

13. The Pickett Model 4

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Abstract: the various variants of the Pickett Model 4.

Keywords: Pickett & Eckel, Model 4.

Recent member of the Kring

I just joined the Dutch Kring, and thought it would be nice to pass on some information about Pickett slide rules.

The first slide rule made by Pickett & Eckel

Pickett & Eckel made their first slide rule around 1943, a cardboard mockup of the Deci-Point. In 1945, they made the magnesium Deci-Point, which appears to have had a short life in their product line. By 1947, the Models 2, 3, and 4 were in production. Pickett made the Model 2 through most of their operations, but the Models 3 & 4 definitely continued into the 1970s.

The Pickett Model 4 went through all the evolutionary changes during the thirty-year lifetime of the company. It started as a magnesium rule, changed to an aluminum rule, then to a thin aluminum rule, and so on.

The Original Model 4

The first Model 4 was made of 5/32nd inches thick magnesium, with an off white coating, and scales photographically placed on the surface. It had a square groove on top, in which rode the indicator spring, and a "VEE" groove on the bottom, which held the indicator windows just off the surface of the slide rule. This arrangement kept the indicator windows from being scratched against the magnesium rule.

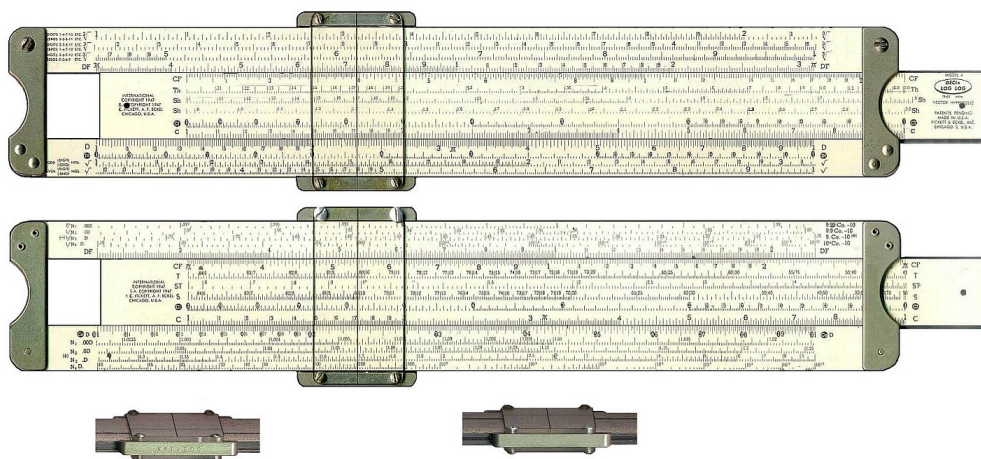


Image 1: Pickett Model 4 #1

It was not long before the scales were changed to a more modern form.

