

AccessionIndex: TCD-SCSS-U.20121208.003

Accession Date: 8-Dec-2012

Accession By: Prof.J.G.Byrne

Object name: Advertisements

Vintage: c.19xx

Synopsis: Sliderules.

Description:

Text ...

Photographs courtesy Prof.J.G.Byrne and Dr.Arthur Hughes.

Accession Index	Location	Vintage	Object and Identification
TCD-SCSS-U.20121208.003.01		c.19xx	<Mfgr?> <model?> sliderule. S/N: <???
TCD-SCSS-U.20121208.003.02		c.19xx	
TCD-SCSS-U.20121208.003.03		c.198x	
TCD-SCSS-U.20121208.003.04		c.198x	
TCD-SCSS-U.20121208.003.05		c.198x	
TCD-SCSS-U.20121208.003.06		c.19xx	
TCD-SCSS-U.20121208.003.07		c.198x	
TCD-SCSS-U.20121208.003.08		c.198x	
TCD-SCSS-U.20121208.003.09		c.198x	
TCD-SCSS-U.20121208.003.10		c.19xx	
TCD-SCSS-U.20121208.003.11		c.198x	
TCD-SCSS-U.20121208.003.12		c.198x	
TCD-SCSS-U.20121208.003.13		c.198x	
TCD-SCSS-U.20121208.003.14		c.19xx	
TCD-SCSS-U.20121208.003.15		c.198x	
TCD-SCSS-U.20121208.003.16		c.198x	
TCD-SCSS-U.20121208.003.17		c.198x	
TCD-SCSS-U.20121208.003.18		c.19xx	

TCD-SCSS-U.20121208.003.19		c.198x	
TCD-SCSS-U.20121208.003.20		c.198x	
TCD-SCSS-U.20121208.003.21		c.198x	
TCD-SCSS-U.20121208.003.22		c.19xx	
TCD-SCSS-U.20121208.003.23		c.198x	
TCD-SCSS-U.20121208.003.24		c.198x	
TCD-SCSS-U.20121208.003.25		c.198x	
TCD-SCSS-U.20121208.003.26		c.19xx	
TCD-SCSS-U.20121208.003.27		c.198x	
TCD-SCSS-U.20121208.003.28		c.198x	
TCD-SCSS-U.20121208.003.29		c.198x	
TCD-SCSS-U.20121208.003.30		c.198x	
TCD-SCSS-U.20121208.003.31		c.198x	
TCD-SCSS-U.20121208.003.32		c.19xx	
TCD-SCSS-U.20121208.003.33		c.198x	

The following instruction manuals are properly part of the literature category of this catalog, but are listed here too for convenience.

Accession Index	Object with Identification
TCD-SCSS-V.20121208.???	

References:

1. Authors, *Title*, Publication, Publisher, Date.
2. Authors, *Title*, Publication, Publisher, Date.
3. Authors, *Title*, Publication, Publisher, Date.

