

ANDERSON'S PATENTED COMBINED STREET LAMP AND MAGIC LANTERN

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On 16 March 1898 William Anderson of 66 Mill Street, Pyrmont, Sydney in the Colony of New South Wales, machinist, applied to the Examiner of Patents for a Certificate of Provisional Protection for an invention of 'An Improved Self Working Magic Lantern for Advertising'. The application was accompanied by a petition in the form prescribed by law, a provisional specification of the invention and a Treasury receipt for £2 sterling. In the words of William Anderson in the provisional specification:

The invention consists of a certain improvement in the Magic Lantern which have [sic] been devised for the purpose of advertising on walls pavements or any suitable place. The essential feature of my invention lies in the mechanism which is clockwork and is situated in a compartment inside the lantern and is so constructed as to give motion to wheels which are connected to a revolving carrier which holds the slides, and works in a compartment in the front of the lantern. The springs which give motion to the wheels are wound on separate axles, one is held at rest by a brake and is attached to the carrier holding the slides, the other in continual motion when wound up and is held in check by an escarpment which allows the wheels to revolve slowly which revolve on an axle which carries a lever which at every revolution lifts the brake of the wheel at rest allowing it to revolve sufficient to bring the carrier round so that a slide is in between the condenser and objective glass and in a direct line with the light when the carrier goes one sixth of a revolution the brake is arranged to hold the wheels in position connected with the carrier while the wheel that rises the brake revolves one round.

The lantern itself consists of an oval shaped case of opaque material containing the compartments. A condenser is fixed in partition of the compartments and a lens or objective glass is fixed in a tube on the front of the Lantern in a direct line with the light and slide when in position. A tube with a mirror fixed at the angle of 45° is made to fix on the objective glass for the purpose of showing the advertisement on the angle when required.

The application was witnessed by Ludovic Blackwood.

Little information can be found regarding William Anderson. A search of the online archives of the City of Sydney Assessment Books¹ for 1891 and 1901 for Pyrmont, the closest in time I could find, showed that there were several William Andersons in Pyrmont at the time, none of whom were associated with 66 Mill Street. This property was described as a single level, three-room house, built of stone with an iron roof and a gross annual value of £26 in 1891 and £18 in 1901 – the tenant rather than the owner was paying the rates (a local tax based on property value). In the 1890s Pyrmont was a working class industrial suburb servicing the railway yards, wharves, wool stores, power stations and mills which created employment for local residents.²

William appears to have been an enthusiastic inventor with several patent applications that can be attributed to him. *The Australian Town and Country Journal*³ regularly published lists of patent applications and included in these are an application for provisional protection for "an apparatus for fixing on sheep trucks to keep the sheep on their legs and protect them from injury in transit" in the names of William Anderson and John Wright Jaffray, both of Sydney.⁴ Jaffray was the proprietor of John W. Jaffray and Co. of Hay Street in Sydney, machinery dealers, and held – or had applied for – several patents in his own name. By 1900 William Anderson, of Pyrmont near Sydney, was applying to the patents

office for provisional protection for "a device for fitting in sheep trucks for the purpose of keeping sheep on their feet during transit by rail" in his own name.⁵ The Commissioner of Patents for the Colony of Victoria accepted the complete specifications from William Anderson, 44 Mill Street, Pyrmont, near Sydney, New South Wales, engineer, for "improvements to sheep trucks" and gazetted this in November 1900, allowing two months for objections to the granting of Letters Patent.⁶ William also applied for provisional protection for "an improved street sweeper" in 1901, his address being given as Pyrmont, near Sydney.⁷

The address supplied to the Commissioner of Patents in Victoria, 44 Mill Street, was a bulk store at 44-48 Mill Street owned and occupied by J. Blackwood and Sons in 1901.⁸ James Blackwood was a Scottish marine engineer who, in 1878, established a business as a specialist supplier to the shipping industry in Sydney.⁹ Following James' death in 1916 his two sons, Ludovic and James (junior) became joint Managing Directors of the company.¹⁰ Ludovic, who had arrived in the colony in 1863 as an infant, witnessed William Anderson's application for provisional protection for his 'Improved Self Working Lantern for Advertising' in 1898.