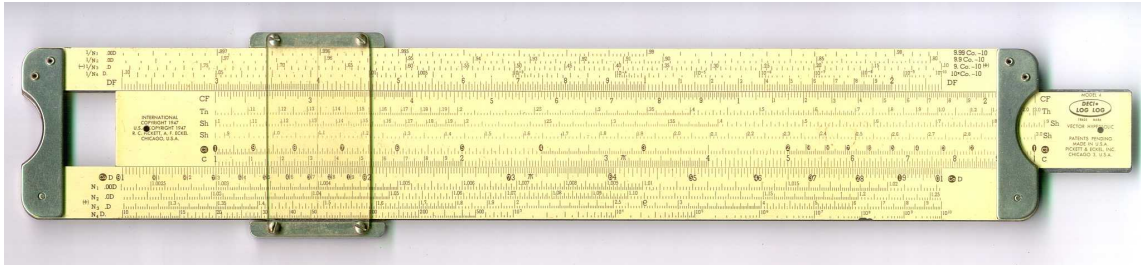


Image 2: Pickett Model 4 #2

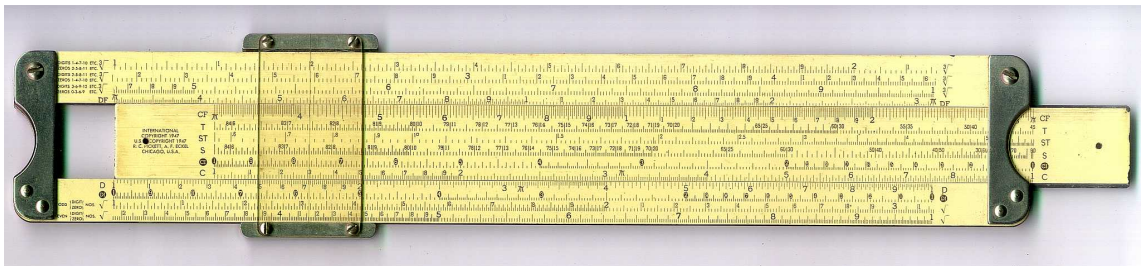


Image 3: Pickett Model 4 #3

The next variant uses the P&E inverted triangle on the right end of the slide. As

we will see, Pickett changed their logo numerous times.

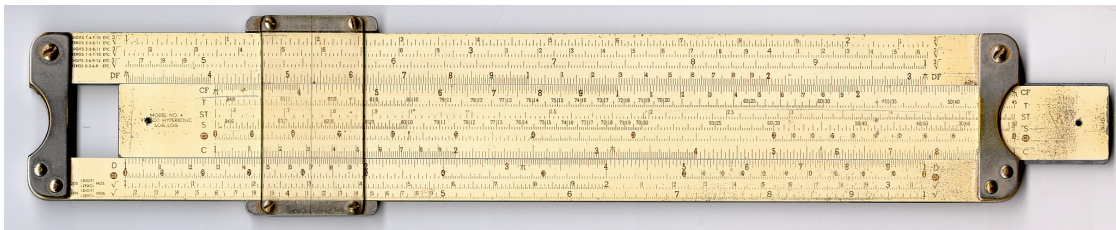


Image 4: Pickett Model 4 #4

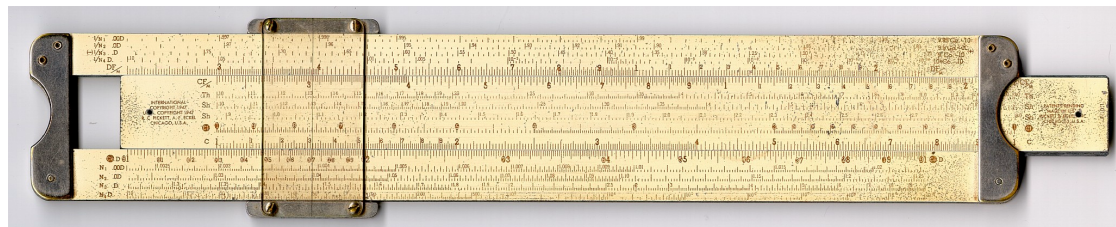


Image 5: Pickett Model 4 #5

Problems

At about this time, the problems with magnesium corrosion began to surface, and the Model 4s stopped being shipped with a vinyl case. Instead, Pickett substituted a non-woven grey felt slip cover, which was supposed to eliminate the corrosion problem. This worked to a degree, but not as well as Pickett would have liked. Pickett also moved the Model designation from the right end to the left

end of the slide, which would be the standard position for all Pickett slide rule models from then on. Pickett also adopted the Pickett logo inside an inverted triangle. They also instituted the use of mask numbers on the right end of the slide, in this case 243 and 254. The images shown below are of a Model 4 that once belonged to an engineer at Boeing, who used this rule to do his calculations on the 747 design.

