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Museo de Sanidad Piece of the month Camera lucida



camera lucida is a portable device that can be attached to an optical microscope in order to assist drawing of observed images. It rests on Wollaston's invention, registered in 1807, which was initially used by artists and drawers to recreate perspective with exactitude. It was standard gear for microscopists only a few decades ago. Microphotography was an expensive technique back then and it was easier to obtain a clear illustration of the object by drawing it. Many histological and microanatomical illustrations that could be found in textbooks and papers were made using camera lucida.

he camera lucida owned by the Museo de Sanidad is preserved in its original case, a wooden box with the CARL ZEISS JENA logo and the inscription ZEICHENAPPARAT on its cover. It includes a polygonal rotating mirror, an optical system and three pieces that bear prisms of various intensities. The mirror is fastened to the body tube with a clamp that is bound by a shank. It is placed above the lens at a distance that can be adjusted with a scale. It is an Abbe-type camera.

Source: Laboratorio del Hospital del Rey. Catálogo razonado de microscopios y accesorios. http://publicaciones.isciii.es



Abbe's camera lucida has two rectangular prisms bound together by their hypotenuse DD'. The face of one of them is silver-plated and works as a mirror, except in its central part.

There is a rotating flat mirror

EE' located at a certain distance.

From A we will perceive the image of the microscopic object by virtue of the central rays that cross ab and, at the same time, the image of the drawing's surface MM'.