

1. Simple Lantern. 2. Magic Lantern.

VICTORIAN YOUTH AND

In my previous articles for the journal on researching the *written word* in respect of the history of the magic lantern, I selected from my collection early books which have a scarcity value and required translation. From initial evidence it might appear that books written about the lantern and its use are few in number and the collector soon finds that many Victorian boys' books contain references to the magic lantern and other optical toys. Some give detailed construction notes for both lantern, slides and accessories.

There are a number of titles of such books that can be easily found, some examples are: *THE YOUNG MAN'S BOOK OF AMUSEMENTS* published by MILNER SOWERBY, 1857. *THE BOY'S PLAYBOOK OF SCIENCE* by John Henry PEPPER published by GEORGE ROUTLEDGE & SONS — a number of editions from 1855-69. *THE BOY'S OWN BOOK* — a complete encyclopedia of sports and pastimes published by CROSBY LOCKWOOD & CO 1878 — again various editions are available.

Details of the magic lanterns illustrated in many of these books are very similar and often the text is repetitive, but on searching it is possible to find the less obvious. One book worth looking for is *THE YOUTH'S ENCYCLOPEDIA OF HEALTH WITH GAMES & PLAYGROUND AMUSEMENTS* by W. MONTAGUE ESQ. published by E. EMANS 1838. Not only are the lantern engravings of a more unusual nature, but the text makes interesting reading. Here are examples of both.

OPTICAL AMUSEMENTS

The Magic Lantern

Few things have ever been productive of so much astonishment as the first exhibition of the *Magic Lantern*. It was invented by a German of the name of Kichen. With a view to exhibit it in an effective manner, the room must be quite dark; and the painted slide being passed to and fro, through its groove, we shall discern the objects in all the brightness of their colours, reflected on a sheet, if the latter be hung up at a proper distance.

The reflector should be perfectly bright: the lamp well trimmed; and the magnifying glass of the very best kind. Mr. West, of Fleet Street, London, has them of all prices, as well as any of the instruments, named hereafter. In painting the glasses (if your prefer painting them yourself:) use transparent colours, such as Prussian blue, lake, Indian yellow, bistre, verdigris, carmine, &c. and white, quick drying varnish. By means of two slides, adroitly managed, *shipwrecks* and other scenes in motion may be represented: one slide, for instance, representing the sea, —and the other the vessel, clouds, &c.

THE SPECTRE LANTERN

Construction of the Ogre (or smoke refracted) Magic Lantern

A box is required sufficiently large to contain a small magic lantern. Place the glass in a sloping position opposite the lantern, whereby the rays

will be refracted through an oval aperture in the lid of the box.

Let there be holes in that part of the box over the lantern, to let the smoke out; and near it must be placed a large, chafing dish, holding lighted coals, inclosed in a painted tin box, about a foot high.

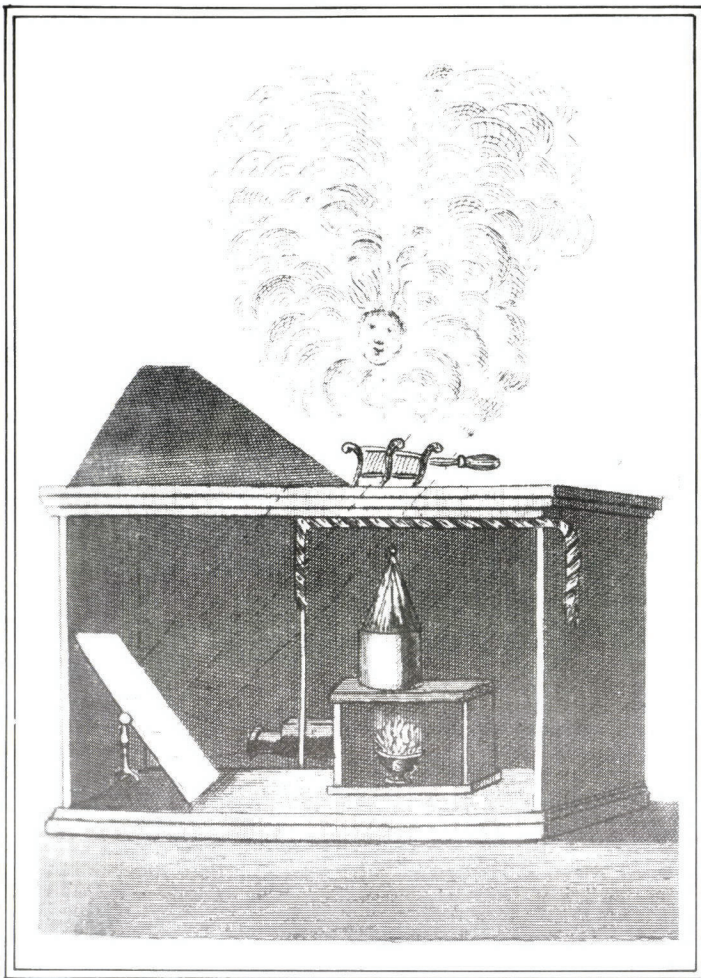
There must also be a glass to rise up and down in the groove *a b*, by a cord and pulley, *c d e f*. On this glass, the spectre must be painted, in a contracted form, as the figure will be reflected.

Light the lamp in the lantern, place the mirror in a proper direction, put the box on a table, set the chafing dish and throw some incense in powder on the coals. Then open the trap door, let down the glass in the groove slowly, and when you see the smoke diminish, draw up the glass: the figure will disappear. Then shut the trap door. The astonishment which this exhibition creates it is impossible to describe.