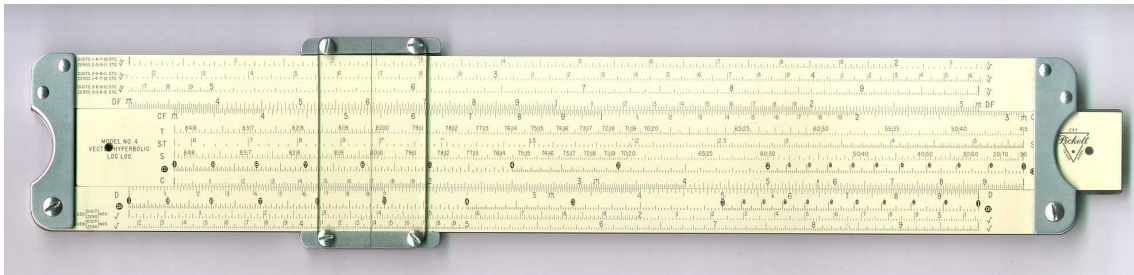


Image 6: Pickett Model 4 #6

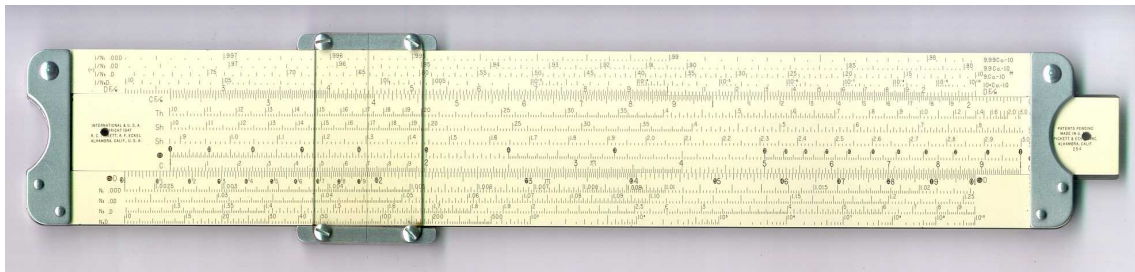


Image 7: Pickett Model 4 #7

There is a variant where Pickett switched to aluminum for the base metal of the rule, where the aluminum is $5/32^{\text{nd}}$ inches thick, but I do not have this variant in my collection at this time. I speculate that Pickett made this move to eliminate the magnesium corrosion problems. This variant continued to use the same tooling as its magnesium predecessor.

Pickett then switched to using $1/10^{\text{th}}$ inch thick aluminum, but continued with the four screw indicator, which required the flat groove on top, and the "Vee" groove on the bottom edge. Pickett also added color to this variant. The white model was designated the Model 4-T Dual-Base Log Log Reciprocal Scale (Vector

Hyperbolic). The new Eye-Saver yellow-green 5600 angstrom wavelength variant was called the Model 4-ES Dual-Base Log Log Reciprocal Scale (Vector Hyperbolic). Only the "-ES" version is shown below. Note the mask numbers on

the right end of the slide, 302 & 300. From this point on, Pickett issued both a "-T" and an "-ES" version of each variant. Unfortunately, I do not have an example of each variant in each color.

