

B-2 Bajka picture projector

AUTHOR

TIME AND PLACE OF CREATION

Time:

1963

Place:

, Poland

TECHNICAL DATA

Dimensions:

height: 195 mm, width: 105 mm, length: 205 mm

OTHER

MIM 1345/VI/181

KEYWORDS

towar luksusowy, rzutniki, przemysł,
propaganda, PRL, prąd, pomoce naukowe,
oświetlenie, odtwarzanie obrazu, ochrona
przeciwpożarowa, obraz, nośnik, kopiowanie,
fotografia, czas wolny, analogowy

DESCRIPTION

A projector is an optical device for projecting enlarged images on a screen. The first known device displaying still images with an oil lamp as a light source was illustrated in a sketchbook by the Italian doctor and engineer Johannes de Fontana. The colour image to be displayed was painted on glass. De Fontana's sketch could have been the inspiration for the building of the so-called *laterna magica* in the 17th century. Invention of this device is ascribed to either Athansius Kircher, who described and illustrated a device reflecting sunlight in a mirror through lenses onto a screen, or to Christiaan Huygens, who presented the first working "magical lantern" in 1659. A prototype of the Bajka picture projector presented here was built in 1953. Its design was developed by Wiktor Bielecki and Tadeusz



Zaborowski. The purpose of the projector is to display (typically on a wall or canvas) still, monochrome, or colour transparencies on positive film recorded on a tape with a width of 35 mm and frame dimensions of 18 x 24 mm. The tape with the slides is not cut into pieces, but is used whole, wound on a roll. The roll is placed in a carrier so that the image or text in the window is inverted, and then it is moved by hand, using a knob. Displaying images is possible thanks to a purpose-built optical projection arrangement comprising a concave mirror and a lightbulb placed parallel to the condenser (an optical element for homogeneous lighting of the film). Improper positioning of the arrangement results in the image being out of focus and covered in colourful smudges. The focus of the projected image is manually adjusted using a rotary, screw-in lens. The Bajka projector was built by Łódzkie Zakłady Kinotechniczne from 1953. The housings of the first units were made of enamelled metal, which was later replaced by stamped Bakelite. Production of the device ended in the 1960s. In the 1970s, the enterprise was renamed to Łódzkie Zakłady Kinotechniczne Prexer, belonging to the Union of Mechanised Household Equipment Industry "Predom". Apart from projectors and slide projectors, the enterprise manufactured photocopiers, wood machining devices, and angling reels. Łódzkie Zakłady Kinotechniczne ended its operation at the beginning of the 1990s. Thanks to their wide ranging applications, slide projectors were very popular. They were used for educational purposes in kindergartens and schools, as well as at home, to view pictorial stories, illustrated on slides. In the 1990s projectors were replaced by newer technologies allowing projection of moving images. Authors: Beata Krzaczyńska, Piotr Turowski