

REPRINT
18TH EDITION CATALOG



DRAFTING MATERIALS
TRACING REPRODUCING PROCESSES



THE FREDERICK POST COMPANY

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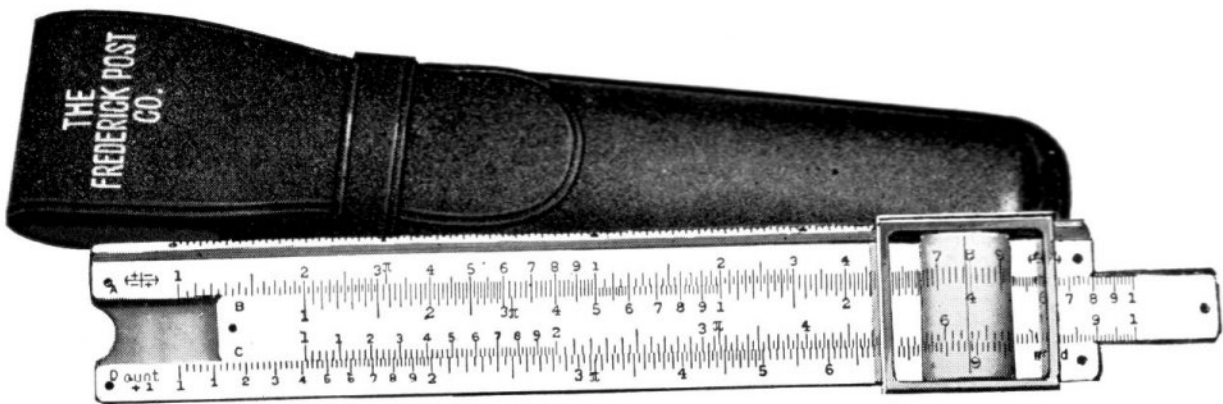
MINIATURE VEST POCKET SLIDE RULES

POST'S Vest Pocket Slide Rules in their present perfected form have become indispensable in all professions where checking and calculating is a factor of vital importance. The following list of Rules are so created and proportioned as to fit the vest pocket.

They are accurately engine divided on white celluloid face with body of built up Bamboo and special Aluminum reinforcing plate. Will not warp or get out of adjustment.

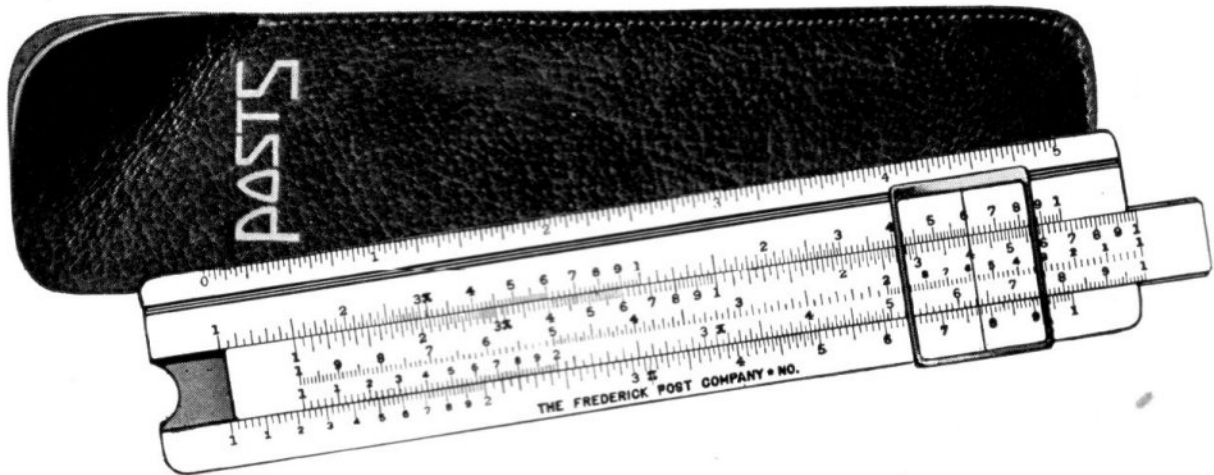
These Rules have glass indicators with special metal protection rim.

- No. 1437. **SLIDE RULE.** 4-inch Mannheim type with A, B, C, D, S, L and T scales. In leather sheathEach,
- No. 1438. **SLIDE RULE.** 5-inch Mannheim Multiphase type with A, B, C, D, CI, S, L and T scales. In leather sheath.....Each,



No. 1441

- No. 1440. **SLIDE RULE.** 4-inch Mannheim type with A, B, C, D, S, L and T scales. In leather caseEach,
- No. 1441. **SLIDE RULE.** 4-inch. Same as 1440 but with Magnifying Indicator. (See illustration.) In leather case.....Each,



No. 1444

- No. 1443. **SLIDE RULE.** 5-inch Extra Thin, Mannheim type with A, B, C, and D scales. In leather sheathEach,
- No. 1444. **SLIDE RULE.** 5-inch Extra Thin, Mannheim Multiphase type with A, B, C, D, CI, S, L and T scales. (See illustration.) In leather sheath.....Each,
- No. 1445. **SLIDE RULE.** 5-inch Extra Thin with CF, DF, CI, C, D, S, L and T Scales. In leather sheathEach,

MANNHEIM TYPE SLIDE RULES

POST'S Slide Rules, both special and Mannheim type, are engine divided on white celluloid mounted on a body of built up, well seasoned and carefully prepared Bamboo with a special reinforcing plate of Aluminum. Bamboo being impervious to moisture will not expand or contract, thereby assuring maximum accuracy and ease of operation of the slides and moving parts.