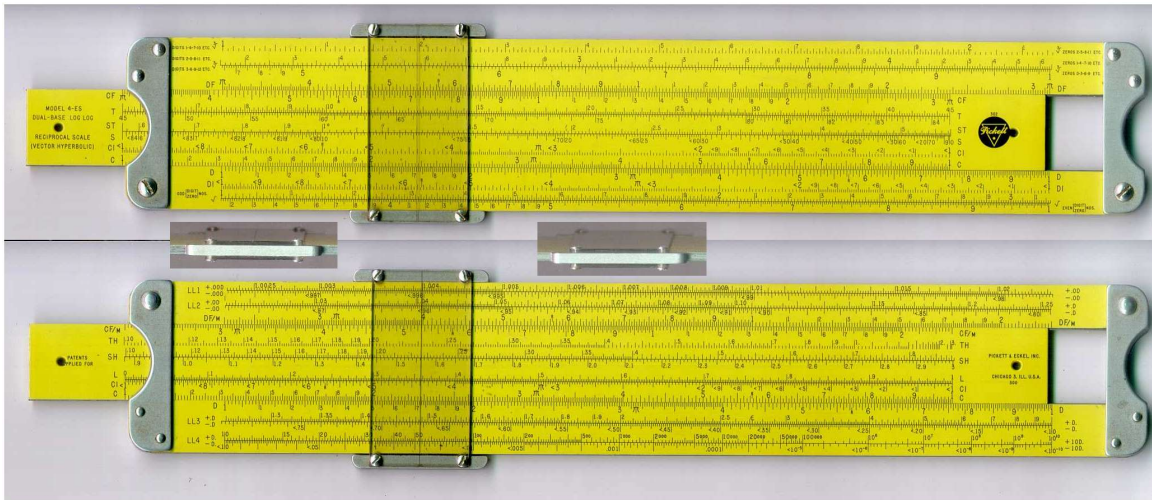


Image 8: Pickett Model 4 #8

Up until this time, Pickett used rounded edges on the stators, and on the finger holes for the slide. The next variant was treated to molded aluminum end braces, which completely covered the ends of the stators. They also had molded aluminum

indicator bars, along with a newly designed indicator window set. The indicator windows are flat. This new indicator used three screws to attach the windows to the indicator bars.

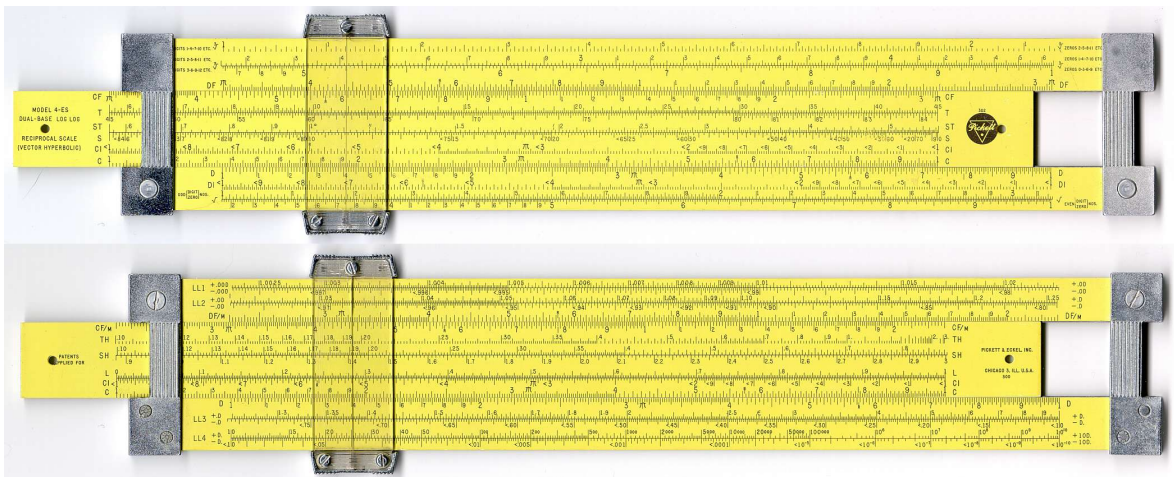


Image 9: Pickett Model 4 #9

The use of these molded aluminum parts made adjusting and using the slide rule fairly difficult, so Pickett moved on through a couple of other variants. The molded aluminum indicator bars were

replaced with the new nylon indicator bars, making it much easier to precisely locate the indicator during a calculation. These appeared for a very short time with the molded end braces