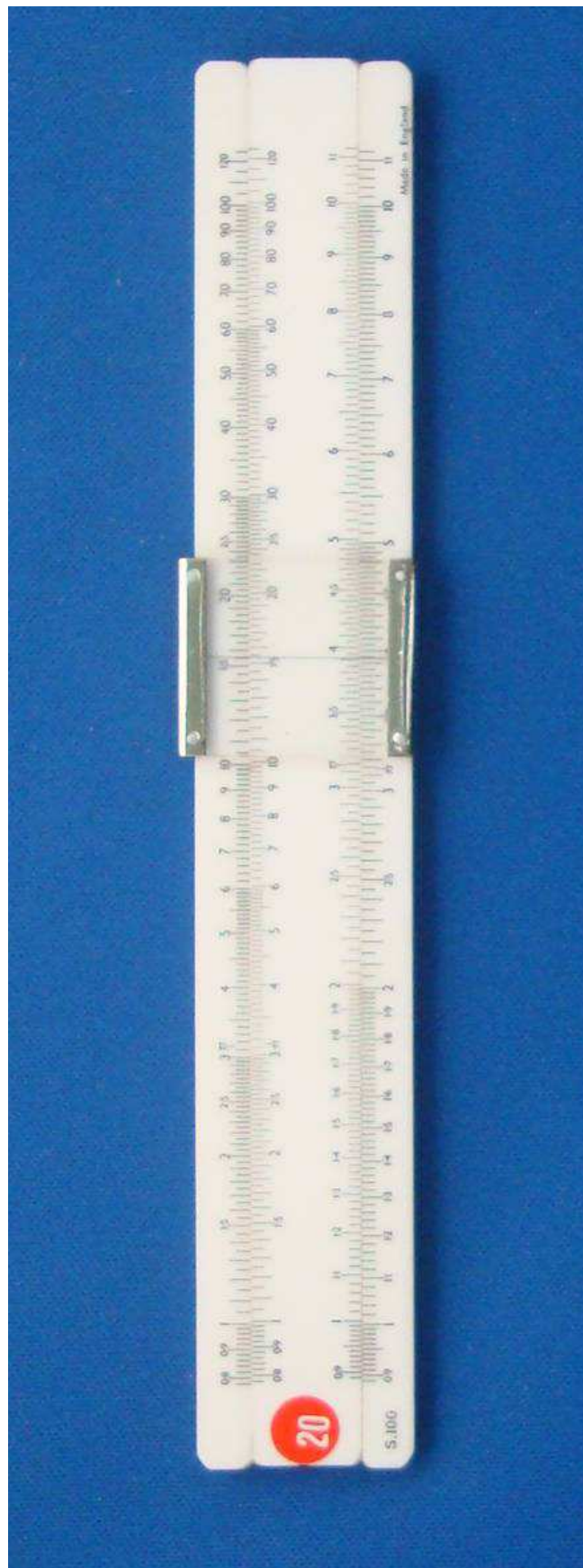


Figure 1: TCD-SCSS-U.20121208.003-fig01



Figure 2: TCD-SCSS-U.20121208.003-fig02

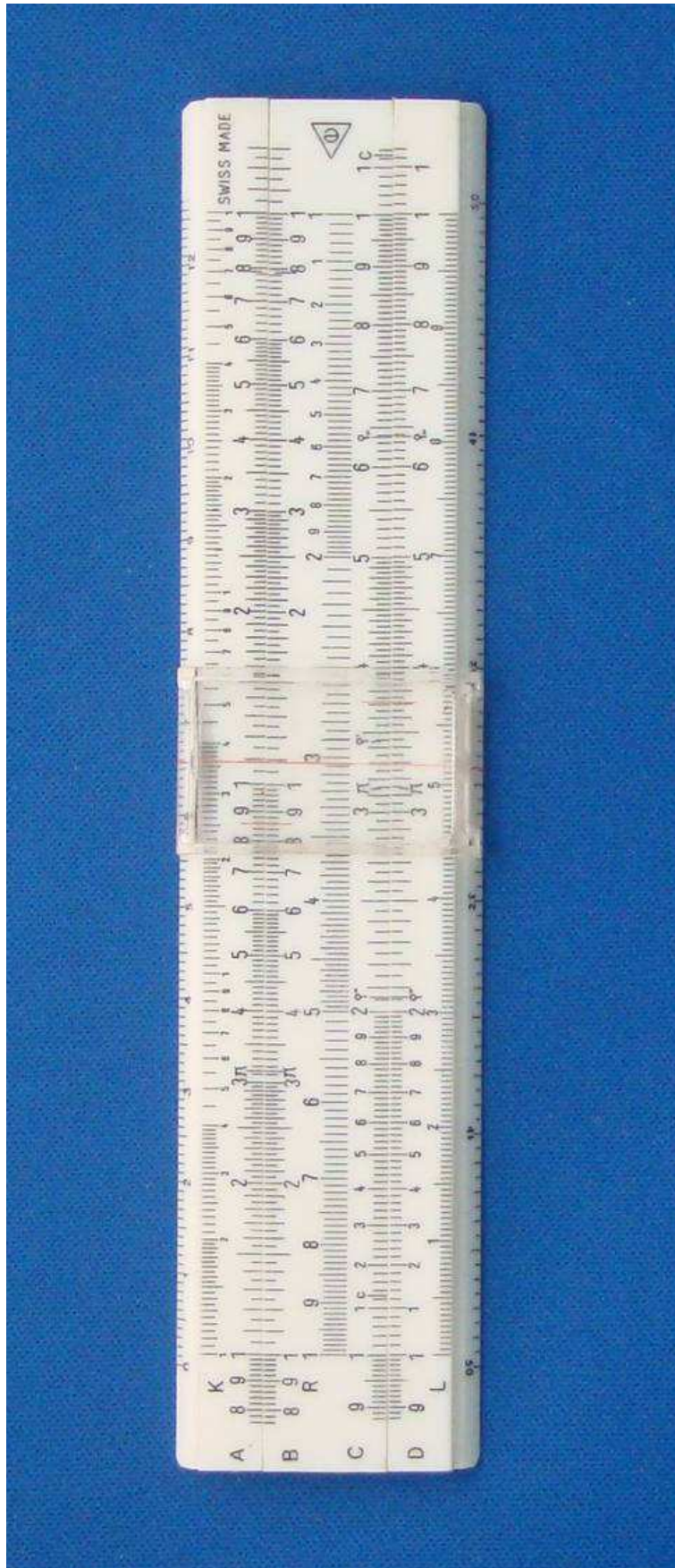


Figure 3: TCD-SCSS-U.20121208.003-fig03



Figure 4: TCD-SCSS-U.20121208.003-fig04

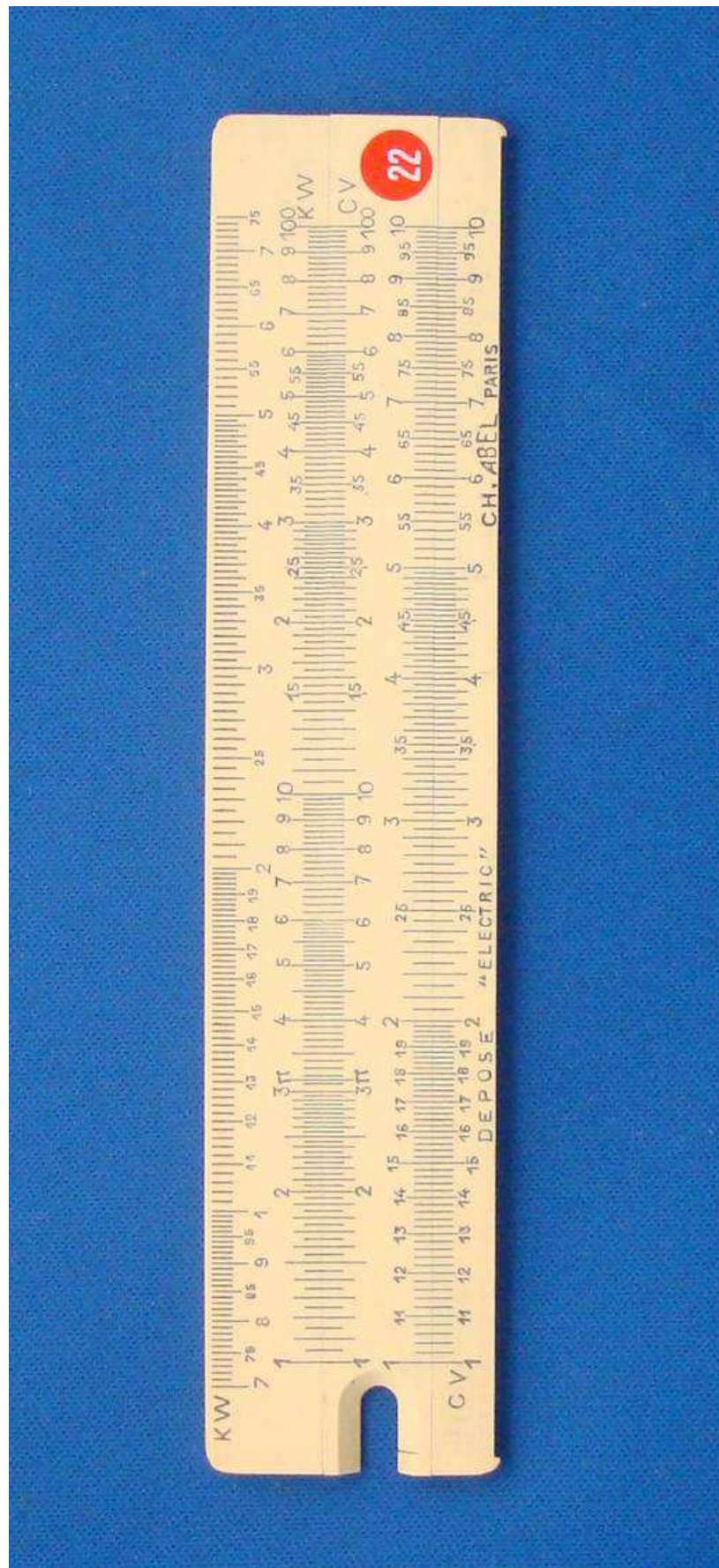


Figure 5: TCD-SCSS-U.20121208.003-fig05

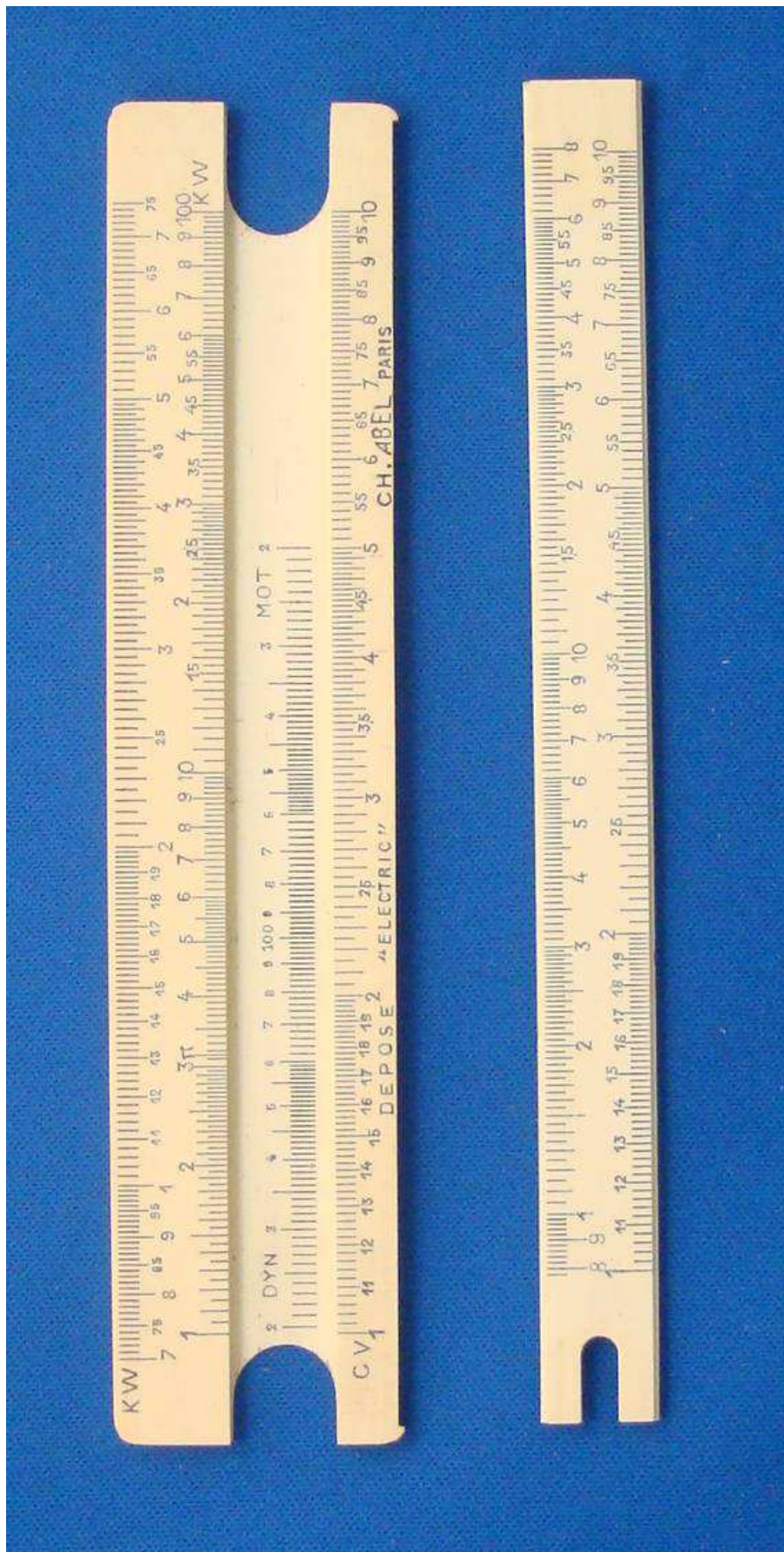


Figure 6: TCD-SCSS-U.20121208.003-fig06

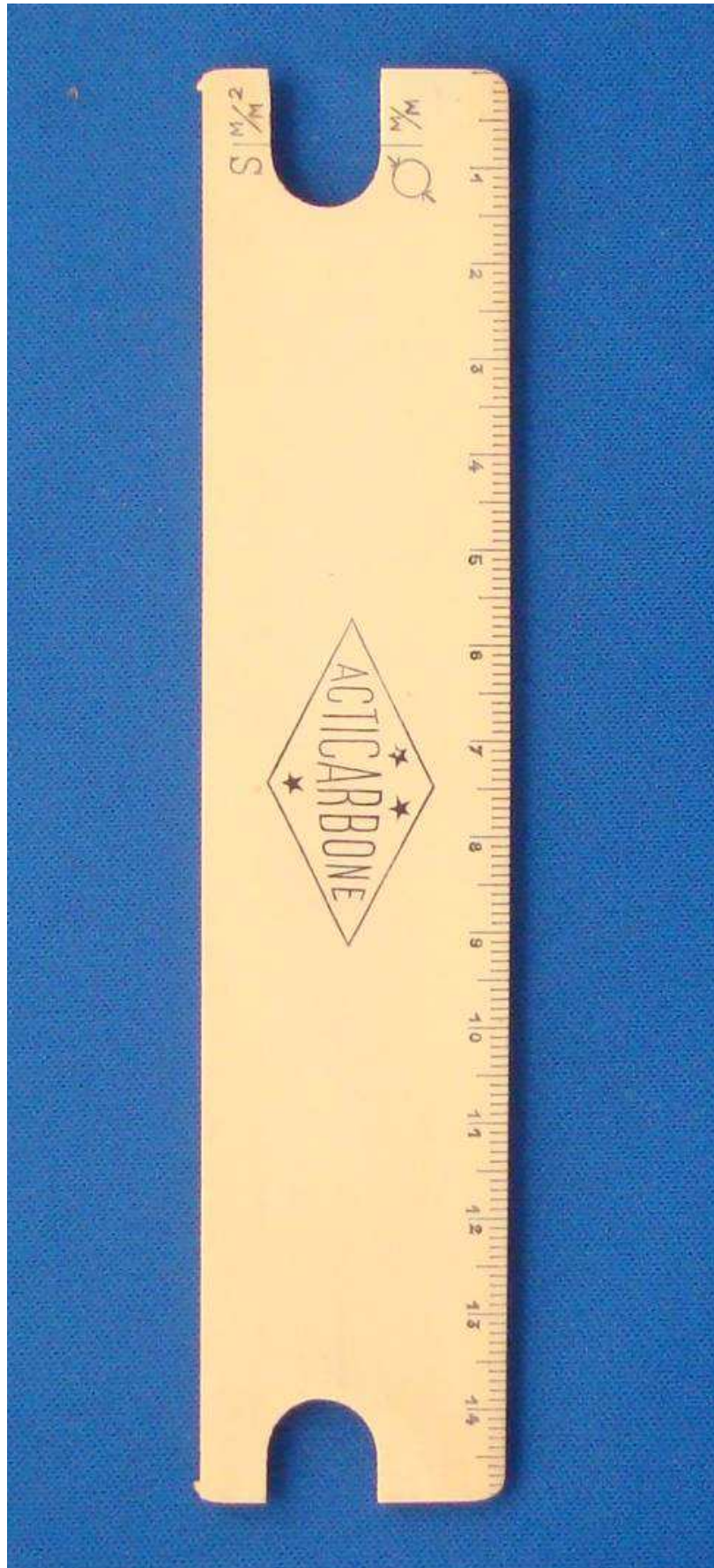


Figure 7: TCD-SCSS-U.20121208.003-fig07

