

# THE MAGIC LANTERN AS A TOY

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Just before the dawn of the twentieth century, the magic lantern was transformed from an optical and phantasmagorical instrument into a tin-plate toy, a mass-produced object made in the context of the homogenisation and standardisation which overtook industrial products. It is not easy to discern the relationship between these toy lanterns and the instruments conserved in the great antique cabinets of optics, and even more difficult to compare such playthings with the many and sophisticated instruments made in the nineteenth century by the Anglo-Saxon optical manufacturers.

The production of magic lanterns on an industrial scale, begun in France by the firm of Lapiere, developed predominantly in Germany and in particular in Nuremberg – thanks above all to the activity of the firms of Georges Carette, the Brothers Bing, Ernst Plank and Johann Falk. For a considerable period of time their varied models of toy lanterns monopolised the European and North American markets.

Throughout the nineteenth century and during the first two decades of the twentieth, Nuremberg was the world centre of toy manufacture. The use of tin, ideal for the new techniques of mass production, enabled the German toy makers to establish a production of economical models, and to consolidate their position, thanks to the lightness of this material which kept down the costs of export to European and North American market.

The choice of Nuremberg and neighbouring Furth as the principal centre of production came mainly from two reasons. First, labour costs were low; in 1908 the Furth and Nuremberg toy factories employed 12,000 workers, the majority of whom were women and children whose low wages (half that of men) allowed products to be sold cheaply and competitively. In the second place was the proliferation in the region of clock makers, whose technical expertise was invaluable in the construction of mechanical toys.

Almost one-third of the entire production was destined for the American market. Except in the case of the most important firms, like Bing and Plank, export was entrusted to 'middlemen', freelancers who ordered the products on behalf of their clients, undertook the packing and shipping,

and assumed responsibility for insuring the goods to their destination.

The close links established between the German toy industry and the United States played an ambivalent historical role: on the one hand the American market was the principal source of wealth and a major impetus for the development of the German industry, on the other, the great economic depression that struck America at the end of the thirties precipitated the collapse of the main firms. It was no coincidence that Bing and Plank both closed their doors around 1930.

Among the first to establish themselves in Nuremberg and engage in the optical toy market – including toy lanterns – was Georges Carette. The son of a French photographer, Carette started his business in 1886 after having visited the Lapiere factory and stolen some of their production secrets – a true case of industrial espionage. First entering the market as a middle-man for Bing and successively setting up on his own account, his catalogues offered (until 1917, the year when his activity ceased) a huge range of tin toys: a variety of toy trains, cars, boats, magic lanterns, etc. As with his German competitors, until about 1900 the major part of Carette's production was made in enamelled tin plate and enamelled brass, while later models were instead characteristically decorated with photolithography in bright colours. The international distribution of Carette's productions – which during the whole period of activity were distinguished by the mark GCCoN, for Georges Carette & Company Nuremberg – was in large part due to the close collaboration with the English company Bassett-Lowke Limited, initiated in 1905. Carette began to produce model buses, trains and wagons in perfect English style, mostly printed by photolithography, exclusively for this company. A special section of production was dedicated to the manufacture of instructional toys, 'Spielwaren und Lehrmittel' – a sales policy also pursued by Bing and Plank). This department was responsible for magic lanterns and slides, zoetropes and stereoscopic viewers.

Carette's 1911 trade catalogue offers a variety of magic lanterns and film projectors, available with a range of objective lenses and different systems of illumination, from the simplest candle-lit model to

those functioning with electricity. The choice of these two elements – lens and illuminant – and the eventual selection of slides conditioned the price. As with the other German firms, the models on offer generally exclude limelight systems of illumination, no doubt because the production was aimed at children, for whom limelight would have been considered dangerous. Accessories of all sorts, sets of fixed or animated slides, chromolithographed and photographic, completed the outfit for the 'little' lanternist.

Even though the greater part of the production was conceived and made for an infant clientele, occasional models of lantern strayed from the ludic function and the juvenile patrons. Carette, for example, offered two different models of magic lantern designed to project advertisements in shop windows. This is a reminder that the early years of the century saw the magic lantern being used as an aid to publicise commercial products, alongside the nascent cinema industry, which would very soon achieve the total eclipse of 'luminous projections' – magic lantern slides might in fact be used as 'trailers' for the usurper.

The firm of Ignaz and Adolph Bing is well-known among collectors, above all for the high quality of the mechanisms of its toys and for the richness of their decoration.