Ons nieuwe lid: Michael O'Leary

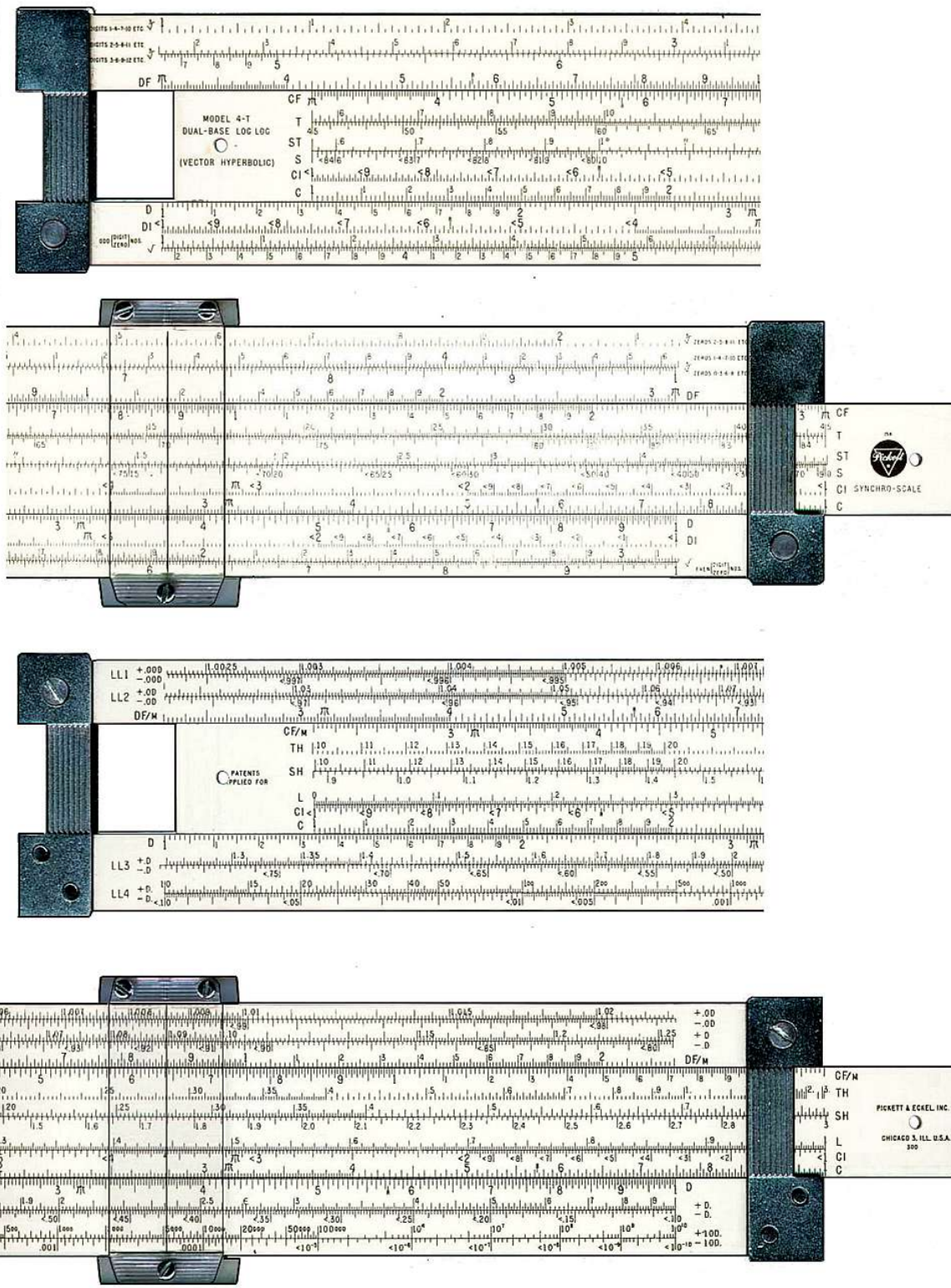


Image 10: Pickett Model 4 #10

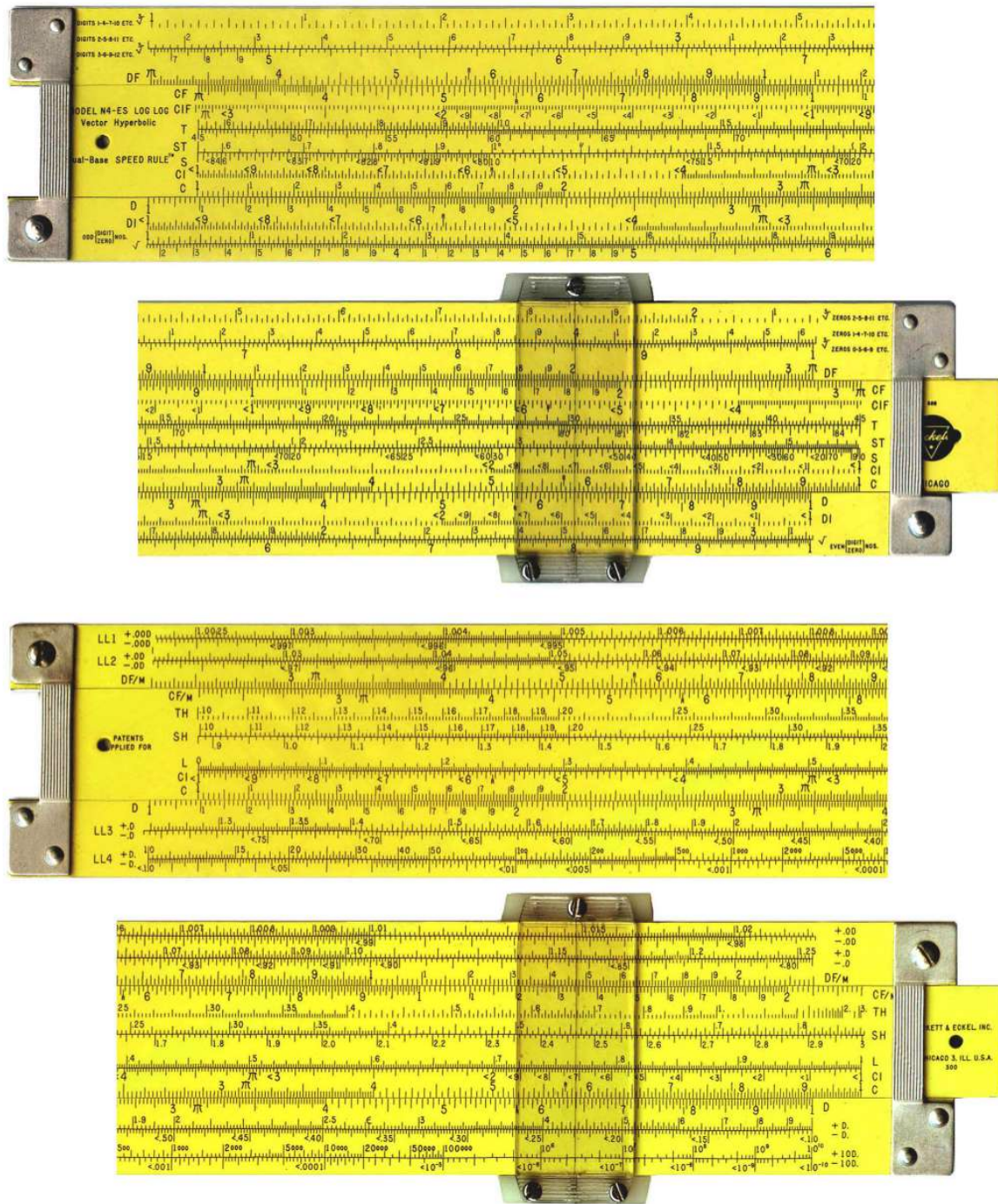


Image 11: Pickett Model 4 #11

And next

The next step in the saga comes when the aluminum end braces were replaced with

stamped aluminum end braces, and the replaceable threaded inserts in the adjustable end of the brace.