On 18 April 1898 the Executive Council and His Excellency the Governor having examined the report thereon by the Examiner of Patents approved the prayer of the petitioner and recommended the issue of a Certificate of Provisional Protection accordingly. On 18 August 1898 William applied to His Excellency the Governor of the Colony of New South Wales for the grant of Letters Patent for his invention and included a receipt for the sum of £3 sterling in accordance with the Act. By this time William had appointed an agent to act on his behalf, one Arthur Griffith, Patent Agent and Labour Party politician.¹¹ The title of the invention had now been changed to 'Combined Street Lamp and Magic Lantern' to reflect further modifications and the application included a detailed specification of the invention illustrated by drawings.

These specifications are typed, as opposed to the original hand written application, and would appear to have been drawn up by Arthur Griffith:

I, William Anderson, of 66 Mill Street, Pyrmont, near Sydney in the Colony of New South Wales, Machinist do hereby declare the nature of my invention for:-

"Combined street and magic lantern."

and in what manner the same is to be performed to be particularly described and ascertained in and by the following statement.

The object of this invention is to provide an apparatus which can be used at will either as a magic lantern or an ordinary shop window lamp or as both together.

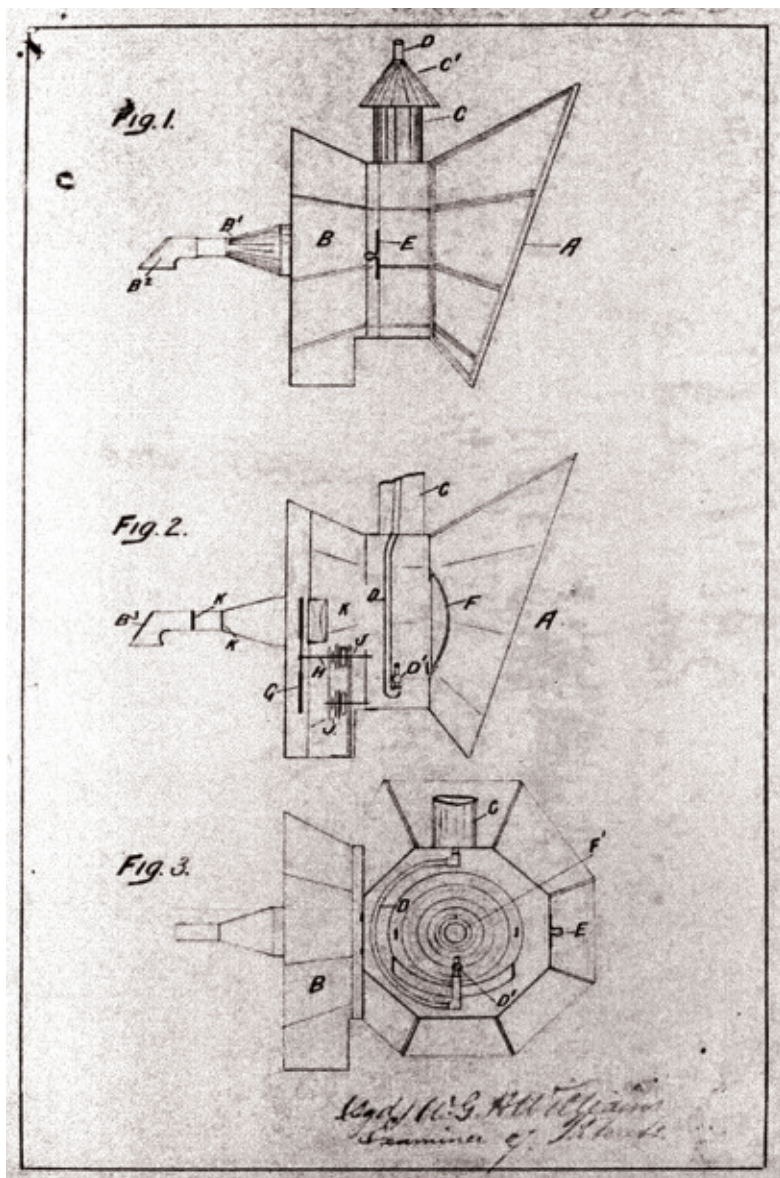
For this purpose I construct an apparatus of the form and shape shown in the drawings herewith to which I shall now refer and fully explain my invention therefrom.