Metal-glass indicator with screws in metal and a brace for glass which prevents breaking.

SCALES

On the upper face are two sets of logarithmic scales, A, B, C and D for multiplying, dividing, squaring and extracting square roots.

On the under side of the slide it has the S and T scales for carrying out trigonometrical calculations and a logarithmic L scale by means of which higher powers and roots are easily determined.

STUDENT SLIDE RULE

10-Inch

- No. 1446. MANNHEIM SLIDE RULE, 10-inch,** engine divided on white celluloid with glass and metal indicator, in fabricoid case with instructions.....Each,

MANNHEIM ADJUSTABLE SLIDE RULES

5-Inch

- No. 1448. MANNHEIM SLIDE RULE, 5-inch,** engine divided on white celluloid with glass and metal indicator, in fabricoid case with instructionsEach,

- No. 1448L. MANNHEIM SLIDE RULE, 5-inch.** Same as 1448 but in sewed leather case with instructions.....Each,

10-Inch

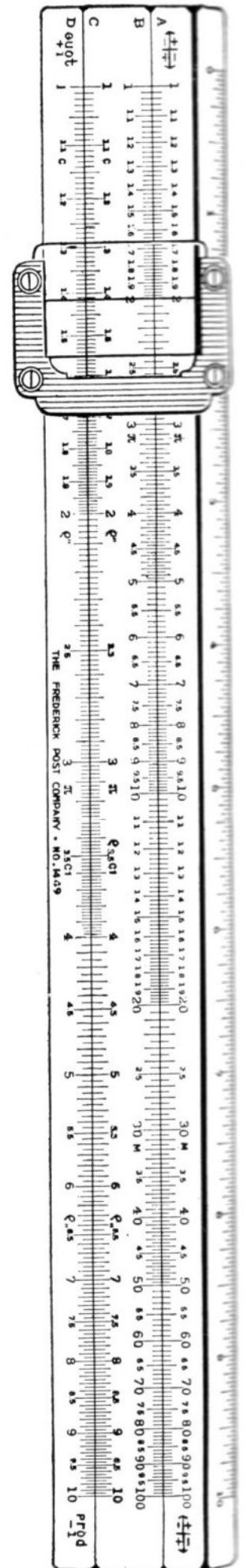
- No. 1449. MANNHEIM SLIDE RULE, 10-inch,** engine divided on white celluloid with glass and metal indicator, in fabricoid case with instructionsEach,

- No. 1449L. MANNHEIM SLIDE RULE, 10-inch.** Same as 1449 but in sewed leather case with instructions.....Each,

20-Inch

- No. 1450. MANNHEIM SLIDE RULE, 20-inch,** engine divided on white celluloid with glass and metal indicator, in fabricoid case with instructionsEach,

- No. 1450L. MANNHEIM SLIDE RULE, 20-inch.** Same as 1450 but in sewed leather case with instructions.....Each,



No. 1449

UNIVERSAL SLIDE RULES

The following scales appear on the face of these rules:

- A**—Standard logarithmic square scale divided 1 to 100 for reading squares and square roots.
- B**—Same as A, logarithmically divided 1 to 100.
- CI**—Standard C scale inverted. When used with C scale gives reciprocals by hairline, including cofunctions (trig.).
- C**—Logarithmic scale divided 1 to 10 for multiplication and division when used in conjunction with D scale.
- D**—Same as logarithmic C scale. When used with A scale gives the squares and with K gives the cubes.
- K**—Standard logarithmic scale of three units for reading cubes and cube roots directly.

On Reverse Side of Slider

- S**—Full length sine and cosine scale divided from $0^{\circ}34'$ to 90° in degrees and minutes.
- L**—Equal parts scale, used with D scale to secure directly, the logarithm of any number.
- T**—This scale is divided in degrees and minutes from $5^{\circ}45'$ to 45° . Tangents of angles from $5^{\circ}45'$ are read directly by hairline on D scale when indexes are lined up. Tangents of angles from 45° to 90° as well as cotangents, are obtained by use of the complementary angle and the D and CI scale.

Advantages

Solves oblique angles directly, without tables, using sine rule.

