## PATENT **SPECIFICATION**

DRAWINGS ATTACHED

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## COMPLETE SPECIFICATION

## Slide Rule

We, CARL RUNE WERN, GEORGE HERMAN WERN and LARS AKE WERN, all Swedish citizens, of Värtavägen 59, Stockholm NO, Sweden, do hereby declare the invention for 5 which we pray that a patent may be granted to us and the method by which it is to be performed, to be particularly described in and by the following statement:-

The present invention relates to a slide rule

10 of the circular type. According to the invention, there is provided a slide rule of the circular type, comprising in combination; a bottom plate, said plate having a first circular, logarithmic scale, 15 a circular disc rotatably pivoted to said bottom plate on an axis which is concentric with said first logarithmic scale, said disc having second and third circular logarithmic scales located inside said first scale and being con-20 centric with the axis of rotation of said disc, the number of decimal periods of the graduations on each scale being equal and amounting to at least four for each of said scales, the figures of the said scales being radially 25 oriented, the angular positions of respective unity values for said scales on said disc being coincident, said second scale of said disc having increasing numerical values in the same direction as said first scale and said third scale having increasing numerical values in the opposite direction thereto, a runner rotatably pivoted on the same axis as the disc and extending radially over all of said scales, said runner being of transparent material and hav-35 ing radial index means and multiplication indication means located on or close to said radial index means and radially between said first scale and said third scale, said runner having also division indication means located on or close to said radial index means and radially between said first and second scales, said disc being provided with radial

index means coinciding in angular position

with the unity value of said disc scales and terminating adjacent said first scale.

The accompanying drawings illustrate an embodiment of the invention:

Figure 1 is a front view of the slide rule according to the invention;

Figure 2 is a cross-section of the slide rule according to Figure 1 along the line II-II as viewed in the direction of the arrows;

Figure 3 is a front view of the bottom plate belonging to the slide rule according to Figure 1;

Figure 4 is a front view of a rotatable disc belonging to the slide rule according to Figure 1;

Figure 5 is a front view of a radial runner belonging to the slide rule according to Figure

The slide rule illustrated in the drawings comprises a bottom plate 1 which is provided with nine circular scales concentric to each other and symmetrically located on the bottom plate 1. Said scales as counted from the rim of the bottom plate 1, Figure 3, towards its centre are designated a, m, n, D, A, p, r, s

The bottom plate 1 is also provided with a helical log log scale, said scale comprising five turns as illustrated in Figure 3, said five turns being designated d, e, f, g and h. There is also, at one edge of the bottom plate 1, a scale 1b graduated in millimetres or inches.

The rotatable slide of the slide rule, which is illustrated in fig. 4, is designated 2. It comprises four scales, all concentric with each other. From the periphery of the disc 2 the scales are designated B, C, b and c.

The area 2a inside the scale c is transparent in order to make the helical scale d to h of the bottom plate 1 visible when the disc shown in fig. 4 is mounted on the bottom plate, as illustrated in fig. 1. There are

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[Price 4s. 6d.]