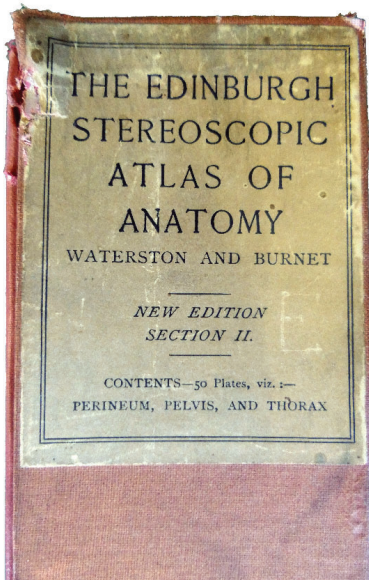
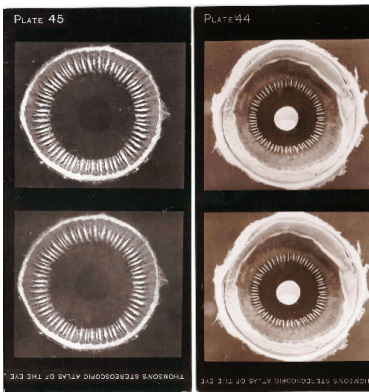


THE COTTER MEDICAL HISTORY MUSEUM

Early use of stereoscopic imaging in medicine



While sorting through the contents of boxes stored on shelves in a room at the Cotter Medical History Museum, one of our volunteers uncovered a presentation box containing a book, and 68 stereo pairs. In the introduction to his book the author Arthur Thompson (Professor of Human Anatomy, Oxford University) states...” These images of the interior of the eye were used as illustrations for a series of lectures on the gross anatomy of the human eye. Attending graduates were preparing for the Diploma of Ophthalmology at the University of Oxford.” This innovative approach was remarkable not only as a result of it being published in 1912, but also because it had the potential to significantly reduce the demand for cadavers for organ donation. The pairs provided enough structural detail for introductory lectures on eye anatomy at least.

For each pair of images, a human eye was first hardened (fixed) in a 4% solution of formol, then frozen and sectioned. The RH pair are an image of the eye with the vitreous gel and lens removed. The pupil is the central, white spot, while the dark area outside that is the iris with 68 ciliary processes on its coronal boundary. The LH pair has also had the vitreous and lens removed, the image clearly showing the posterior surface of the ciliary zone of the iris. Each student in Thompson’s class would be issued with a stereoscope (an adjustable frame with paired, low-magnification lenses) which when used to view a stereo-pair resulted in a single, detailed three-dimensional image of the internal fabric of the eye.

Also at the Cotter Medical History Museum is another Atlas of stereo-photographs, this containing images relating to the human anatomy in general. Published in 1905, the 250 mounted stereo pairs include a number of images of large, horizontal and vertical sections through the chest cavity and the abdominal region for example, while others are of more close-up detail of individual organs.