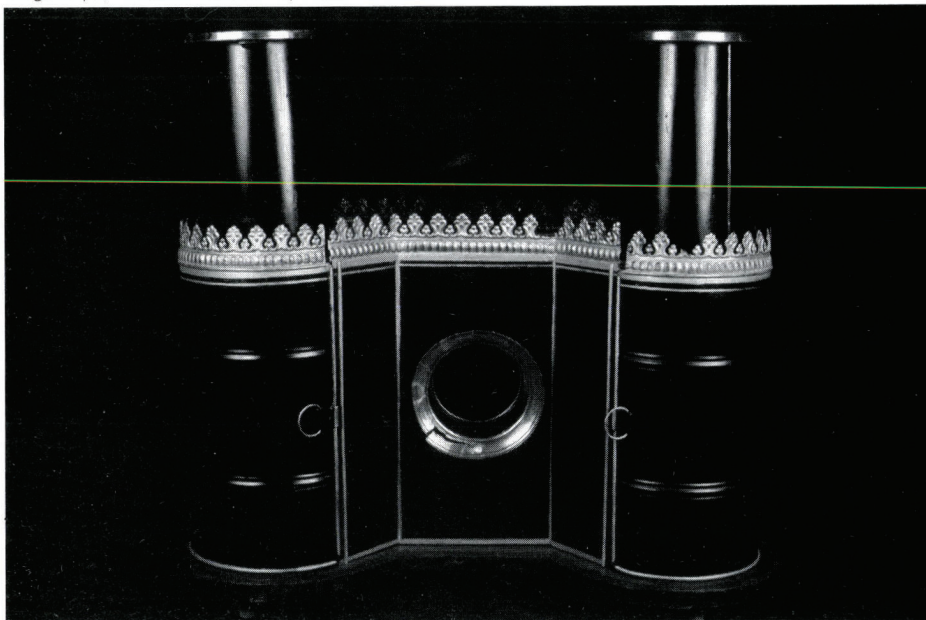
The Bings began their business activities in 1866, but it was only from about 1880 that the firm was installed at Karolienstrasse, Nuremberg, which was their first establishment centred on the production of toys, under the name 'Nuremberger Spielwarenfabrik Gebrüder Bing'. In 1890 further sales points were opened, as well as another factory at Grunhain in Saxony, designed exclusively for the production of articles in lacquered tin. In 1895 the firm was transformed into a limited liability company with the name 'Nuremberger- und Lackierwarenfabrik vorm. Bing A.G.' with Ignaz as president. During the First World War, Bing's production, like that of most of Europe's toy makers, experienced a period of stasis both in terms of national production and export. In 1917 the distribution company 'Concentra' was established to serve the numerous firms which commercialised the Bing products, and to sell them with its own factory mark. Internal prolems, including the death of Ignaz Bing in 1918 and the profound economic crisis which hit the United States, resulted in the eventual closure of the firm in 1934. The stock and machinery were acquired by Bub, Kraus and Fleischmann, toy makers of Nuremberg. In 1960, the Bing trademark and rights passed to a Swiss publisher, Verlag Eisenbahn.

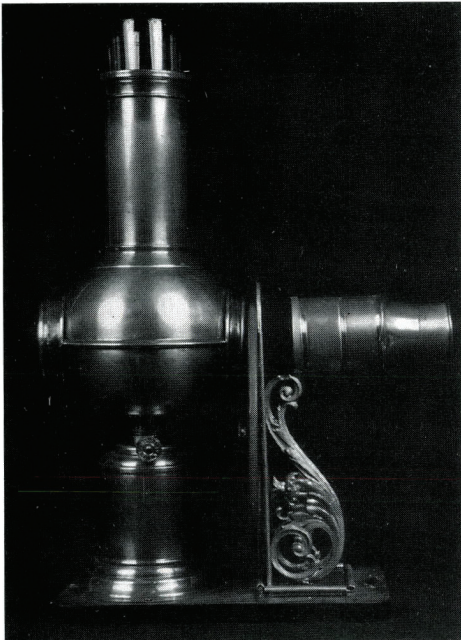
Bings' production included, as well as mechanical and electric toys and models and soldiers of various types, a variety of different styles of magic lantern, film projectors and optical toys.

The Bing lanterns, like those of Carette, Plank and Falk, were characterised by often curious names. The models 'Bosco', 'Reform', 'Type 1250' – to quote only a few of the numerous catalogue entries – were exclusively designed for a juvenile market and were consequently somewhat simplified, easy to use, and supplied packaged in parts in decorated boxes, complete with a selection of fixed and animated slides.