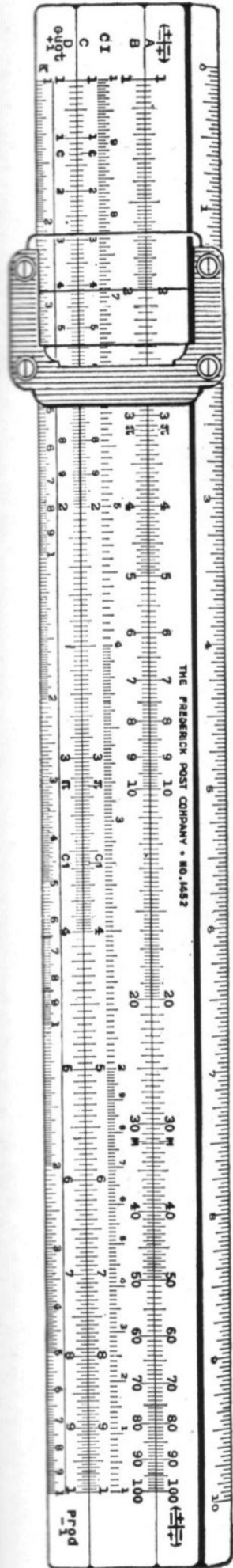
Metal-glass indicator with screws in metal and brace for glass prevents breaking of glass and thus eliminates additional expense of replacement of that item.

Extra gauge marks accentuate its accuracy and its speed, because the amounts never are even numbers and the settings are made unerringly and far more rapidly with this feature.

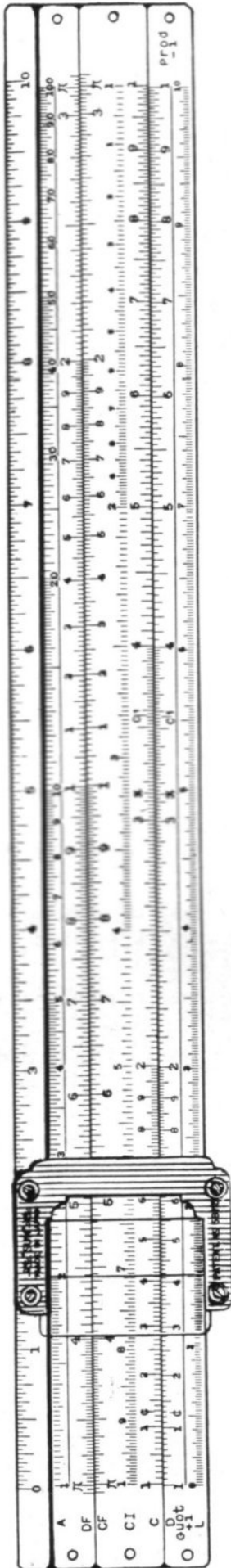
Hairline is snugly placed over markings and is of a reddish hue which makes reading easier.

This slide rule is adjustable, but, unlike all other makes of slide rules, once set to your desires, no further adjustment is ever necessary because the laminated Bamboo is impervious to moisture and prevents warping. Further, this slide rule has an aluminum back—an additional reason for the constantly smooth action of the slider and increased accuracy.

- No. 1451. **UNIVERSAL SLIDE RULE.** 5-inch. In fabricoid case...
- No. 1451L. **UNIVERSAL SLIDE RULE.** 5-inch. In leather case....
- No. 1452. **UNIVERSAL SLIDE RULE.** 10-inch. In fabricoid case..
- No. 1452L. **UNIVERSAL SLIDE RULE.** 10-inch. In leather case...
- No. 1453L. **UNIVERSAL SLIDE RULE.** 5-inch. In leather case with extra fine divisions and magnifier. The ideal pocket rule for all professional men. The fine divisions give this 5-inch rule the accuracy of a 10-inch rule.....
- No. 1454. **UNIVERSAL SLIDE RULE.** 20-inch. In fabricoid case..
- No. 1454L. **UNIVERSAL SLIDE RULE.** 20-inch. In leather case...



No. 1452



No. 1455

UNIVERSAL SLIDE RULES

With CF and DF Scales

The following scales appear on the face of these rules:

- A**—Standard logarithmic square scale divided 1 to 100 for reading squares and square roots.
- CF**—This is the C scale folded.
- DF**—This is the D scale folded.
- CI**—Standard C scale inverted. When used with C scales gives reciprocals by hairline, including cofunctions (trig.).
- C**—Logarithmic scale divided 1 to 10 for multiplication and division when used in conjunction with D scale.
- D**—Same as logarithmic C scale. When used with A scale gives the squares and with K gives the cubes.
- K**—Standard logarithmic scale of three units for reading cubes and cube roots directly.

On Reverse Side of Slider

- S**—Full length sine and cosine scale divided from $0^{\circ} 34'$ to 90° in degrees and minutes.
- L**—Equal parts scale, used with D scale to secure directly, the logarithm of any number.
- T**—This scale is divided in degrees and minutes from $5^{\circ} 45'$ to 45° . Tangents of angles from $5^{\circ} 45'$ are read directly by hairline on D scale when indexes are lined up. Tangents of angles from 45° to 90° as well as cotangents, are obtained by use of the complementary angle and the D and CI scale.

Advantages

The principal advantage of this scale lies in the use of the folded scales, which permit calculations with a minimum number of settings and without using extremities of the scale or resetting, as would be necessary when using only C and D scales.

