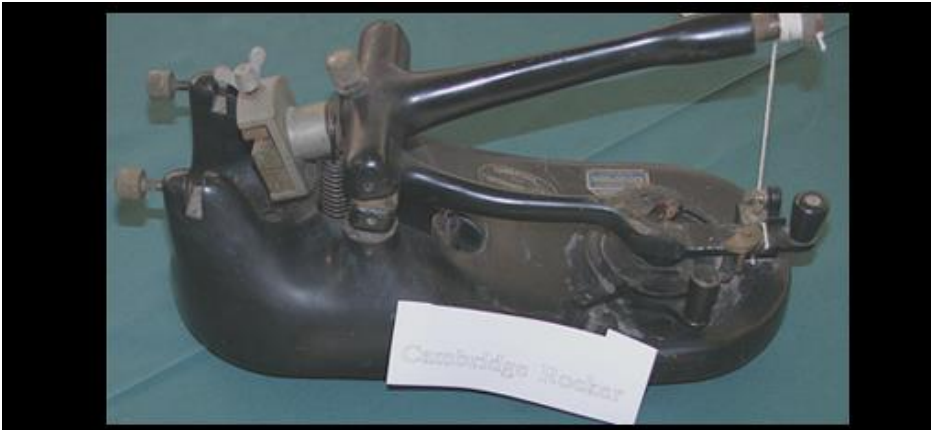




The Royal College of Pathologists

Pathology: the science behind the cure

Object 25: Cambridge rocker microtome



What is it?

A microtome is an instrument used to cut very thin slices (sections) of tissue, about half the width of a hair. Sections have to be very thin so that individual cells can be examined under the microscope. The Cambridge Rocker was one of the earliest automated microtomes.

History

Before the invention of microtomes, thin sections were cut for microscopy using a razor blade or very sharp knife. The sections produced were of variable thickness – and it was rather dangerous for the fingers of the operator. The Cambridge Rocker microtome was developed by Horace Darwin (son of Charles). It was first marketed in 1885 and was one of the most successful microtomes ever invented.

Pathology

Thousands of sections of tissue are cut every day on a microtome before being stained and examined by histopathologists. These pathologists specialise in the diagnosis of disease by examining sections under the microscope. Modern microtomes ensure that sections of uniform thickness can be produced with minimal effort by the biomedical scientists who operate them.

Find out more

The [Science Museum](#) in London has an example of a Cambridge Rocker microtome in excellent condition.