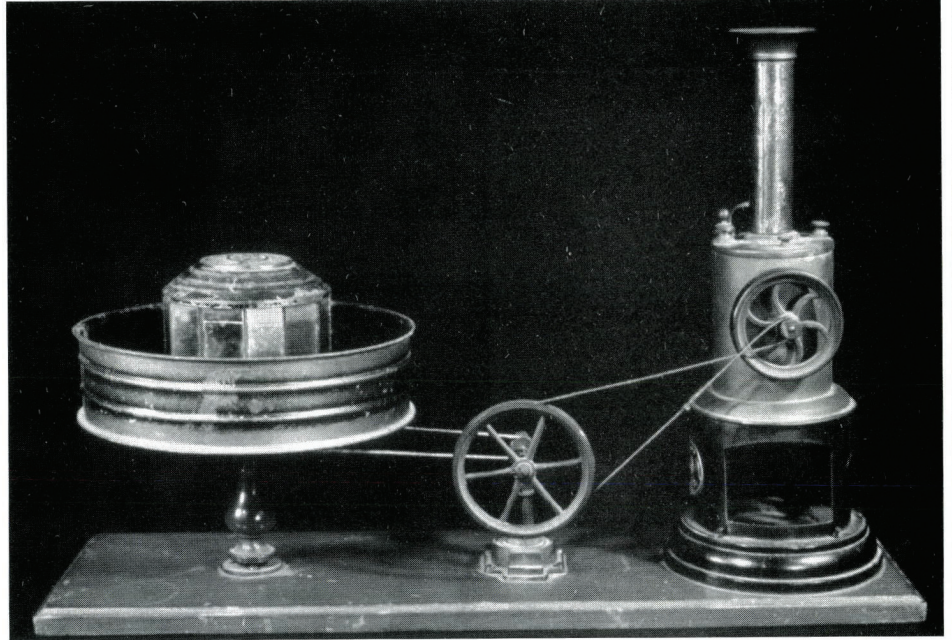
Parallel with their magic lantern production, the Bings were among the first – almost certainly the very first in fact – to launch on the market cinematographic toy lanterns, recognising that in this way the cinema could be made a sure source of profit. Such entrepreneurial vision and capacity to transform new technical discoveries into ludic

Megascoppe, "Wunder-Camera" by Plank





Plank's "Climax" lantern



Steam praxinoscope by Plank

objects was characteristic of the German manufacturers, and the main reason for their success.

Every toy made by Bing as well as the box containing it bore the lithographed trade mark of the firm, which enables us today to identify not only the maker but the period of production. Until 1919 the mark was G.B.N. (Gebrüder Bing, Nürnberg); while after this date the mark B.W. (Bing Werke) was adopted. During a brief transitional period either mark might appear. Unlike Carette and Plank, the mark on Bing products was very simple, based on essential geometric figures, usually an oval framing the initials.

Amongst the most aggressive competitors of the Brothers Bing was Ernst Plank, who also went into business in 1866, to produce model steam engines and tin plate trains. Later came aeroplanes and optical toys. The firm closed in 1930, when it was taken over by the Schaller company, specialising in optical and projection equipment.

Plank's trade catalogue offers a huge range of optical toys, stereoscopic viewers, praxinoscopes, zoetropes, kinetoscopes, film projectors, magic lanterns and slides. The magic lanterns came in a variety of different models and prices. The 'Globus' lantern, for example, worked with paraffin and could project either circular or rectangular slides. The 'Nebelbilder-Apparate' was designed for dissolving views, while the 'Triumph' and 'Evening Star' lanterns – the latter based on the sciopticon lantern – projected photographic slides. The 'Climax' model was completely made of brass and came with a special book, posters and admission tickets to enable children to present a complete show.

Within an industrial style of mass production, some of these lanterns demanded a quality of hand work in the choice of materials, the construction and the

richness of the decorative elements. It is necessary only to consider the brass decoration of some 'Climax' lanterns, the elaborate mechanism of the hot-air-driven praxinoscope or a curious style of megascope, Wunder Camera, disguised as a castle: all these examples present a quality that may be compared with the more admired (at least by modern collectors) French and English productions.

As with the work of his competitors, the trade mark is often the only element that enables us confidently to distinguish Plank's productions. This presents a few decorative elements: within two concentric oval frames are the letters 'E.P.', surmounted by a wheel with two spread wings and three small stars. Often – for instance on slides – this mark was replaced by the simple initials 'E.P.'

Finally we must recall another firm which flourished at the same time as those of Bing and Plank. This was Johann Falk, whose mark remained throughout the entire period of his activity an oval frame containing the initials 'J.F.', flanking a tower. Falk entered toy production as a collaborator of Carette. In 1898 he opened his own business which remained active until around 1930.