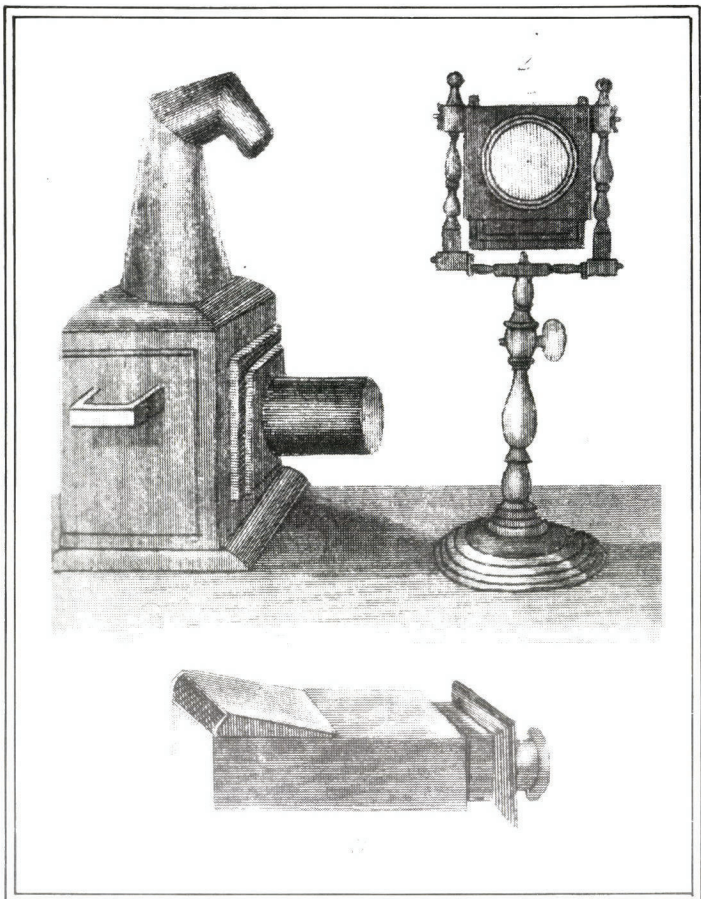
West's Phantasmagoria Magic Lantern (See Engraving)

This instrument produces much amusement, we may add *instruction* also, as Mr. West constructs them for Astronomical and Zoological purposes. The following is the method of showing the phantasmagoria.

Instead of the figure being reflected on a white wall, or sheet, as by the magic lantern, it is thrown on a transparent screen or curtain. The most desirable situation is, where there are folding



Spectre Magic Lantern.



*1. West's Phantasmagoria Magic Lantern
2. West's Optical Diagonal Machine for
viewing Pictures 3. West's Camera Obscura*

THE MAGIC LANTERN

doors from one room to another; the curtain should be hung in the doorway, and the spectators placed at the opposite end of the room. The exhibitor, or person who manages the lantern, is then to place himself in the adjoining room behind the curtain; the lantern should be fastened round the waist, so as to leave the hands at liberty; and holding the slide with one hand adjust the tube with the other. He should now go pretty close to the curtain or screen, and draw out the tube until the image is perfect, which of course will be very small; then walking slowly backwards, and sliding the tube in at the same time, to keep the image distinct, as it increases in size, it will appear to the spectators on the other side of the screen to be coming towards them; and then again, by the exhibitor walking towards the screen, to diminish the image, it will appear as if the figure was moving backwards. Before changing the painting, the darkening door of the lantern may be pushed down, to shut out the light, or the hand may be placed before the lens.

It will also be necessary to observe the following remark:

1. If the lamp does not burn brilliantly, the image will be faint, and very likely the darker parts will not appear at all. The Argand lamp must be raised or lowered so as not to smoke, but to enlighten the field all over; this can be done before the slides are put in.
2. If the lenses, or the paintings, are soiled or

dusty, the images will be proportionably faint.

3. In holding the lantern under the arm, or when fastened to the waist, care must be taken to keep it upright, otherwise one side of the figures may be faint or perhaps, disappear altogether.

In exhibiting the phantasmagoria, the spectators should not be placed directly before the screen, or they will see the light of the lantern; but they should be stationed a little on one side, and as far off as is convenient.

To give motion to the figures, a variety of moveable slides are made for the purpose, many of which produce very singular appearances; but with the plain slides the figures may be made to move in a circular, elliptical, or any other way, by moving the lantern in a corresponding direction, which will of course produce the like motion in the images. A curious effect is produced by drawing out the tube, and slipping it suddenly to the focus; this is easily done. By holding the tube tight at the proper place, a shivering motion may be given to the figures, by giving the lantern a sudden shake, or a skeleton be made to tumble to pieces by means of a slide made for that purpose. By standing at the bottom of the stairs a figure may be made to appear going up. The figure of a skeleton is a very good one for this purpose. In the same way, this figure may be made to lie on the floor, and rise up in a sitting or standing position. By applying moveable slides to the lantern, an immense variety of curious effects may be

produced, particularly on the transparent screen: many of these are often exhibited in public. Those who take delight in the apparatus will soon be able to produce the whole of them

Rais'd from philosophy's profound recess,
Here view illusion clad in magic dress,
As here some supernatural agent's aid,
The varied change of aerial forms displayed;
Or some arch demon, lab'ring in the work,
Whose cunning spirit in each shade should lurk,
To give it, spectre-like, to sink to rise
To vanish, or enlarge to fearful size,*
And thus delude the senses thro' the eye.

*The best phantasmagoria lanterns will reflect a figure from two inches diameter to ten feet.

further researches
by
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