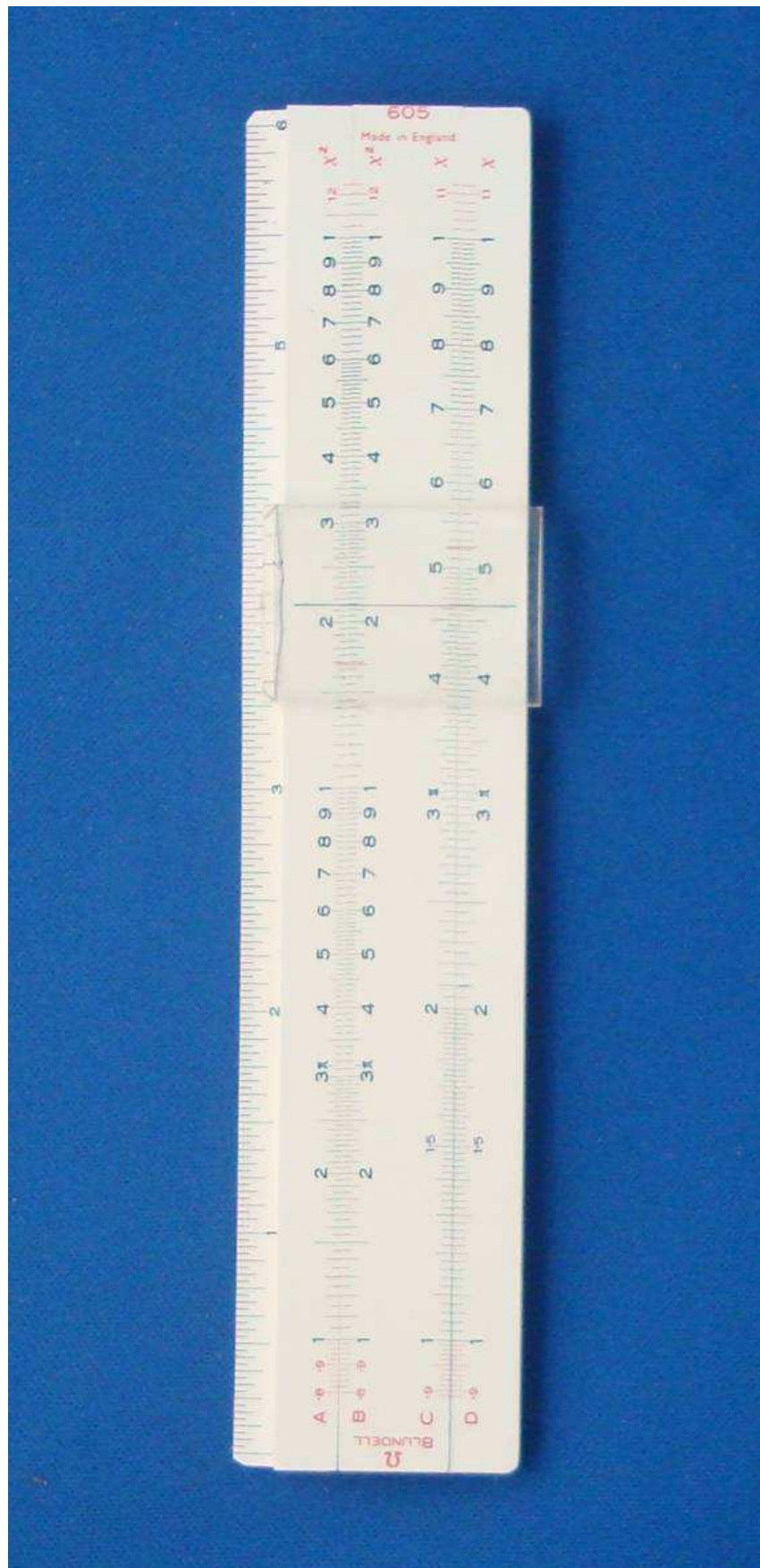


Figure 8: TCD-SCSS-U.20121208.003-fig08



Figure 9: TCD-SCSS-U.20121208.003-fig09

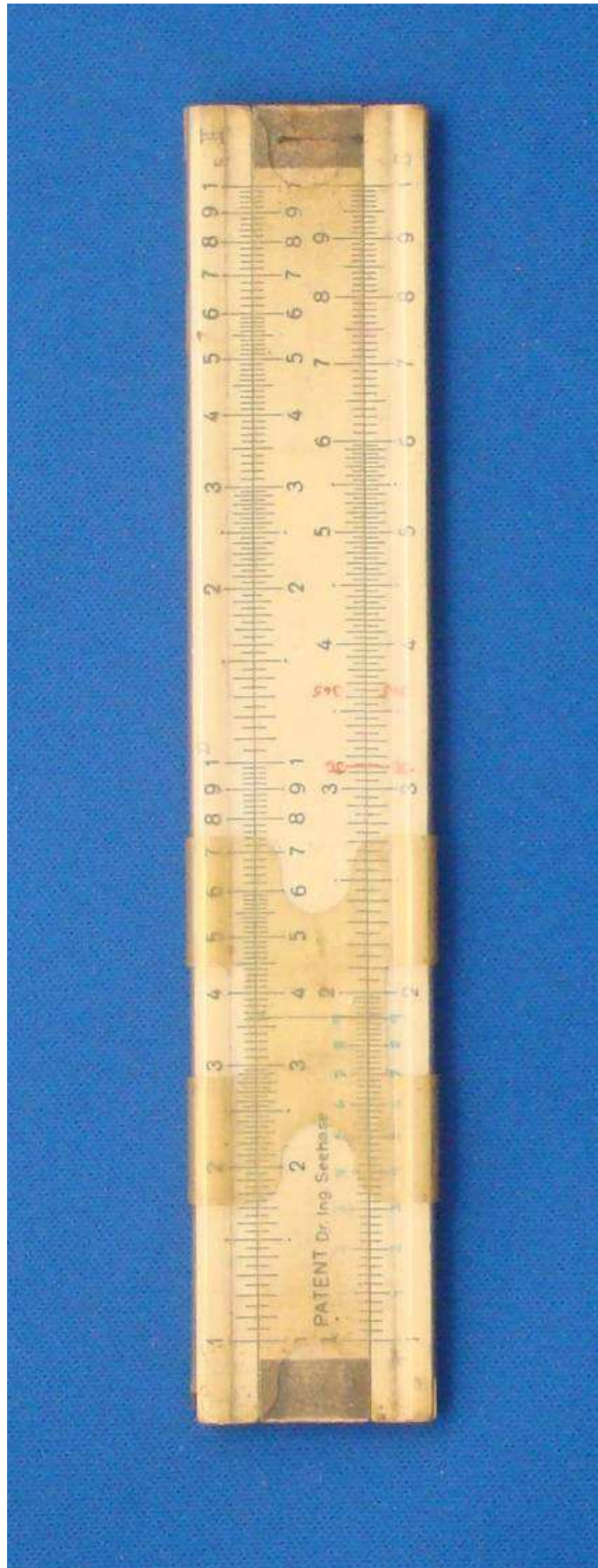


Figure 10: TCD-SCSS-U.20121208.003-fig10



Figure 11: TCD-SCSS-U.20121208.003-fig11

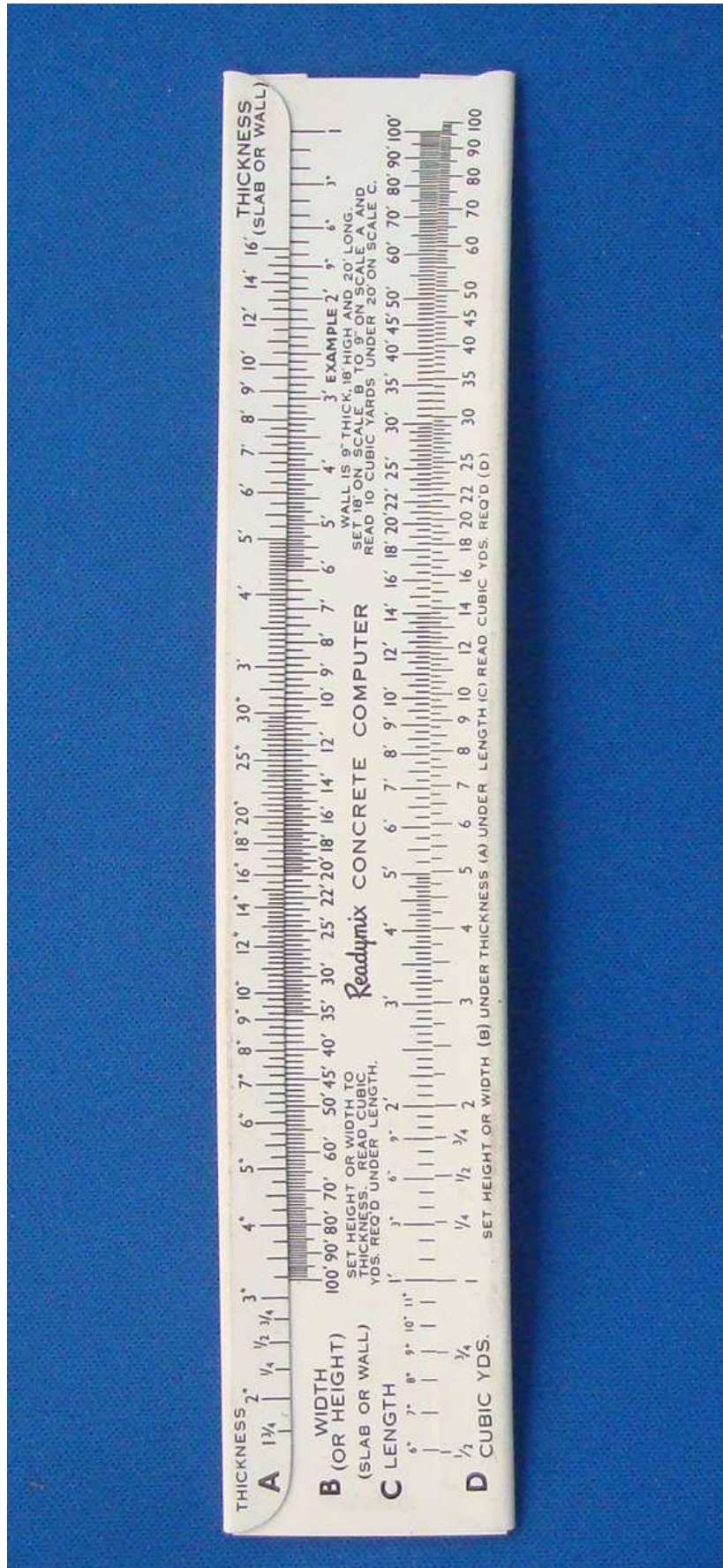


Figure 12: TCD-SCSS-U.20121208.003-fig12

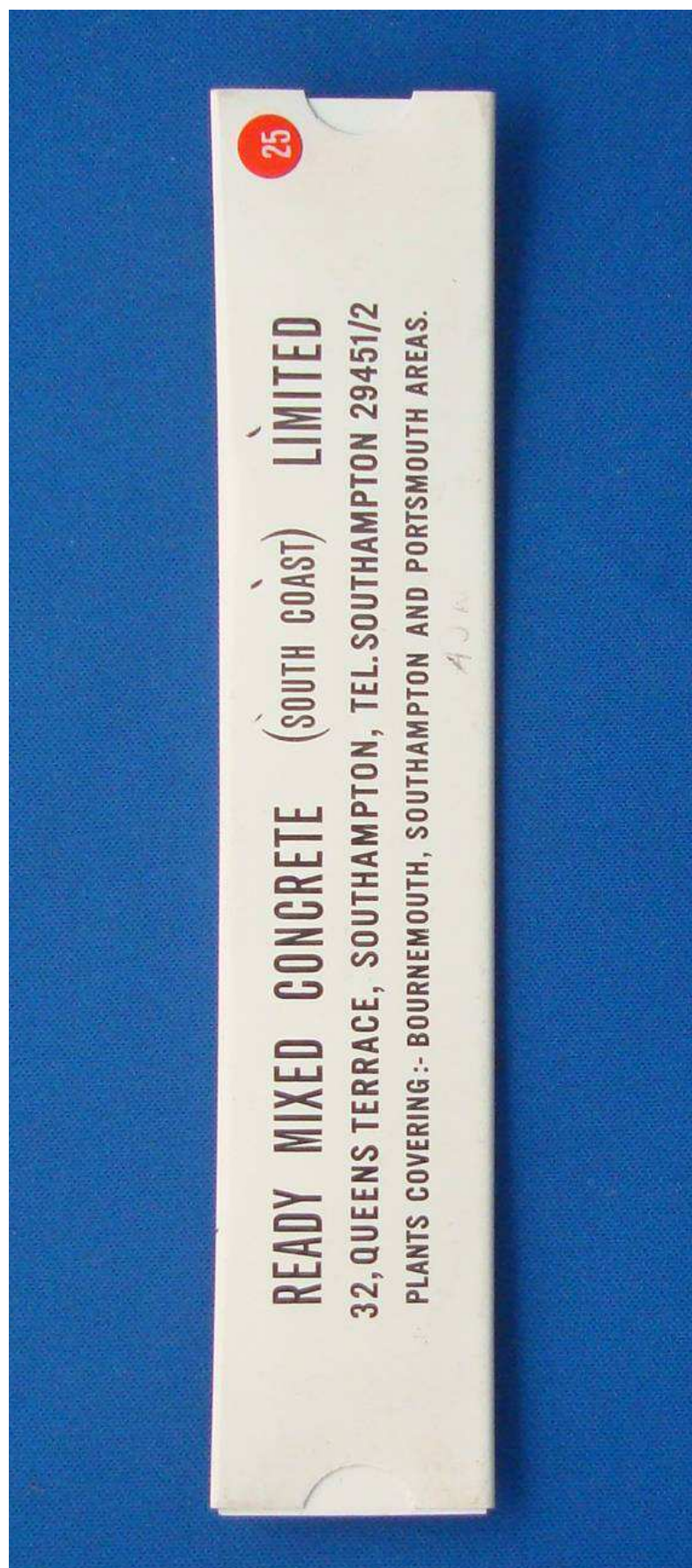


Figure 13: TCD-SCSS-U.20121208.003-fig13

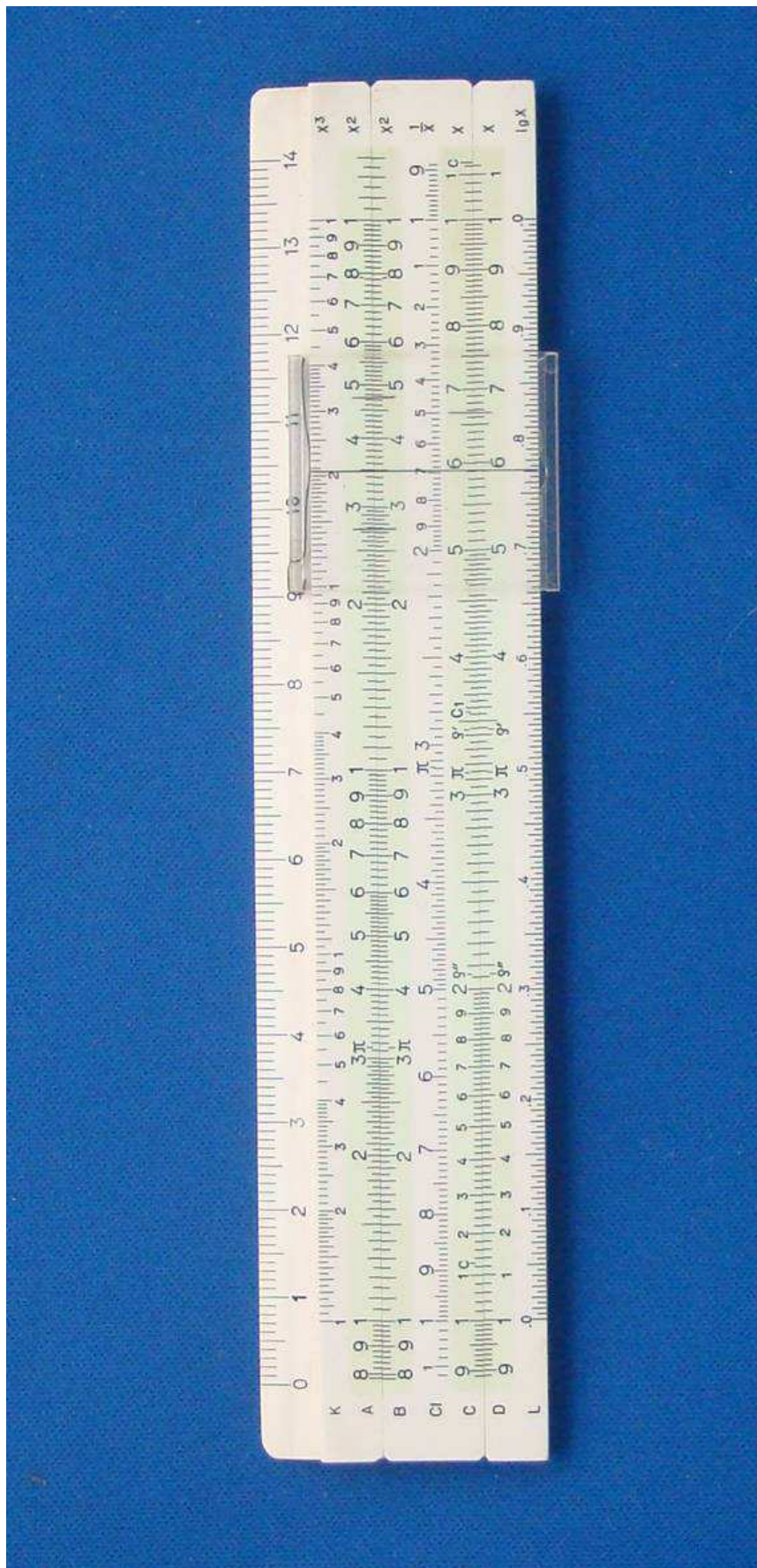


Figure 14: TCD-SCSS-U.20121208.003-fig14