The folded scales correspond in every respect to the C and D scales, except that each has but one index which is located as close to the center of the rule as possible.

The CI scale, an inverted full length C scale, is used in conjunction with all other scales, enabling the operator to take three factors at one setting of the slide and to read reciprocals by means of the indicator.

This scale has an inch scale on one edge and a centimeter scale on the opposite edge.

- No. 1455. UNIVERSAL SLIDE RULE.** 10-inch. In fabricoid case with instructionsEach,
- No. 1455L. UNIVERSAL SLIDE RULE.** 10-inch. In leather case with instructions

ELECTRICAL SLIDE RULES

The following scales appear on the face of these rules:

- A**—Standard logarithmic square scale divided 1 to 100 for reading squares and square roots.
- B**—Same as A, logarithmically divided 1 to 100.
- CI**—Standard C scale inverted. When used with C scale gives reciprocals by hairline, including cofunctions (trig.).
- C**—Logarithmic scale divided 1 to 10 for multiplication and division when used in conjunction with D scale.
- D**—Same as logarithmic C scale. When used with A scale gives the squares and with K gives the cubes.

In addition, this rule has three logarithmic scales by means of which powers and roots of the form a^x and \sqrt{x} can be calculated where x may be fractional. The rule is numbered from 1.1 to 100,000 and is limited to this due to the length of the rule. However, its range covers the majority of general calculations within these limits.

The efficiency of a dynamo or motor can be determined by a single setting of the slide, while the cross section of an electrical copper conductor for direct or alternating current, free from induction, can be obtained by two settings of the slide, the other necessary data being given.

On Reverse Side of Slider

- S**—Full length sine and cosine scale divided from $0^\circ 34'$ to 90° in degrees and minutes.
- L**—Equal parts scale, used with D scale to secure directly, the logarithm of any number.
- T**—This scale is divided in degrees and minutes from $5^\circ 45'$ to 45° . Tangents of angles from $5^\circ 45'$ are read directly by hairline on D scale when indexes are lined up. Tangents of angles from 45° to 90° as well as cotangents, are obtained by use of the complementary angle and the D and CI scale.

Advantages

Solves oblique angles directly, using sine rule.

Is of special use to electrical and mechanical engineers in electrical calculations, owing to its practical utility and simplicity of operation.

Metal-glass indicator with screws in metal and brace for glass prevents breaking of glass and thus eliminates additional expense of replacement of that item.

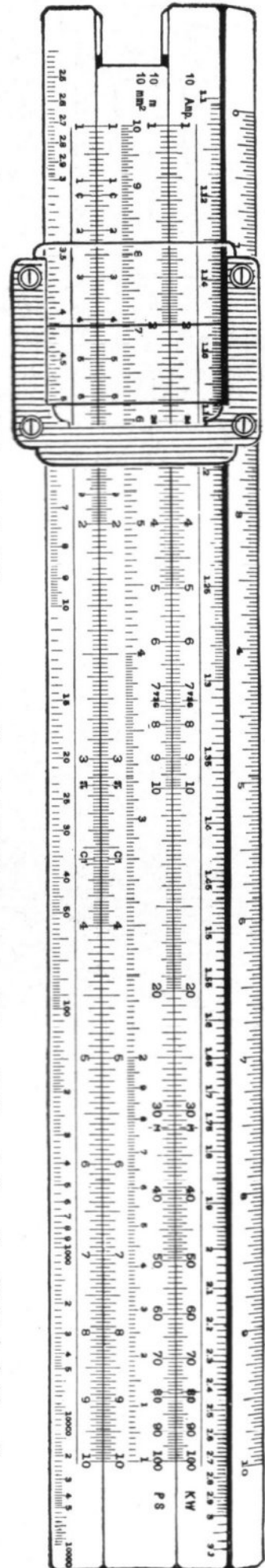
Extra gauge marks accentuate its accuracy and its speed, because the amounts never are even numbers and the settings are made unerringly and far more rapidly with this feature.

Hairline is snugly placed over markings and is of a reddish hue which makes reading easier.

This slide rule is adjustable, but, unlike all other makes of slide rules, once set to your desires, no further adjustment is ever necessary because the laminated Bamboo is impervious to moisture and prevents warping. Further, this slide rule has an aluminum back—an additional reason for the constantly smooth action of the slider and increased accuracy.

Each

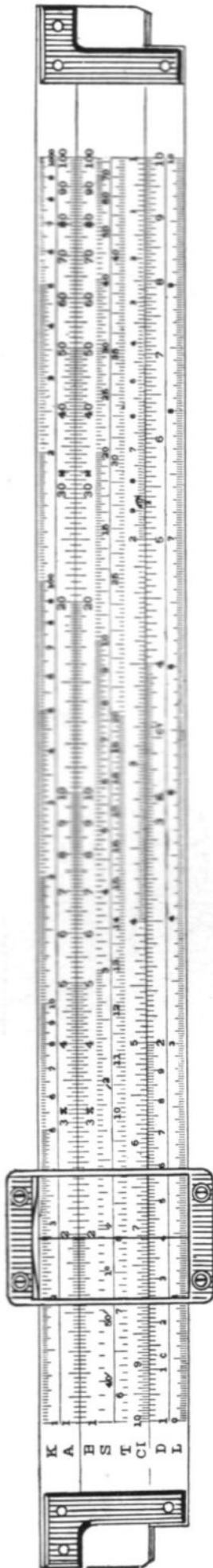
- No. 1456.** ELECTRICAL SLIDE RULE. 10-inch. In fabricoid case with instructions.....
- No. 1456L.** ELECTRICAL SLIDE RULE. 10-inch. In leather case with instructions.....



