Wargrave Local History Society

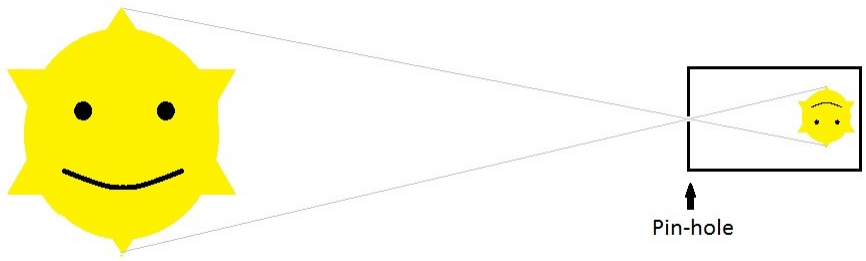
Latest News - October 2017

Henry Fox Talbot and the Reading Establishment

The October meeting was a fascinating illustrated talk by Martin Andrews on the pioneer photographer Henry Fox Talbot and the Reading Establishment.

Martin began with a story from the early 1840s. At the time, Dickens was writing A Christmas Carol, Brunel's SS Great Britain was launched - and in Reading a foreign man was to be seen wandering the streets, going to buy strange substances in chemist's shops. Nobody knew who he was, but it generated much 'gossip' about the dark mysterious stranger.

The two strands that were necessary to producing photographs were the optics and the chemistry. The optics were derived from principles known to Aristotle, well over 2,000 years ago. The 'camera obscura' was used by the ancient Greeks to observe the eclipse of the sun. It consisted of a closed room or box, with a tiny hole on one side. Rays of light would pass through the hole, to form an image on the opposite side of the enclosed space. As the straight rays of light had both to pass through the same hole, the resulting picture was upside down. It was used for scientific investigation by Leonardo Da Vinci, and by the mid-16th century was in use by artists, as a drawing aid - they could trace the image formed on a screen, and when lenses were added to the light path, a sharper and stronger image was formed on the screen. The picture, however, was still upside down. That was corrected by introducing a mirror, at 45o, between the pin-hole or lens and a ground glass screen, on which the tracing could be made.



Use of these devices became a popular hobby - some were made in the form of a Sedan chair. Some well-known artists also used a camera obscura as an aid - Gainsborough, for example, having one disguised as a book (so people would now know he was using an 'aid'), whilst more recently David Hockney is known to have had one. By the early 19th century, therefore, the basic aspects of a camera were well known.

The chemistry involved took much longer to reach a satisfactory result. In 1725, a Nuremberg professor, Johann Heinrich Shultze, was experimenting with some silver based salts, when he realised they became darker if exposed to light. He made up a solution of chalk with silver in it, left it on the window sill, and when he returned, the side that had faced the light had gone dark, but the rest remained white. If he put a cut out stencil of a letter on the flask, the letter could be 'printed' into the solution - it was a good 'party trick'. In this country, Thomas Wedgewood (son of Josiah the potter) and Humphrey Davey experimented with Schultze's salts, and coated paper with them. By sandwiching a sheet of this with an object such as a leaf or feather, and exposing it to sunlight, a silhouette would be formed on the coated paper. The problem was that the image was not 'fixed' - if the paper was left out in the light, the chemical reaction would continue, so they had to be kept in drawers to be brought out for a quick viewing and then replaced. A frustrated French amateur artist, Joseph Niepce, tried this type of sensitised paper in a camera obscura, which produced an image, but again, he had difficulty in making the image permanent. He then tried a bituminous coating on a pewter plate - the bitumen became softer on exposure to light. Washing the plate

in oil of lavender and turpentine would remove the softer areas (ie where light had fallen). His picture taken from his workshop window took 8 hours to make, however! He then tried silver coated copper sheets, which had been coated with an iodine vapour. The refined process interested Jacques Daguerre, a showman who showed large dioramas to the public. He persuaded Niepce to go into partnership with him (somewhat to the latter's disadvantage). By 1837, a way was found to fix the picture, using common salt. The resultant Daguerrotype was a 'one off' - no second copy could be made, and it was very fragile. They became very popular - "Daguerrotypomanie" - and could include novelties such as aerial pictures taken from a balloon. The French government decided that it was such an important discovery that they would buy the process from Daguerre, and make it free to the world. Daguerre claimed to have invented the means to create a picture using light, but his method had problems, whilst several other people made similar claims.

One of these was Henry Fox Talbot, who could justify a prior claim to the invention. He had also used a sensitised paper, in small cameras around his home at Lacock. One left for several hours in August 1835 showed a negative image of the oriel window. Fox Talbot then realised that if he waxed this piece of paper, sandwiched it with a second piece of coated paper and exposed that to the light through the 'negative', he could get a positive - and by repeating this, could form multiple copies. This was a break-through (although as he used high quality writing paper, the pictures were a bit 'soft'.

Fox Talbot wanted to develop the idea, to show how such pictures could be used in books. London at the time had air that was far too polluted for the process, but Reading was half way by the new GWR from his home at Lacock to London. Here, in Russell Terrace, now part of Baker Street, he set up his "Reading Establishment". The paper was sourced from Lovejoy's bookshop in London Street (where Dickens was a frequent visitor). Fox Talbot's valet, a Dutchman called Nicolaas Henneman came to produce these pictures, on an industrial scale. The idea was to show what was possible - to record works of art for insurance for portraits, for recording 3D items like sculpture, as well as 'artistically'. Once negatives were made, the prints were exposed for about 20 minutes in frames set up outdoors. The Reading establishment was incredibly prolific, with some 50,000 prints being made over 3 years. Henneman also took many pictures of Reading - the Abbey gateway, Castle Street, the original Oracle, and the churches, for example. The prints were on sale in Lovejoy's window, where the sensitised paper could be bought by amateurs (but professionals had to be licenced by Fox Talbot). The first book - in the world - to include such pictures, called "The Pencil of Nature", in parts was produced at the Reading Establishment - some 4,300 prints being made to be individually pasted into the books (the word photograph had not been invented then). Apart from those by Fox Talbot himself, many of the pictures had been taken by the 'dark mysterious foreigner' - Nicolaas Henneman.

Fox Talbot's work had an 'unbelievable impact on the world - documenting wars, recording scientific images from microscopes, etc - although the British Government showed no interest in it. Similarly, the essential part played by Reading in the history of photography is largely ignored - the premises not even having a 'blue plaque', (part now being a builder's yard), whilst there is not even a display in the town's museum.

The next meeting will be on Tuesday, November 14th: John Harrison, who leads the team of bell ringers at All Saints, Wokingham, will look at the Living Heritage that is the social history of bell ringing, from the 18th century to the modern era, whilst on Tuesday, December 12th, the Society will hold its Christmas Party.