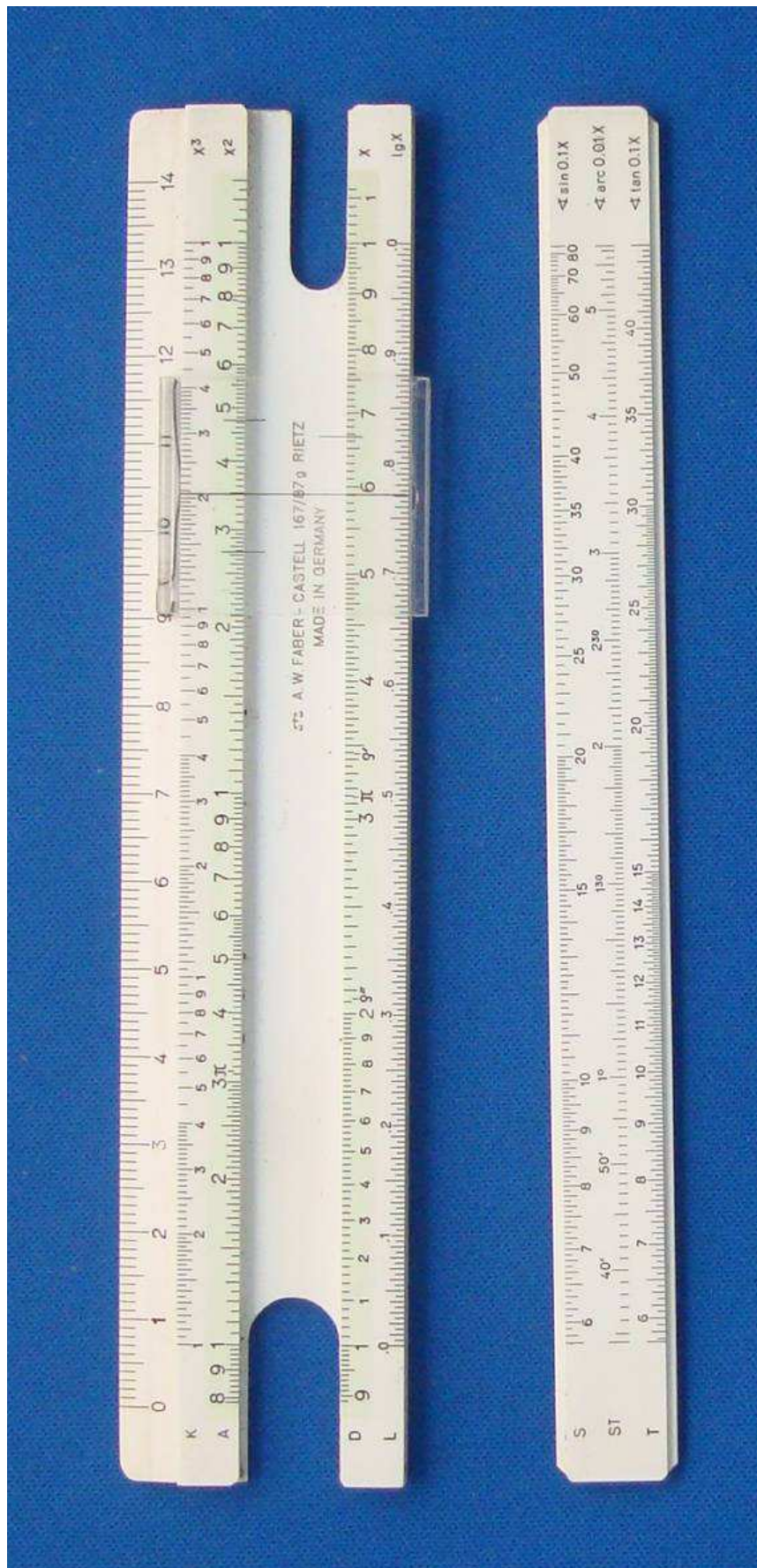


Figure 15: TCD-SCSS-U.20121208.003-fig15

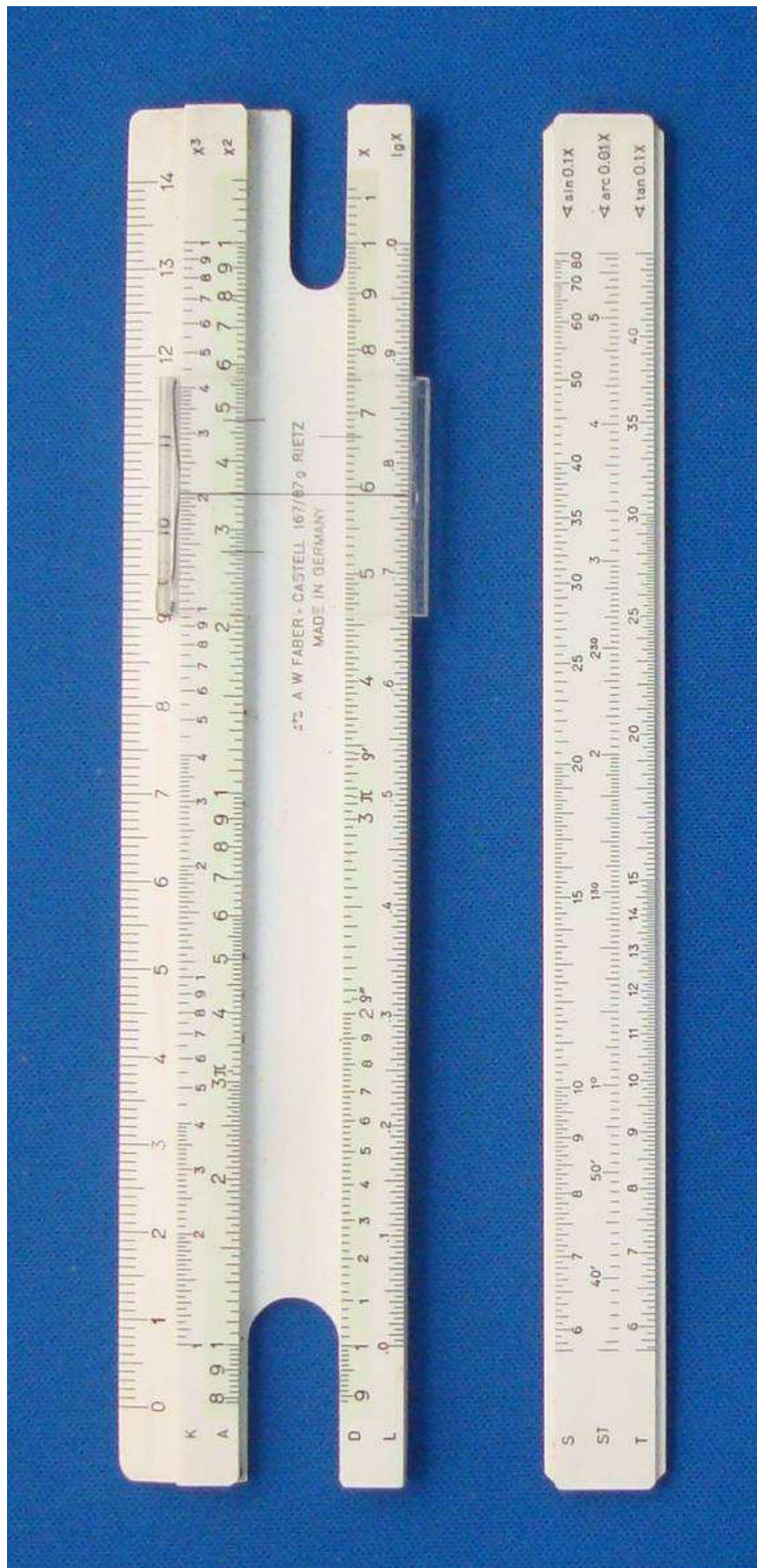


Figure 16: TCD-SCSS-U.20121208.003-fig16

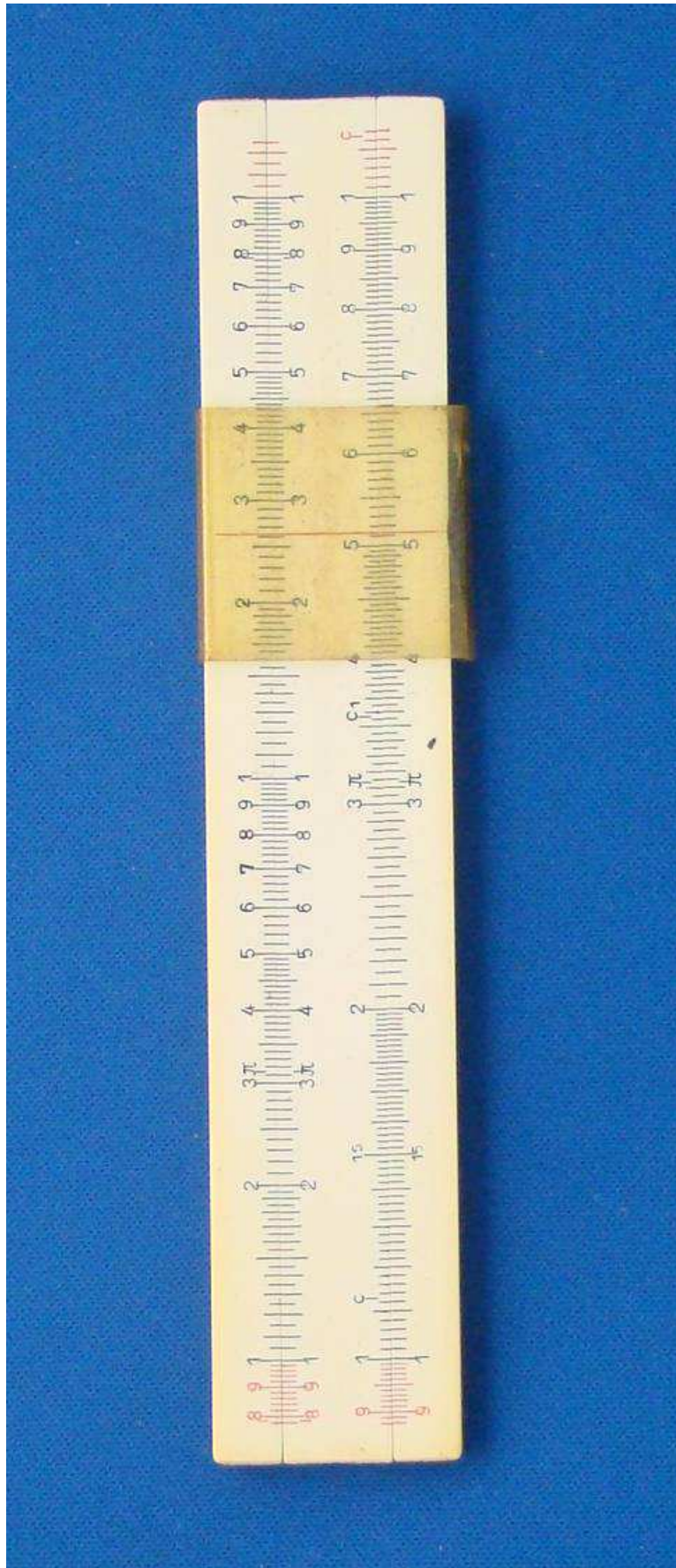


Figure 17: TCD-SCSS-U.20121208.003-fig17

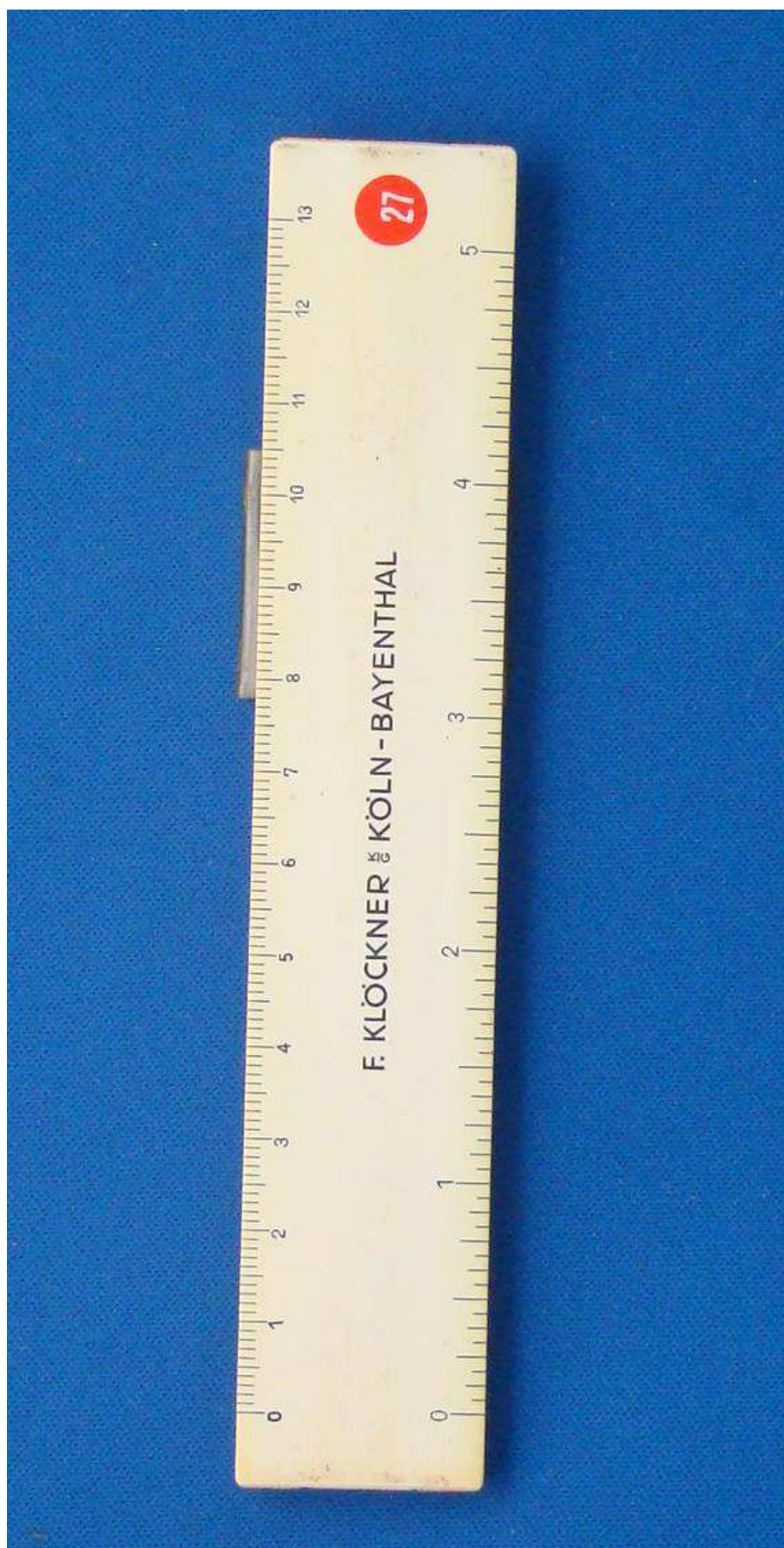


Figure 18: TCD-SCSS-U.20121208.003-fig18



Figure 19: TCD-SCSS-U.20121208.003-fig19

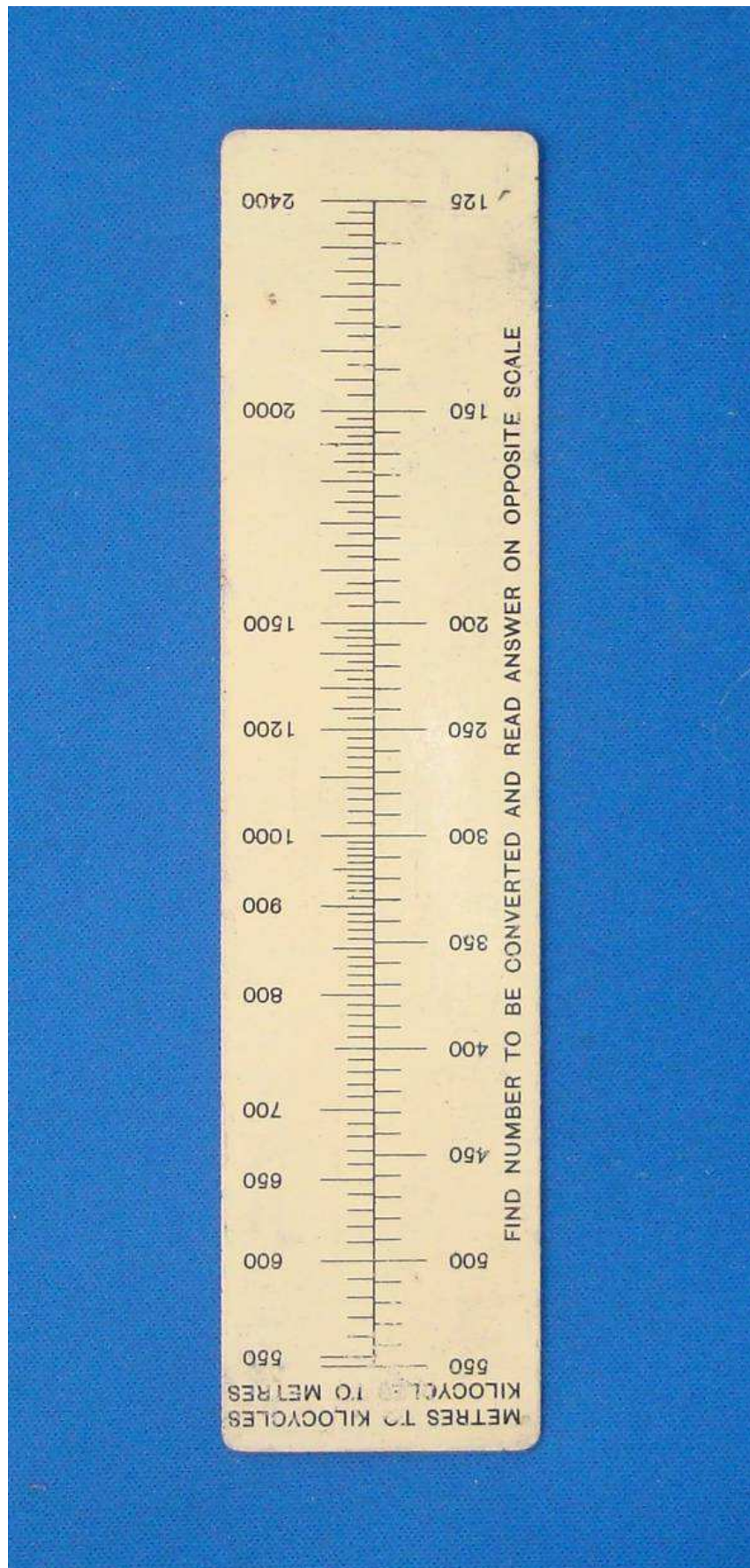


Figure 20: TCD-SCSS-U.20121208.003-fig20