Clearly the industrial production of magic lanterns also demanded the perfection of production methods for slides. Cheap and easily managed lanterns could not have made the same commercial impact had they depended on slow and costly production of hand-painted slides. Unlike the firm of Lapierre in France, the German lantern manufacturers generally reproduced their slides by chromolithography, a technique perfectly adapted to the demand for slides which were at the same time cheap yet visually effective. This technique achieved the commercial object only at the cost of a significant loss in the quality of the image. With

their limited colour range and imprecise reproduction, these German slides are a very long way from the beauty and the quality of hand painted slides or of Carpenter's 'copper-plate sliders'. This kind of industrial technique implies finally a significant homogenisation in the style and iconography of the slides, so that it is often hard



Caricature published by Franz Barth, 1820–21

Plank slide of caricature portraits



today, when there is no trade mark, to distinguish a Bing from a Plank slide. In some cases however the use of chromolithographic printing was combined with hand painting: most of the animated slides made by Plank present the fixed image in chromolithography while the elements on the moving glass which animate the image (in most cases this involves only simple details like an arm or the sails of a windmill) are painted by hand. In this case also there were purely commercial motives; it was in fact much quicker and so cheaper to reproduce such details by hand rather than by chromolithographic printing.

Alongside the cheaper run-of-the-mill slides, the catalogues offer superior sets of slides at higher prices. Thus the provision of cover glasses or the cardboard and metal profiles with decorative elements in some Bing slides are offered at higher prices. Alternatively sets of slides might be offered in de luxe style, marked by greater care and attention to their finish. For example, in a series of Plank slides depicting children playing beside a river, the more accurate drawing of faces on the superior set indicates the use of a print matrix different from that used in the ordinary style, in which the faces appear quite roughly sketched.

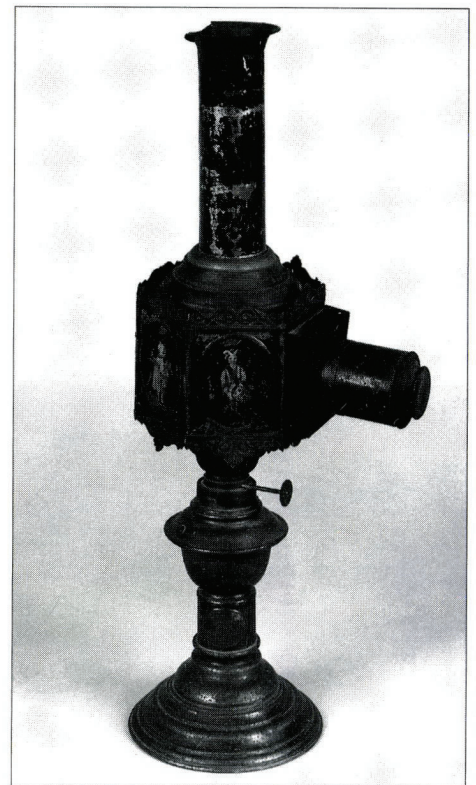
The ludic character of the lanterns made by these German firms is most apparent in the repertory of the slides. Analysing the subjects offered by the

different firms it is quite rare to find any set of slides directed at a public other than children. There are no 'daring' subjects like the 'diableries' of Lapiere; and, more curiously, given the German taste for the supernatural, none of the fantasmagoric subjects so much in vogue in the nineteenth century.

The iconography of the German slides can generally be categorised in five sub-divisions: comic subjects, subjects from juvenile life, instructive subjects, scenes from daily life, and fairy stories. Like Lapiere, the German manufacturers offered in their catalogues series of slides of fairy tales or known children's stories. Both Lapiere and Plank offered episodes from Daniel Defoe's Robinson Crusoe. Plank's version takes the form of a circular slide – adopting, two centuries later, a style of slide illustrated by Zahn. Plank's version is however much less articulated from the narrative point of view than that of the French firm: while Lapiere told the story in six slides, each of which described two scenes, Plank summed up the narrative in only eight episodes presented on his single slide. On the other hand the German version replaced the captions which appeared on the French slides with a little card folder, supplied together with the slide, which provided a suitable commentary for the show.

Circular slides of this form were sold with the 'Climax' and 'Globus' lanterns and bore in the centre the copyright mark 'Gesetzlich Geschützt', followed by the title in German, French and English – demonstrating the international circulation of Plank's products.

It is interesting to attempt to connect these lantern slides to earlier iconographic models. For the most part the German productions represent re-workings of images already codified and diffused in the local iconographic tradition. The slides for instance present figures that would have been well-known and readily recognised by a juvenile public; and structure the narrative itself from images that follow the distinctive canons of a German iconographic patrimony. An example is a Plank subject which shows in caricature style a jockey, a clerk, an admiral and a baker respectively mounted on a hare, a raven, a frog and a cock. The comic effect relies on the physiognomical similarity between the animal and his rider, chosen as a representative of a particular social category. Such images show a significant resemblance to a popular Austrian print of the nineteenth century, 'Der Dahn Raiter' which shows a highranking military officer mounted on a cockerel.



Unusual decorated Plank lantern sold by Bonhams in July 1996

Advertisement for Bing's toy Kinematograph, 1898

Nürnberg: Metall- und Lackierwarenfabrik von Gebrüder Bing A. G.



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Neuheit!

Interessante  
Neuheit!

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Horizontal-running films for Bing's toy Kinematograph

