

# Gerlach leveller

AUTHOR

TIME AND PLACE OF CREATION

Place:  
, Poland



TECHNICAL DATA

Dimensions:  
height: 125 cm, width: 110 cm, length: 205  
cm

OTHER

MIM 906/XI/47

KEYWORDS

drogownictwo, kartografia, geodezja,  
międzywojnie, urządzenia pomiarowe

DESCRIPTION

A leveller is a land survey instrument allowing measurement of the difference in height (geometric levelling) between points in the field. The instrument has the form of a horizontal tube with a scope and a spirit level, which allows horizontal positioning of the device. A leveller is mounted on a tripod base, on which the whole device is mounted on a tripod. The altitude difference read out involves observing values, using the horizontal leveller, on the so-called level staffs set vertically in the targeting axis of the instrument. Modern, automatic levellers do not require very precise manual levelling, as they are equipped with a mechanic/optical system called the compensator. Its purpose is to maintain a horizontal cause of the targeting axis in case of minuscule deviations of the instrument. The presented instrument was made in the Specjalna Fabryka Instrumentów Geodezyjnych i Rysunkowych Gustawa Gerlacha around 1930. The establishment operated from 1816 to the World War II, and it specialised in producing land surveying instruments such as the theodolites, levellers, rangefinders, steel squares, and topographic tables. The company also produced other, small accessories for land surveyors. Instruments from the G. Gerlach factory were considered to be on par in terms of quality with products of the most

renowned German manufacturers, such as Zeiss. The company's strong position was evidenced by international awards and the presence of its branch offices and sales outlets in several cities. References: M. Kluza, Polscy wytwórcy instrumentów naukowych w XIX wieku [w:] Polscy twórcy aparatury naukowej, ed. A. Strzałkowski, Monografie series, vol. X, Kraków 2006, pp. 277–285. G. Gerlach najstarsza polska wytwórnia sprzętu geodezyjnego, prepared by S. Walczak, exhibition catalogue of the Museum of Technology in Warsaw in accordance with the programme prepared by the Main Commission for Museums and Exhibitions of the Polish Surveyors' Association, Warsaw, October 1973.