Note that the end braces have vertical lines over the slide. The screws and threaded inserts were specially made for Pickett out of aluminum, which eliminated the possibility of corrosion due to the use of dissimilar metals. Both the screws and the threaded inserts could be

easily replaced by the dealer, and were a standard part of Pickett's parts kits. Pickett also introduced the "EZE Slider" springs just under the adjusting screw in the end braces. This pair of tiny leaf springs applied a little tension to the slide, which made it very easy to adjust.

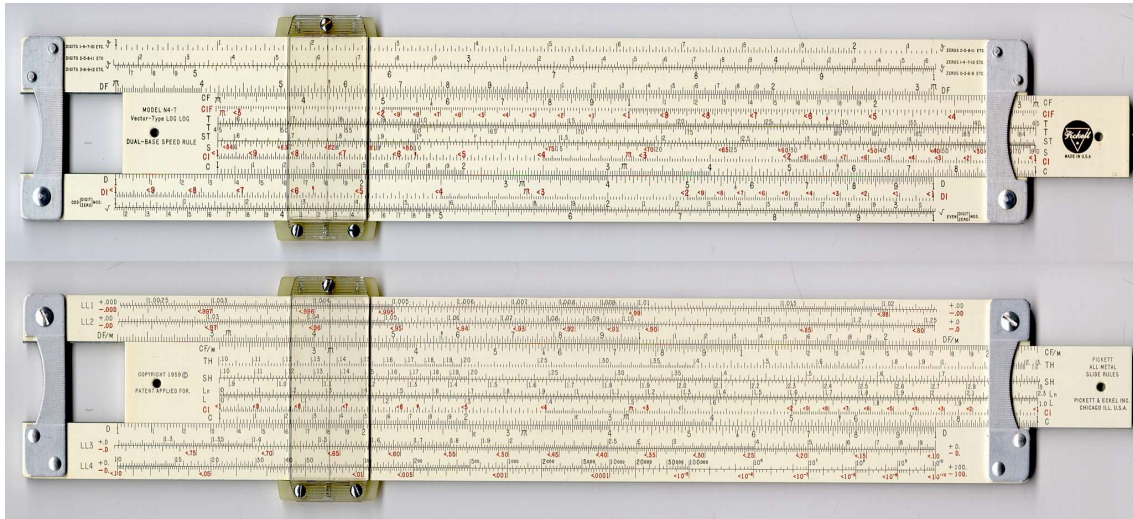


Image 12: Pickett Model 4 #12

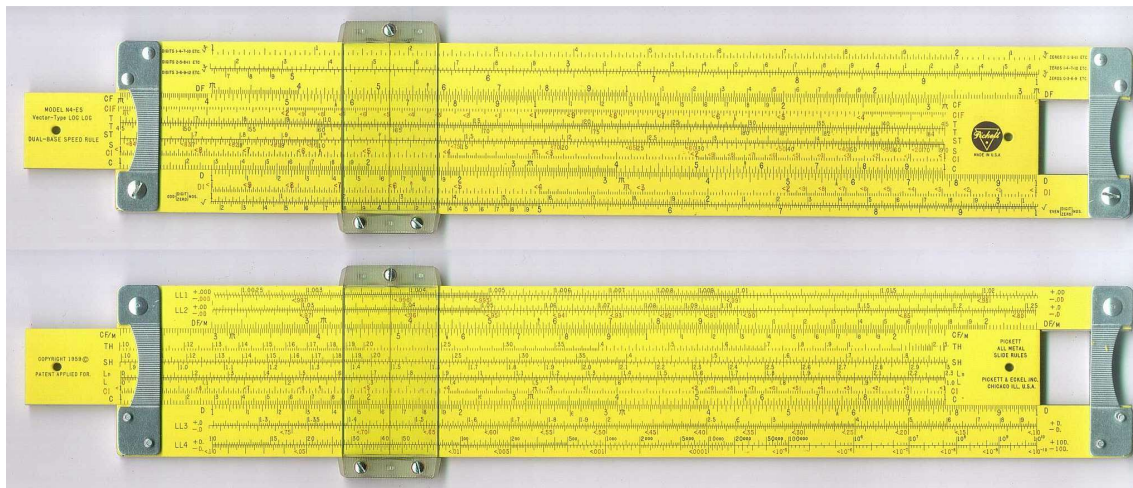


Image 13: Pickett Model 4 #13

The end braces were changed out to having horizontal ribs over the slide, next. Even more important, though was the introduction of color for the inverted scale numbers and markings, using red instead of the all black