

Overview: Invented by William Crookes in 1903, spinthariscopes are designed to show the emission of alpha particles from a radioactive source (typically Ra-226) as they strike a zinc sulfide screen. These scintillations are viewed through a small objective lens which focuses on a zinc sulfide screen at the other end of the tube in front of which is suspended the source. It typically takes about 20 minutes for dark adaptation of the human eye to occur and when it does, the sight of the atomic disintegrations is quite stunning. It looks almost as if one is looking into a meteor shower.

Spinthariscopes with Adjustable Focus / Source Position from Berlin









Description: This spintharoscope is an incredibly well-machined instrument with very nice optics, and an adjustable distance from the viewing lens. It disassembles as shown in the photos above. The source is embedded in some type of resin. After a few minutes of dark adaptation and proper focusing, the scintillations are very clear.

Price: \$500 US shipping: \$15

Rare "The Hammer" Spintharoscope and Original Box





Description: This rare spinthariscopes was named "The Hammer." After a few minutes of dark adaptation, the scintillations from this spinthariscopes are very clear and bright.

Price: \$600 **Shipping:** \$15

Rare Radium Chemical Company Spintharoscope and Original Box

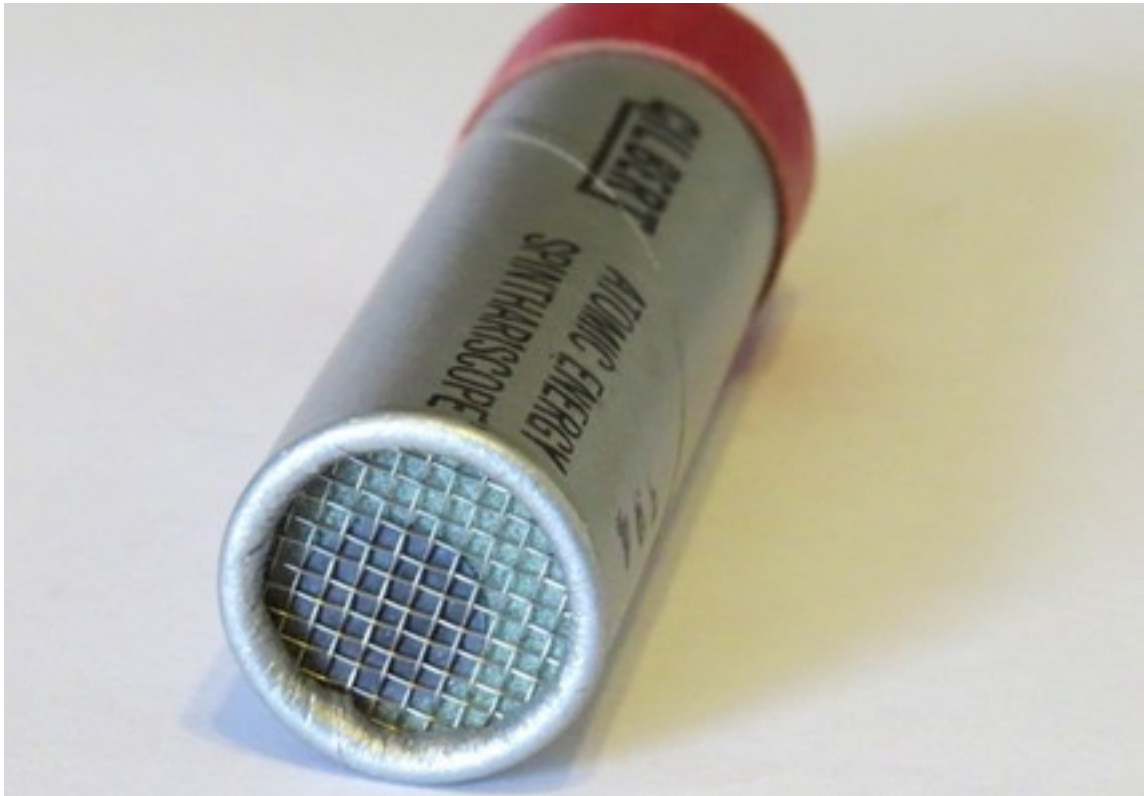




Description: This spintharoscope is rarely seen and was manufactured by the Radium Chemical Company, manufacturers of Undark. The design of this spintharoscope is unique in that the Radium and Zinc Sulfide were mixed together at the back of the scope with a lens placed at the front. After a few minutes of dark adaptation, scintillations can still be clearly seen.