No. 1456

UNIVERSAL SLIDE RULES

(DUPLIX TYPE)



No. 1458

The following scales appear on the face of this rule:

- K**—Standard logarithmic scale of three units for reading cubes and cube roots directly.
- A**—Standard logarithmic square scale divided 1 to 100 for reading squares and square roots.
- B**—Same as A, logarithmically divided 1 to 100.
- S**—Full length sine and cosine scale divided from $0^{\circ}34'$ to 90° in degrees and minutes.
- T**—This scale is divided in degrees and minutes from $5^{\circ}45'$ to 45° . Tangents of angles up to 45° are read directly by hairline on D scale when indexes are lined up. Tangents of angles from 45° to 90° , as well as cotangents, are obtained by use of the complementary angle and the D and CI scales.
- CI**—Standard C scale inverted. When used with C scales gives reciprocals by hairline, including cofunctions (trig.).
- D**—Logarithmic scale divided from 1 to 10. This scale, as stated above, when used in conjunction with T scale, gives tangents using hairline—with CI gives reciprocals using hairline—with B gives squares and D gives square roots—with K scale, K gives cubes and D gives cube roots—with L equal parts scale when indexes line up, the logarithm of D numbers are read directly below on the L scale. (In Mannheim type, set number on C scale of which log is desired against right index of D scale. Read log on L scale underneath face of rule.)
- L**—Equal parts scale, used with D scale to secure directly, the logarithm of any number.

On Reverse Side

- DF**—This is the D scale folded.
- CF**—This is the C scale folded.
- CIF**—This is the C scale inverted and folded.

The same operations are performed with these scales as with C, D, and CI scales. The advantage of these folded scales is that they permit calculation with a minimum number of settings, and without using extremities of scale or resetting as would be necessary when using only C and D scales. They are all logarithmically divided. By folding the scale, more factors may be handled in an operation using the CIF, CF and DF scales.

- C**—Logarithmic scale divided 1 to 10 for multiplication and division when used in conjunction with D scale.
- D**—Same as logarithmic C scale. When used with A scale gives the squares and with K gives the cubes.

UNIVERSAL SLIDE RULES

(DUPLIX TYPE)

Advantages

Solves oblique angles directly, using sine rule.

Metal-glass indicator with screws in metal (Patented) prevents breaking of glass and thus eliminates additional expense of replacement of that item.

Bamboo (one of 3 hardest woods in the world) used as base of construction, is oil cured, thoroughly seasoned, pieced together for extra strength, will not warp at sea level and therefore maintains its superb accuracy.

Extra gauge marks accentuate its accuracy and its speed, because the amounts never are even numbers and the settings are made unerringly and far more rapidly.

Hairline is snugly placed over markings and is of a reddish hue which makes reading easier.

This slide rule is adjustable, but, unlike all other makes of slide rules, once set to your desires, no further adjustment is ever necessary because this slide rule of laminated Bamboo base construction never warps.

Special Markings

On A and B scales appears (M) at $31.83 = \frac{100}{\pi}$. Setting this point on B to the diameter of a cylinder on A, the circumference is read over 1, or 100B, or the area of the curved surface over the length on B.

On A and B Scales appears the red line at $.7854 = \frac{\pi}{4}$.

On C and D scales

$$c \text{ is found at } 1.128 = \sqrt{\frac{4}{\pi}}$$

$$c_1 \text{ is found at } 3.568 = \sqrt{\frac{40}{\pi}}$$

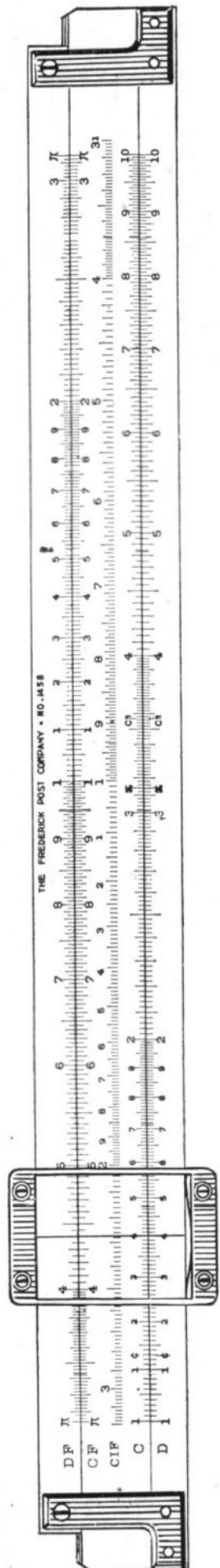
These are useful in calculating the contents of cylinders and are thus derived: cubic contents of cylinder of diameter d and length L, then $V = \frac{\pi d^2 L}{4}$; substituting for $\frac{\pi}{4}$ its reciprocal $\frac{4}{\pi}$ the formula be-