FIG 1 is a side elevation.

FIG 2 is a section of Fig 1.

FIG 3 is elevation showing the apparatus open (i.e. with the lamp detached from the magic lantern except on the side where they are hinged).

In Figure 1 – A is lamp front, B is frame covering mechanism of magic lantern B1 funnel of magic lantern, B2 deflector. C is funnel or chimney C1 cowl. D gas pipe. E catch or fastening holding together the two portions of the apparatus on the side shown, on the other side is a hinge.



Digitally modified from a copy of the blueprint accompanying the application

In Fig 2, F is detachable reflector shown in the position in which it throws the light into the lantern. G is revolving lantern slide carrier operated and controlled by spindle H. J J the ordinary striking mechanism of a clock here adapted to rotate spindle H, in the manner required for the purpose of a magic lantern display. D is gas pipe, D1 burner. K K the various lenses of the magic lantern B3 deflecting mirror of magic lantern. In Fig 3 – F1 is front view of reflector in same position as in Figure 2. D is gas pipe, D1 burner.

When it is desired to use my apparatus simply as a magic lantern the reflector F is placed (in an adjustment constructed therefor) in the position shown in the drawings (i.e. between the burner and the lamp front A). By placing the reflector between the burner and the mouth of the magic lantern funnel B1 the light is thrown into the lamp portion of my apparatus which then becomes an ordinary street shop-front lamp. By removing the reflector altogether my apparatus will act both as a magic lantern and a street lamp if the light be sufficiently powerful. In the drawings a gas jet has been shown as the means of producing light but any other form of light would be equally suitable if sufficiently powerful. To light the gas jet or to adjust the reflector it will be necessary to release the catch E and open the apparatus on its hinge in the manner shown in Figure 3. It is not necessary to describe the parts of the magic lantern, or the clock work apparatus which operates the slides, both being well known mechanisms, adapted bodily without important modification for my purpose. The object of deflector B2 is to enable the view of the magic lantern when desirable to be thrown on the pavement or any object out of line with the funnel B1.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:

1. – The combination and arrangement in one apparatus of a magic lantern and a street lamp illuminated by the same light in the manner and for the purpose herein set forth and as illustrated in the drawings.

2. – The combination and arrangement of the striking mechanism of a clock with the slides of a magic lantern for the purposes and in the manner herein set forth.

Dated this 20th day of August, 1898

(Sd) ARTHUR GRIFFITH.

Agents for the applicants

The application for Letters Patent for the invention was approved by The Executive Council and His Excellency the Governor on the recommendation of the Examiner of Patents on the 4 October 1898, securing William Anderson the benefits of the invention for 14 years.

I have been unable to find any record of this lantern having been ever produced for sale. This may well be related to the timing of the invention. At the time Anderson received his patent for a clockwork-driven self-working lantern, the electrification of the Australian colonies was taking place. By 1894 Melbourne streets were being lit by electricity and in 1904 a power station was constructed in Pyrmont to supply Sydney with electricity. In 1910 a small newspaper in outback Queensland described the following (unfortunately the scan of the paper is not clear enough to allow a reproduction of the sketch):

A 'MAGIC LANTERN' THAT WORKS ITSELF.

Our sketch shows the new automatic projecting machine. The electric lantern is fitted with a number of "receivers" set in a circle. A slide is placed in each receiver, and the machinery is started, exposing each subject in turn, and running unattended for the long period of eight hours.¹²

In 1927 Messrs Beale and Company Ltd, manufacturers of pianos, were using a Balopticon, a sort of automatic magic lantern, to show a series of 70 coloured views of the Beale factory at their exhibit at the Sydney Royal Easter Show.¹³

Of course today one would have digitally produced images stored on a memory stick or DVD and projected via a laptop and data projector – but where is the romance in that?

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