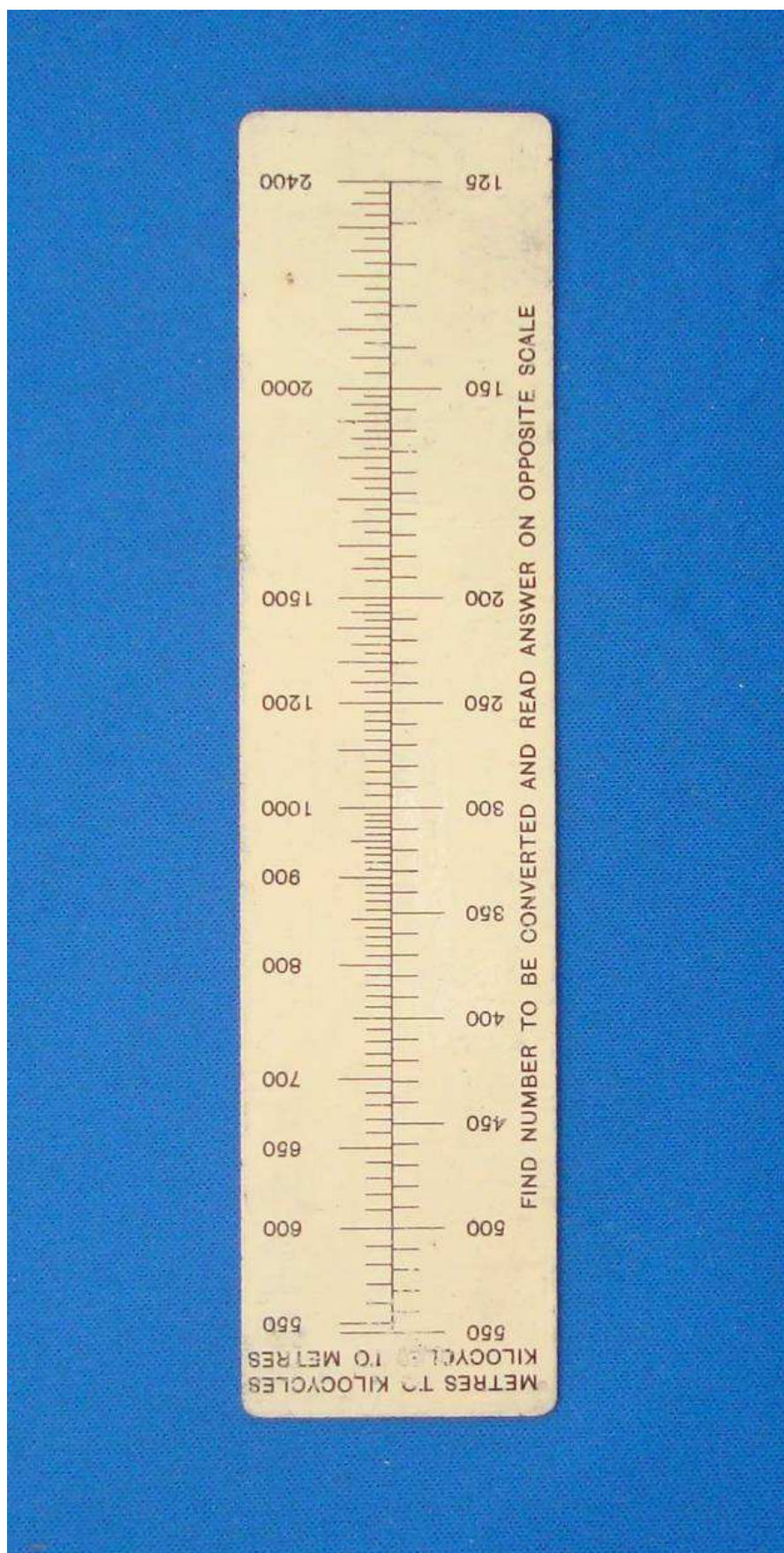


Figure 21: TCD-SCSS-U.20121208.003-fig21

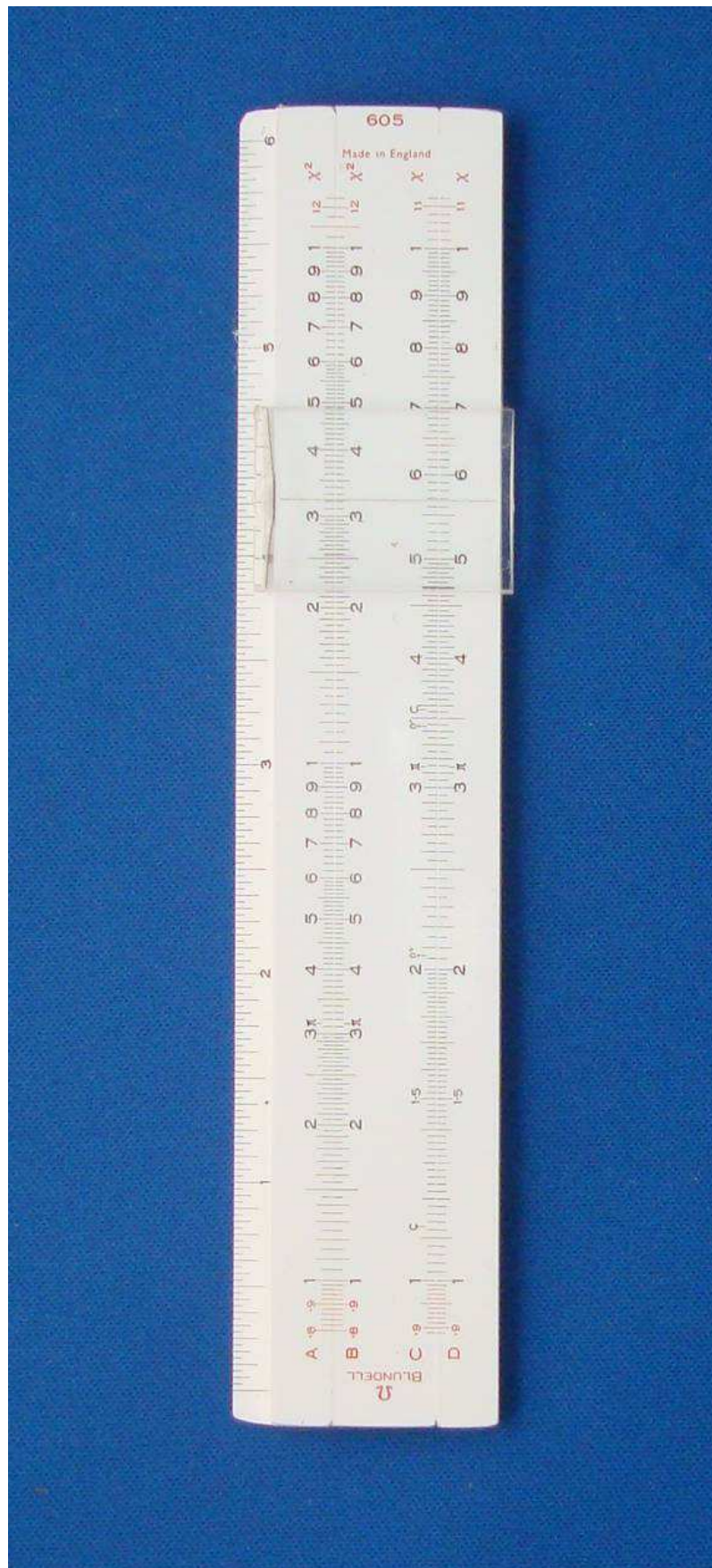


Figure 22: TCD-SCSS-U.20121208.003-fig22



Figure 23: TCD-SCSS-U.20121208.003-fig23

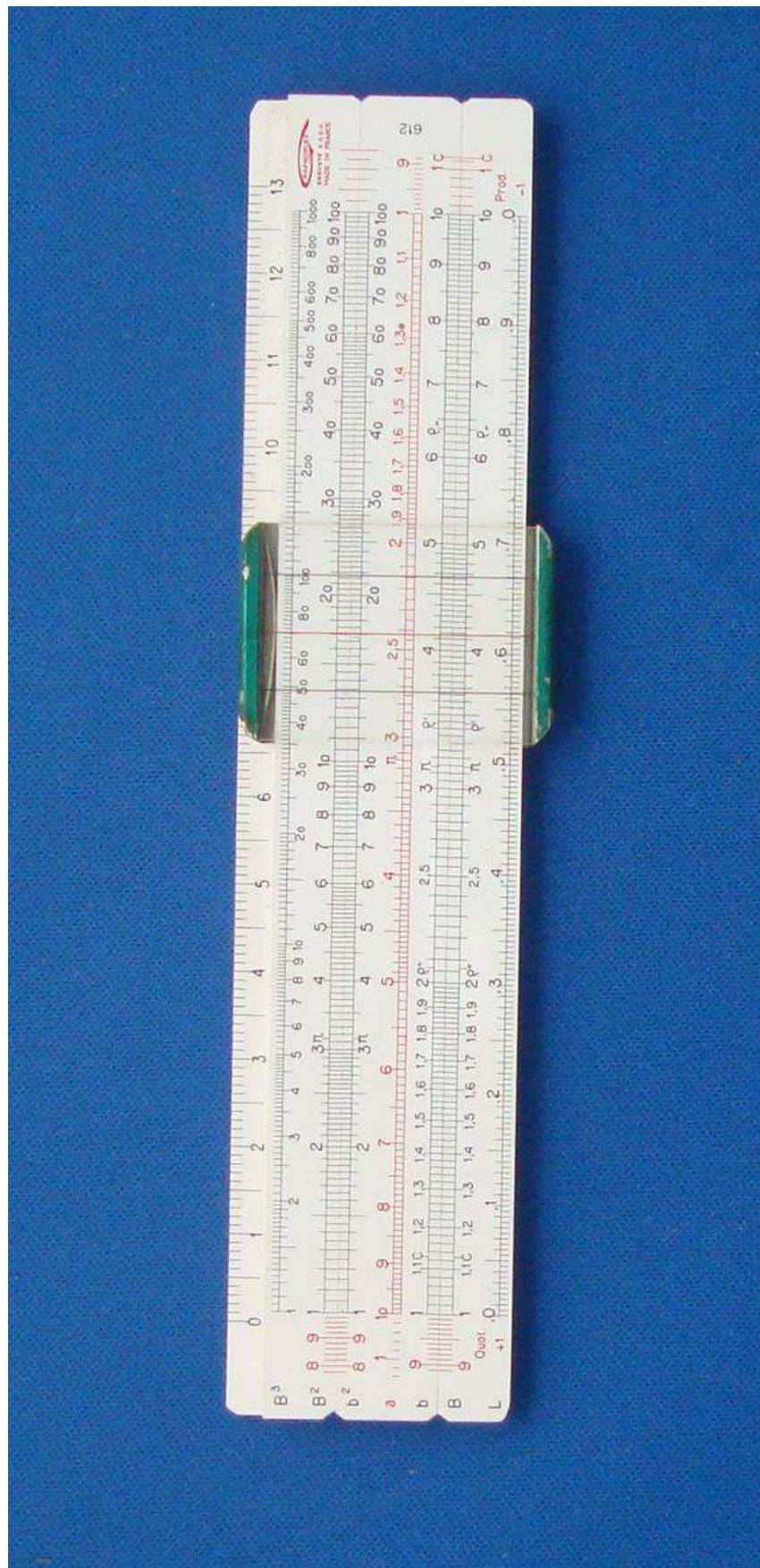


Figure 24: TCD-SCSS-U.20121208.003-fig24

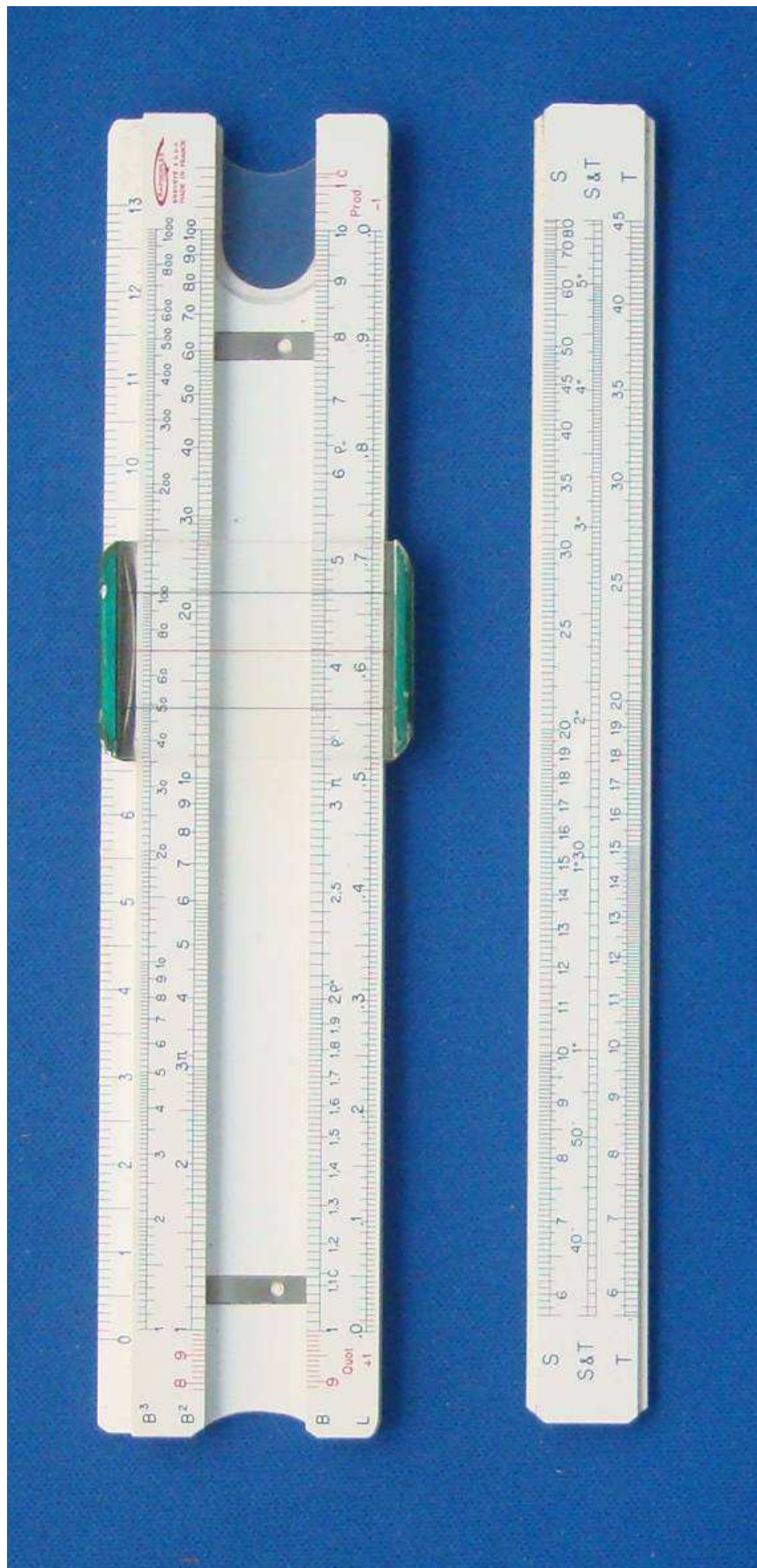


Figure 25: TCD-SCSS-U.20121208.003-fig25



Figure 26: TCD-SCSS-U.20121208.003-fig26

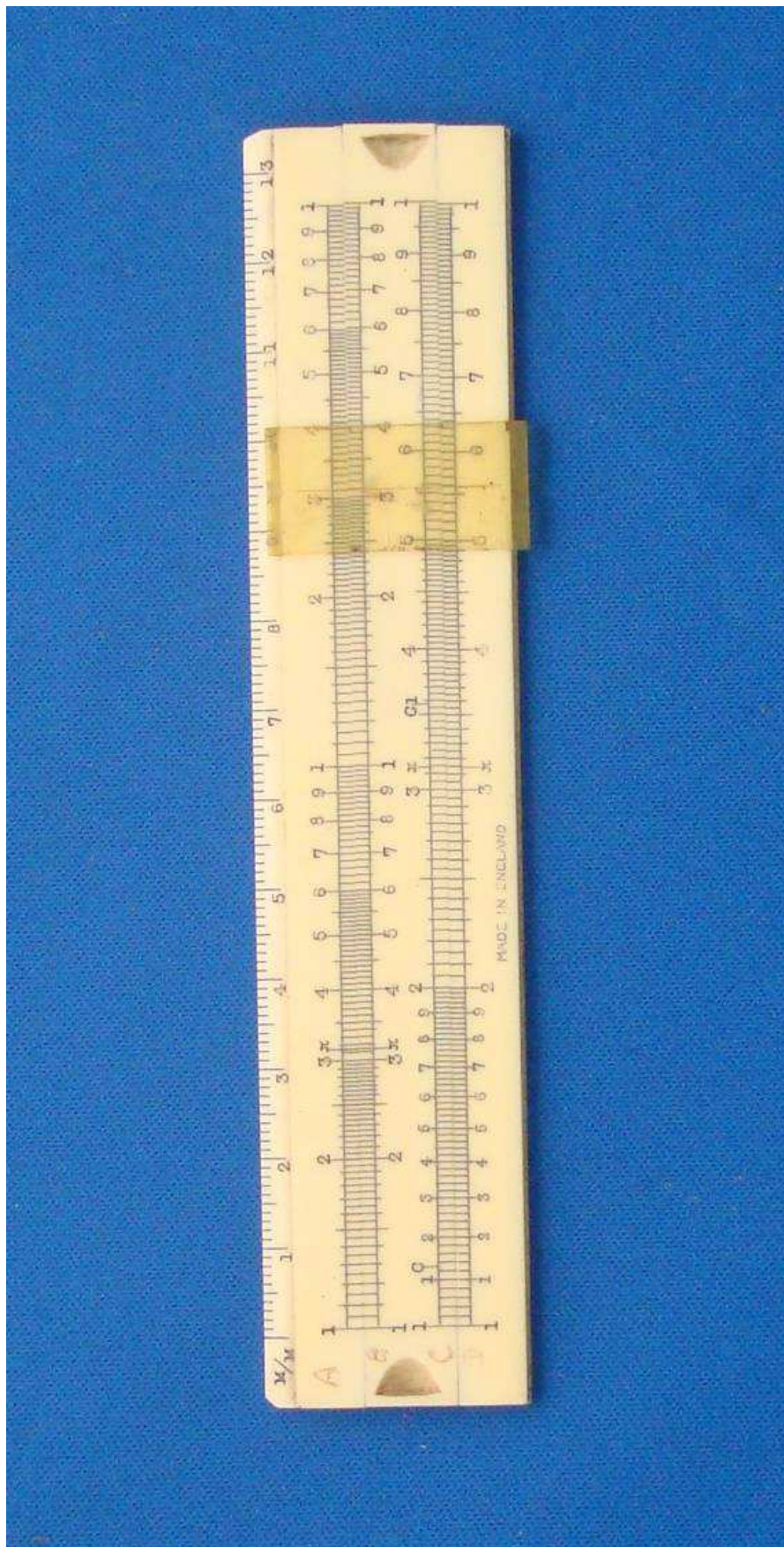


Figure 27: TCD-SCSS-U.20121208.003-fig27