Price: \$500 **Shipping:** \$15

Gilbert Atomic Energy Spintharoscope





Description: This inexpensively made spinthariscopes was part of the Gilbert Atomic Energy Lab set from the 1950's. The Zinc screen no longer shows scintillations.

Price: \$150 Shipping: \$15

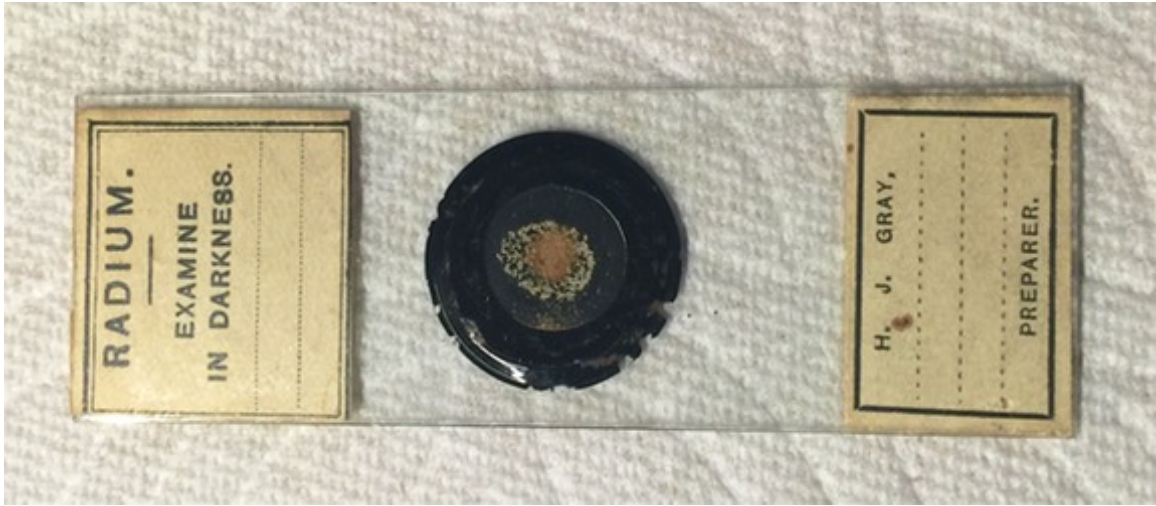
Scientific Shop Radium Scintillation Slide



Description: This Radium scintillation slide from “The Scientific Shop” in Chicago was intended to be used with a microscope or a simple magnifier. The Radium and Zinc Sulfide were mixed together in the sealed disk on the slide. The disk glows vigorously after exposure to UV light, as well as natural light. Untested with a microscope for scintillations.

Price: \$400 Shipping: \$15

H. J. Gray Radium Scintillation Slide





Description: This Radium scintillation slide prepared by H. J. Gray was also intended to be used with a microscope or a simple magnifier. The Radium and Zinc Sulfide were mixed together in the