comes $\frac{d^2 L}{1.273}$. Take square root of fractional part and we have

$\left(\frac{d}{1.128}\right)^2 \times L$. It is now convenient to set gauge mark c on C to d on D and read over L on B the cubic contents on A. Successive multiplication is avoided by substituting the reciprocal of the constant, thus bringing the expression into form $\frac{axb}{c}$, which requires one setting of slide rule. The advantage of dividing d before squaring it is evident. The mark $c_1 = c\sqrt{10}$ and is used if it is necessary to draw slide more than half its length to the right.

No. 1458. UNIVERSAL SLIDE RULE—Duplex type—10-inch—all white celluloid facing with engine divisions. Bamboo base prevents warping and maintains accuracy. Patent glass-metal indicator with screws in metal to prevent breaking glass. Trigonometrical scales are divided logarithmically. (Special gauge points are marked to facilitate engineering calculations.) In fabricoid case with instructions.....Each,

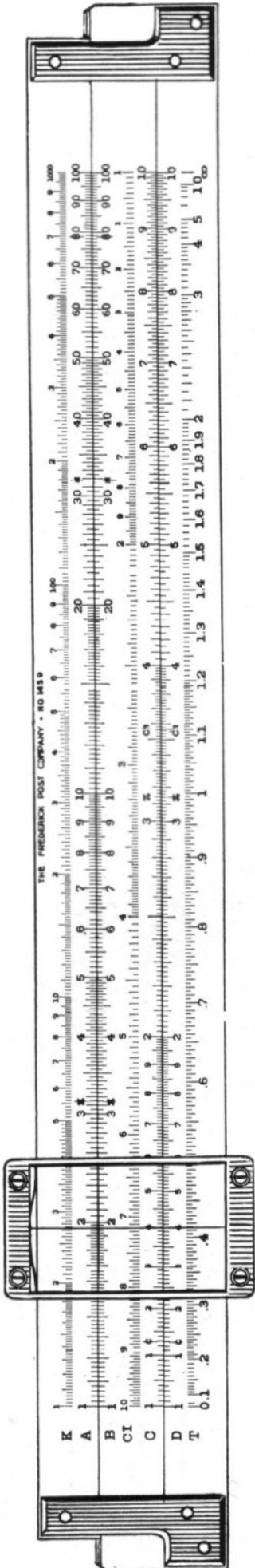
No. 1458L. UNIVERSAL SLIDE RULE. Same as 1458 but in leather case with instructions.....Each,



No. 1458

UNIVERSAL SLIDE RULES

(SPECIAL LOG LOG TYPE)



No. 1459

The following scales appear on the face of this slide rule:

- K**—Standard logarithmic scale of three units for reading cubes and cube roots directly.
- A**—Standard logarithmic square scale divided 1 to 100 for reading squares and square roots.
- B**—Same as A, logarithmically divided 1 to 100.
- CI**—Standard C scale inverted. When used with C scales gives reciprocals by hairline, including cofunctions (trig.).
- C**—Logarithmic scale divided 1 to 10 for multiplication and division when used in conjunction with D scale.
- D**—Same as logarithmic C scale. When used with A scale gives the squares and with K gives the cubes.
- T**—Gives tangent of θ angle directly from θ scale by use of hairline. Trigonometric function read directly up to 84.5° , as sines read directly up to 90° .

On Reverse Side

- θ —Trigonometric scale decimally divided to degrees and tenths of degrees. This scale is of special interest to the engineering field as trigonometric functions are read directly to 90° when used in conjunction with P, T, or Q scales.
- R θ** —Standard radian scale giving radians and percentages thereof, of θ angles.
- P**—Decimally divided sine scale, for directly solving $\sqrt{a^2 \pm b^2}$.
- Q**—Decimally divided cosine scale, used with P scale.
- Q'**—This is an extension of Q scale, used with P scale.
- C**—This is a single logarithmic scale divided 1 to 10.
- LL1, LL2, LL3**—
Continuous Log Log Scales in three parts.

Advantages

Setting hairline at θ degrees on θ scale (which runs to 90°).

Read Directly

Sines (on P scale) of all angles from 5.75° to 90° .
Tangents (on T scale) of all angles from 5.75° to 84.5° .
Cosines (on Q scale) of all angles from 5.75° to 90° .

Read Directly Cofunctions, as follows:

Cotangents on CI scale of all angles from 5.75° to 84.5° .
Secants on CI scale of all angles from 5.75° to 90° .
Cosecants on CI scale of all angles from 5.75° to 90° .