color scheme of the earlier rules. This variant continued to use the flat indicator windows, and was copyrighted in 1959. If you are still with me on this, you are

truly a slide rule collector! The curved indicator comes next!

Magnifiers

Magnifiers being an interesting change, Pickett made a special half round indicator to provide some magnification for their Models 3, 4 & 16 rules.

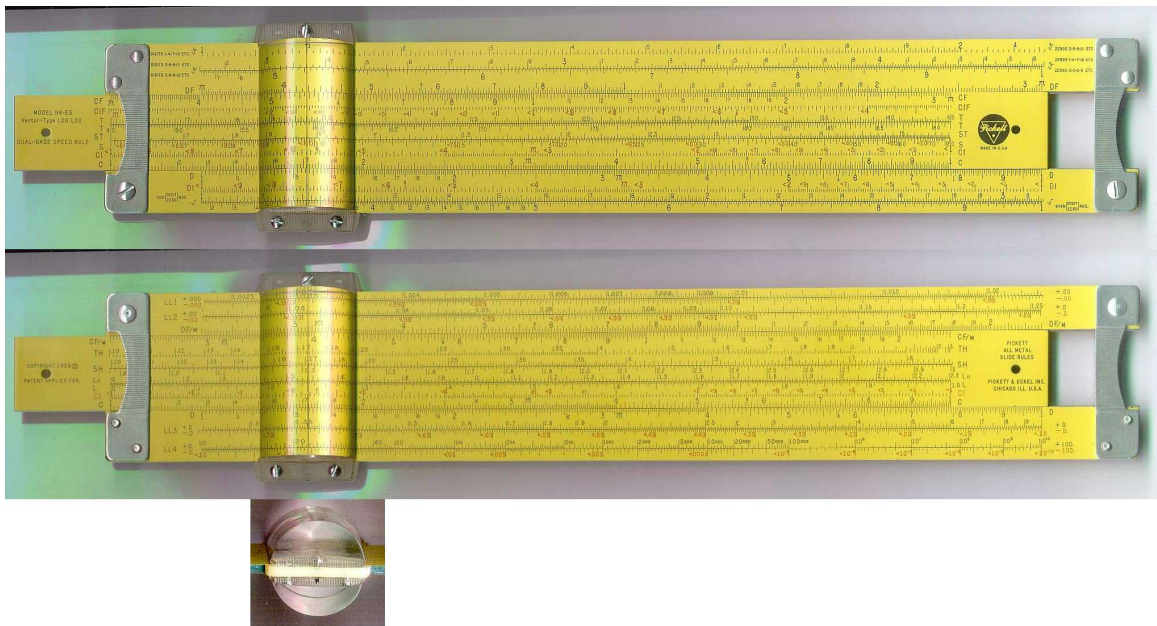


Image 14: Pickett Model N4M-ES #14



Image 15: Pickett Model 4 #15

In comes another logo change.

I have not been able to verify the last change I suspect was made, which was to eliminate the "EZE Slider" springs. As you can see, there are a lot of changes that showed up in the Model 4. Now, think

about this. All these changes also happened in all the magnesium/aluminum models Pickett made. This will give you some idea of the magnitude of models and variations in the Pickett model line.