Figure 28: TCD-SCSS-U.20121208.003-fig28

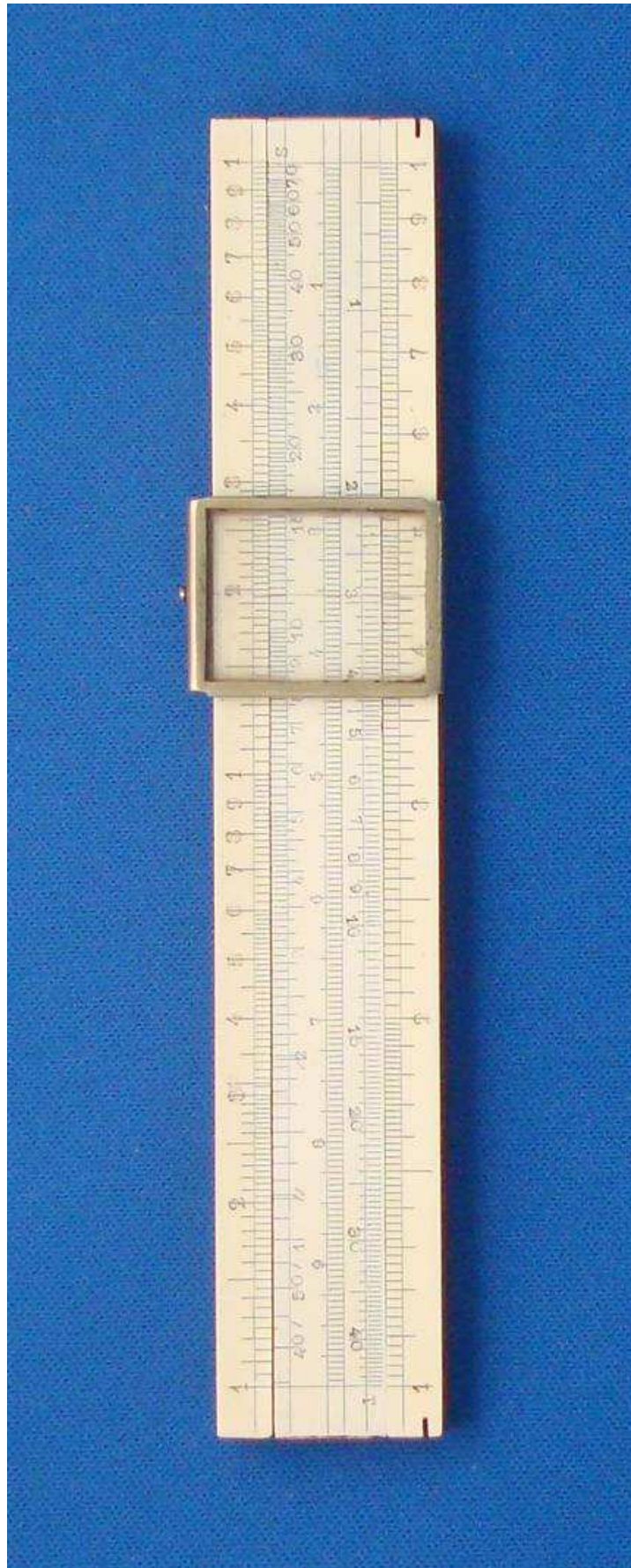


Figure 29: TCD-SCSS-U.20121208.003-fig29

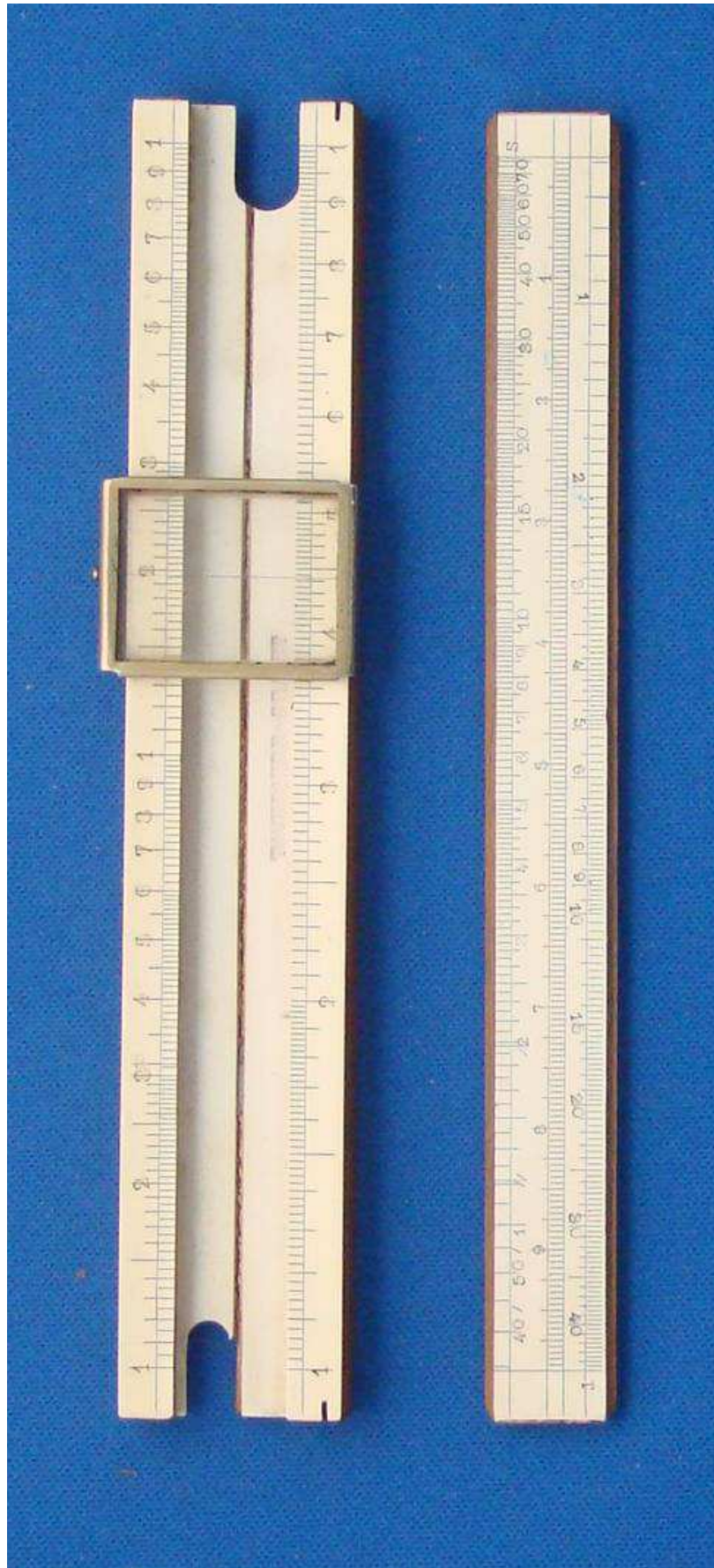


Figure 30: TCD-SCSS-U.20121208.003-fig30



Figure 31: TCD-SCSS-U.20121208.003-fig31

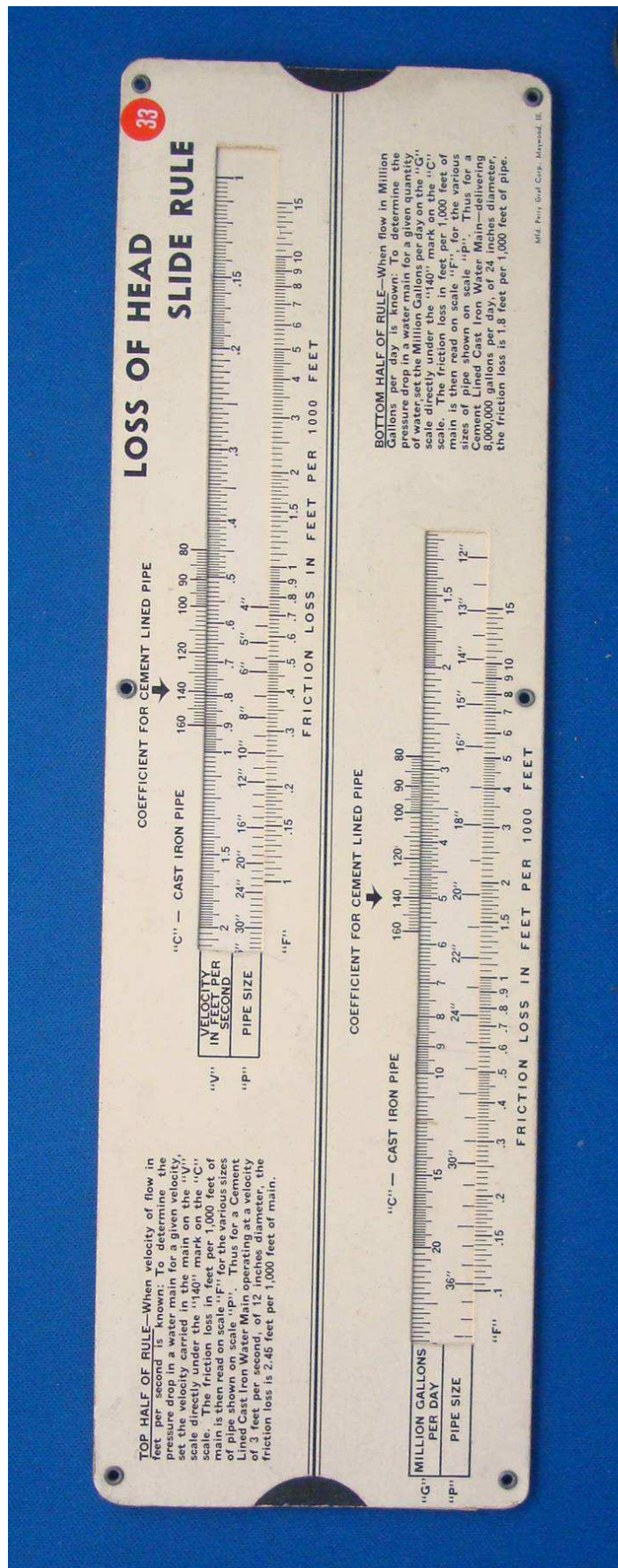


Figure 32: TCD-SCSS-U.20121208.003-fig32

Many flow tests have been conducted on Cement Lined Pipe which amply justifies the use of a friction factor of "140" for designing purposes. Actual tests by competent engineers on both new pipe and on installations after years of service show friction factors as high as "150." We are listing the "C" values as determined by actual tests from various cities over the country.

Based on Hazen-Williams Formula:
 $V = C \cdot R^{0.63} \cdot S^{0.54}$ 0.001—0.04

RESULTS OF FLOW TESTS ON CEMENT LINED CAST IRON PIPE

SIZE	AGE	LOCATION	VALUE OF "C"
4"	New	University of Illinois	149
6"	New	University of Illinois	151
8"	New	University of Illinois	150
10"	10 years	Dedham, Massachusetts	142
12"	14 years	Watertown, New York	149
12"	5 years	Manchester, New Hampshire	142
12"	11 years	Concord, New Hampshire	143
12"	15 years	Charleston, South Carolina	145
12"	15 years	West Palm Beach, Florida	140
14"	New	Concord, New Hampshire	151
30"	6 years	Corpus Christi, Texas	146
36"	New	Corpus Christi, Texas	145



**THE CAST IRON PIPE
RESEARCH ASSN.**

122 SO. MICHIGAN AVE.
CHICAGO 3, ILL.
THOMAS F. WOLFE, ENGINEER

Figure 33: TCD-SCSS-U.20121208.003-fig33