4.18) in a set entitled ‘Play it safe with a Redhead’ featuring safety first slogans on the reverse of the box and ‘Famous Redheads’ with depictions of famous people with red-hair in the style of the Miss Redhead character. These sets were designed by the company at the time, but there have also been labels produced by the general public in competitions such as one that was artistically themed with three categories for school children, and an open class (fig. 4.19) and an International competition to depict the country of origin of the applicant (fig. 4.20)¹⁰. These special Redheads labels as well as the standard brand design give the product a good public image and have the affect of making the brand, interesting and fun, – properties that are rarely found in most brands of matches. By keeping the design current, the brand identity, which includes the design concept and philosophy, is serving the business as this appeals to the match buying public and, hence, sells matches.

4.4 Tomorrow’s Match Brands

The short-term future of matchbox design is difficult to predict, although a continuance of the current trends, that of the older brands remaining relatively unchanged and younger brands keeping up-to-date, is most probable. It seems most unlikely that any manufacturer will undertake major revisions to their brand portfolios’ designs, as costs and prices are the dominant means of competing in virtually all markets. The sales of matches have now been in constant decline for 35 years and the aim of match manufacturers is not how to sell more but to adapt their operations to this decline¹¹. The reason for this decline is that the technology, the match as a fire making device, is becoming obsolete; lighters are more convenient and cheaper and there is also a decreasing need to make fire. Because of this, the number of brands of match will gradually disappear as the industry is consolidated and manufacturers are forced to rationalise their brands by market forces.

However, some match companies have diversified their product range to include items that are similar or related to matches and by branding them accordingly, they are using the strength of the match brand to sell these other products. For example, the ‘Swan Vestas’ brand of match, which has been marketed as ‘the Smoker’s Match’ for much of its product life, has provided its strong brand image to a range of smoking peripherals including cigarette rolling papers and filter tips, a refillable gas cigarette lighter, flints, lighter fluid and gas, and pipe-cleaners (fig. 4.21). As these products are all smoking related they maintain the brand’s traditional heritage and this enables the consumer to make a much smaller leap than a significantly different product. This therefore enables the brand and its design to be used as a highly successful marketing tool, by making the relatively small change from the smoker’s match to the smoker’s brand.



4.21 The complete product range bearing the Swan brand name, SMA

10 *Matchbox Redheads of Australia* [website], <<http://members.bettanet.net.au/~katynjoe/home/home2.htm>> accessed 24/03/2004

11 Interview with Graham Jones – Senior Vice President, Mergers and Acquisitions, 27/03/2004



4.22 The Redheads barbeque product range, RH

Equally, the 'Redheads' branding has been similarly applied to other related products. These include fire lighters, a smokeless fire log and, appropriately given its Australian market, to barbeque products such as a long-neck gas-fuelled lighter and barbeque cleaning products (fig. 4.22). Other examples of match brand diversification are barbeque grill-bags and disposable barbeques bearing the Bryant & May brand and similar ranges with other European branding. These extensions of the brands have enabled the designs to be built upon without the traditional constraints of the size of the matchbox. However, given the size and shape of a matchbox, there is little that can practically be done to the design of the brand without departing too far from the original and losing the connection.

The future of matchbox label design is threatened by the depreciation in relevance of the match itself as the number of different brands of match and manufacturers of matches have drastically reduced from the numbers the industry once held. While the design of match brands may become an obsolete practice, some of the brands themselves are likely to live on in the subsidiary products developed and marketed under the original brand name.

Conclusions

The graphical and typographical design of the printed matter applied to match packaging has been varied and colourful during its 170-year history. From the beginning, competition between rival match manufacturers, who were all producing products of increasingly uniform quality, necessitated packaging that would appeal most to the consumer.

The factors that have governed the design of matchbox labels are many and wide-ranging. The first, and most obvious, is the size of the matchbox itself. The requirement for the product to be portable also meant that it be small and this, in due course, determined which design devices could be used, such as typeface, type-size, pictorial matter and level of detail. While this constraint established the parameters within which the design would have to work, the governing factor in the early design of matchbox labels was that of the contemporary style of design as this determined what the printer of the label had available. The early labels conformed to the stylistic trends of the time, as they were being applied to all manner of consumer products, and it took a degree of experimentation to discover the most efficient approaches and methods of designing a label specifically for a matchbox.

When they were discovered, and subsequently developed by the manufacturers themselves, the lack of effective copyright law and the subsequent plagiarism became another influencing factor, given the ease with which an efficient and attractive label could be copied. Over time, there emerged three dominant styles – that of the ‘Jönköping Original’, the ‘double-oval’ and the ‘cartouche’.

Following a strengthening of copyright law towards the end of the nineteenth century, the designs employed on match packaging gradually diversified, although the conventions established in early stages remained. The use of pictures as a trademark emerged from the need to add some originality to the labels, in order to avoid the accusation of plagiarism, and this helped develop the modern marketing practice of branding. The original motive of the trademark for ownership was replaced with one intended to elicit an emotional response from the consumer and the establishment of brand loyalty.

From as early as the 1850’s, the design of matchbox labels was driven by branding which in turn was, and still is, driven by that which is perceived to appeal most to the buying public. Contemporary fashions and attitudes in popular culture dictated what appeared on the labels and contemporary stylistic trends in design determined how the content of the labels appeared. However, the underlying approach and structure was still firmly based on the early Victorian designs. This practiced continued well into the twentieth century and it was only after two World Wars, a stock market crash and the beginning of the decline in match consumption that this trend began to change.

Given the role that the design of the matchbox label has to play in the marketing of the product, the designs employed today fall into roughly two groups. There are those which have retained the design structure of the original label (and in some cases, simply retained the original label), in

order to imply a long history and hence quality. The other group are those that have been updated, in line with contemporary trends to appear modern, interesting, and appealing to today's consumers. Naturally there is a third group, those that fall somewhere in between the other two, but these are not as accomplished because, while trying to attain the best of both worlds, they achieve neither.

In general, matchbox label design has evolved over the course of the product's history, this evolution having reflected societal changes during the 170 years in question. While some of the covers produced today are practically identical to when they were initially designed over a hundred years ago, many could only have been produced in the last ten years. When new labels or brands have been introduced they have typically been affected by contemporary design styles but many are still based on the structures and principles of the original Victorian labels.

While the future of matches may be bleak, the graphic and typographic designs of the packaging that accompany the product have, in many cases, proved to be strong enough to be transferred onto related products. If label design is to evolve further, this is where it will occur.

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