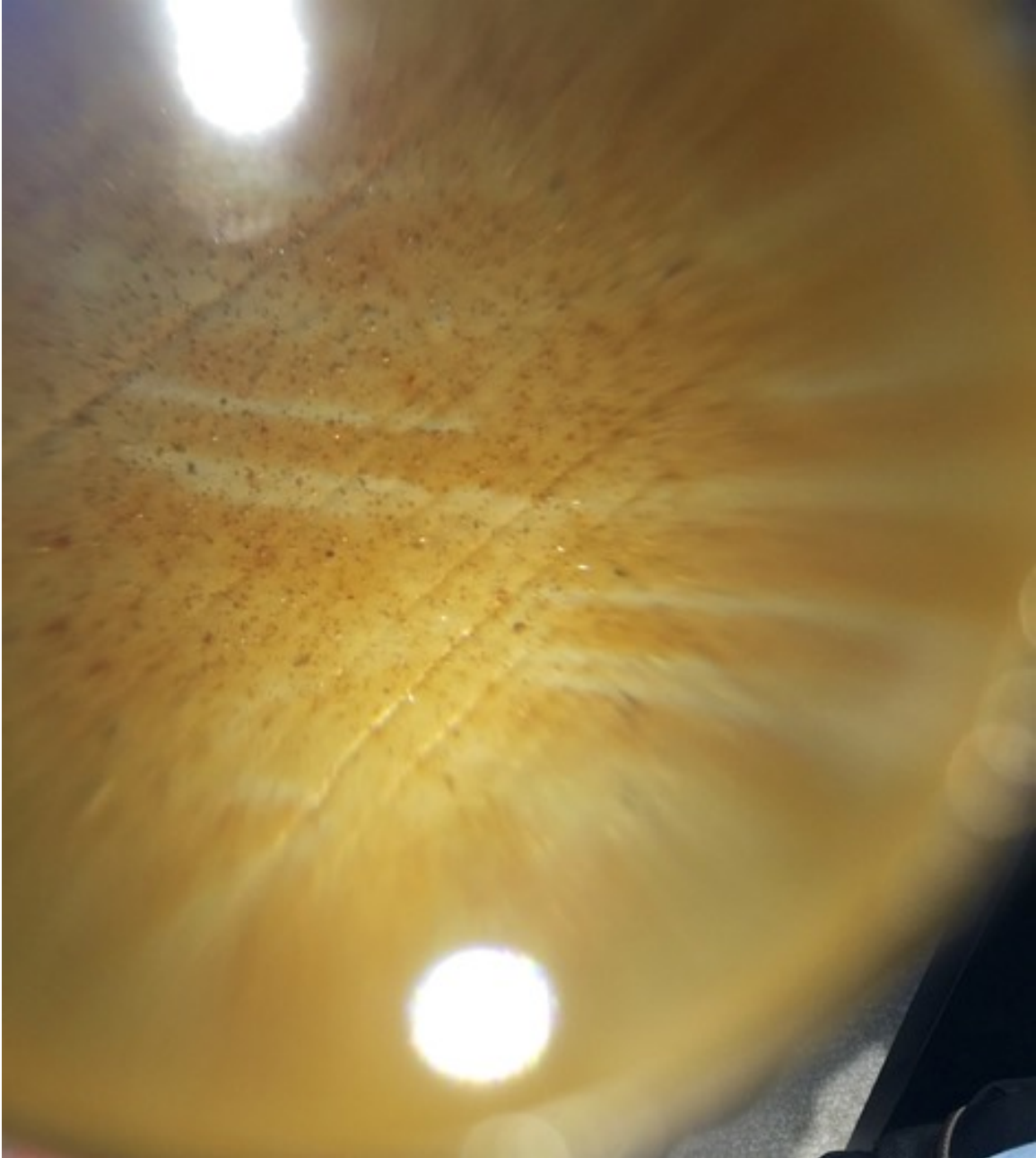
sealed disk on the slide. This disk also glows vigorously after exposure to UV light, as well as natural light. Untested with a microscope for scintillations.

Price: \$400 **Shipping:** \$15

Unknown Brand - Bright Scintilloscope from the 1920's







Description: This antique Scintilloscope is in perfect condition, with gorgeous optics and a nickel-silvered brass tube. It has a screw on the side of the barrel for adjusting focus. After 15 minutes, the light show begins with very clear and impressive scintillations. The Radium source can be seen in the photo but the barrel cannot be opened to measure its activity level. It measures approximately 5X background radiation through the brass tube.

Price: \$500 Shipping: \$15