1. BASIC USE OF THE SLIDE RULE

The slide rule scales are graduated between the numbers. From 10 to 1[illegible] each number is divided into 10 with the 5th line longer. The [illegible]mber 14 could be 14, 0·14, 1·4, 140, 1400, etc. depending where [illegible]u put the decimal point. The number 20 could be 20, 0·20, 2·0, [illegible]0, 2000, etc.

[illegible]or an example, take the second line past the 14. There are 10 [illegible]ivisions between the 14 and 15, therefore, each line in this case represents 0·1. The example was two lines past the 14, so it will be 0·2 past 14 which is 14·2. Depending on where you put the decimal point, this answer could be 1·42, 142, etc.

From 16 to 25, each number is divided into 5; therefore, each line represents 0·2. You will notice from the 20 on, only each 5th number is printed, the others being represented by the longer lines. From 25 to 50, each number is divided into 2; therefore the line represents 0·5. From 50 to 100 (10), each number is marked but there are no divisions.

The slide rule consists of two scales. The outer scale (black) and the inner scale (red) are identical plotted logarithms, i.e. the position of each number represents the log value of that number.

As an example, take the number 30. The log of 30 is 0·477, so the position of the line representing 30 will be 0·477 of the total distance around the scale. 0·477 is just under a half; therefore, the position of 30 is just under half of the distance around the scale. The same principle applies to all the numbers.

2. MULTIPLICATION AND DIVISION

To multiply two numbers when using logs, the logs of the numbers are added. Using the slide rule is practically the same except there is no requirement to look up the log or antilog. On the slide rule, the position of the numbers represents their log value.