UNIVERSAL SLIDE RULES

(SPECIAL LOG LOG TYPE)

Solves Right Triangles Directly

Bamboo being impervious to moisture eliminates warping and other causes of inaccuracies common to all other slide rules.

Special Markings

A and B Scales

M, at 31.83 = $\frac{100}{\pi}$ Setting this point on B to the diameter of a cylinder on A, the circumference is read over 1, or 100B, or the area of the curved surface over the length on B.

$\frac{\pi}{4}$ at .7854 This is used as below.

C and D Scales

c and c₁ are found at 1.128 = $\sqrt{\frac{4}{\pi}}$ and at 3.568 = $\sqrt{\frac{40}{\pi}}$

These are useful in calculating the contents of cylinders and are thus derived: cubic contents of cylinder of diameter d and length L, then

$$V = \frac{\pi d^2 L}{4}; \text{ substituting for } \frac{\pi}{4} \text{ its}$$

reciprocal, $\frac{4}{\pi}$ the formula becomes

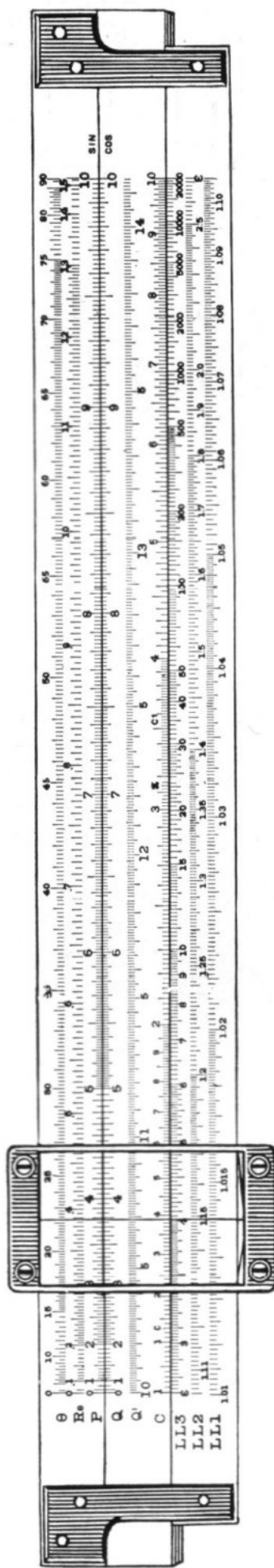
$$\frac{d^2 L}{1.273}. \text{ Take sq. rt. of fractional part,}$$

and we have $\left(\frac{d}{1.128}\right)^2 \times L$. It is now convenient to set gauge mark c on C to d on D and read over L on B the cubic contents on A. Successive multiplication is avoided by substituting the reciprocal of the constant, thus bringing the expression into the form $\frac{axb}{c}$, which requires one setting of

slide rule. The advantage of dividing d before squaring it is evident. The mark c₁ = c x $\sqrt{10}$ and is used if it is necessary to draw slide more than half its length to the right.

No. 1459. UNIVERSAL SLIDE RULE. 10-inch—all white celluloid facing with engine divisions. Bamboo base prevents warping and maintains accuracy. Patent glass-metal indicator with screws in metal to prevent breaking glass. Trigonometrical scales are divided decimally from 5° to 90°. In fabricoid case with instructions.Each,

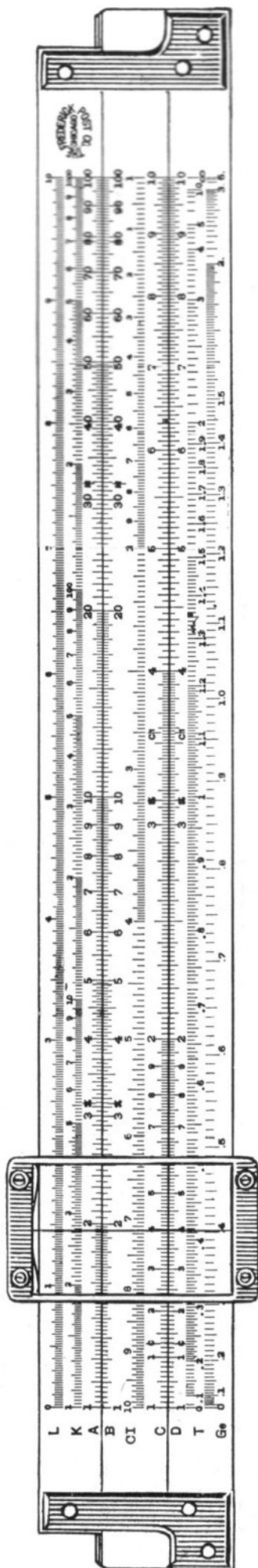
No. 1459L. UNIVERSAL SLIDE RULE. Same as 1459 but in leather case with instructions.Each,



No. 1459

SLIDE RULES

UNIVERSAL DE LUXE



No. 1461

The following scales appear on the face of this slide rule:

- L**—Equal parts scale, used with D scale to secure directly, the logarithm of any number.
- K**—Standard logarithmic scale of three units for reading cubes and cube roots directly.
- A**—Standard logarithmic square scale divided 1 to 100 for reading squares and square roots.
- B**—Same as A, logarithmically divided 1 to 100.
- CI**—Standard C scale inverted. When used with C scales gives reciprocals by hairline, including cofunctions (trig.).
- C**—Logarithmic scale divided 1 to 10 for multiplication and division when used in conjunction with D scale.
- D**—Same as logarithmic C scale. When used with A scale A gives the squares and with K gives the cubes.
- T**—Gives tangent of θ angle directly from θ scale by use of hairline. Trigonometric function tangent read directly up to 84.5° , as sines read directly up to 90° , also $\sinh\theta$ read directly when used with $G\theta$ scale.
- $G\theta$** —NEW PATENTED GUDERMANIAN (theorem) SCALE. Reads directly $\sinh\theta$, $\tanh\theta$, $\operatorname{gd}x$, also hyperbolic cofunctions $\cosh\theta$, $\coth\theta$ and $\operatorname{cosech}\theta$.

On Reverse Side

- θ —Trigonometric scale decimally divided to degrees and tenths of degrees. This scale is of special interest to the electrical engineering field as trigonometric and hyperbolic functions as well as cofunctions are read direct when used in conjunction with P, T, Q, and $G\theta$ scales.
- $R\theta$** —Standard radian scale giving radians and percentages thereof, and $\operatorname{gd}x$.
- P**—Decimally divided sine scale, for solving $\sqrt{a^2 \pm b^2}$ etc. directly. Also, $(a^2 + b^2 - c^2)$, one setting.
- Q**—Decimally divided cosine scale, for use with P scale.
- Q'**—This is an extension of Q scale, for use with P scale.
- C**—This is a single logarithmic scale divided 1 to 10.
- LL1, LL2, LL3**—
Continuous Log Log Scales in three parts.

ADVANTAGES

Direct Reading Advantages:

Sines, Cosines, Secants and Cosecants read directly from 5.75° to 90° .

Tangents and Cotangents read directly from 5.75° to 84.5° .

SLIDE RULES UNIVERSAL DE LUXE

Many trigonometrical and hyperbolic functions and co-functions read directly by unique arrangement of scales.

Solves right triangles directly.

Requires less settings, has greater accuracy and greater speed of operation.

Special gauge points facilitate accurate settings.

Special Markings

A and B Scales

M , at 31.83 = $\frac{100}{\pi}$ Setting this point on B to the diameter of a cylinder on A, the circumference is read over 1, or 100B, or the area of the curved surface over the length on B.

$\frac{\pi}{4}$ at .7854 This is used as below.

C and D Scales

c and c_1 are found at $1.128 = \sqrt{\frac{4}{\pi}}$ and at $3.568 = \sqrt{\frac{40}{\pi}}$

These are useful in calculating the volume, curved surface, circumference, diameter, etc. of cylinders, where

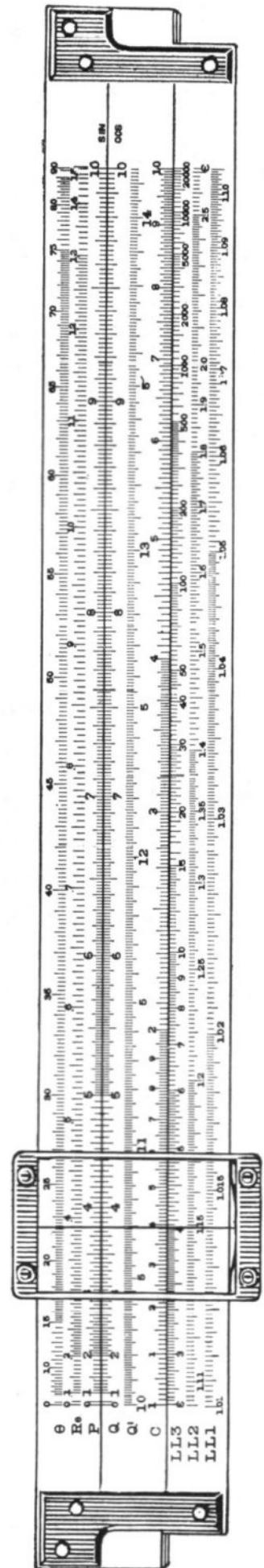
$$V = \frac{\pi d^2 L}{4}$$

In addition to the advantages listed above, this slide rule, with its epoch-making non-logarithmic scales, enables the engineer to solve the widest variety of problems in a quicker, simpler and more accurate manner. For instance, using the L and P' scales, the square root of a number may be read to approximately 5 place accuracy. Belting problems of the mechanical engineer are solved at one setting of the P and Q scales. The result is read on L scale.

The most casual examination of this slide rule quickly reveals the singular arrangement of its scales resulting in easier setting and more accurate readings.

No. 1461. UNIVERSAL DE LUXE SLIDE RULE—Duplex Type—10-inch—all white celluloid facing with engine divisions. Bamboo base prevents warping and maintains accuracy. Patent glass metal indicator with screws in metal to prevent breaking glass. Trigonometrical scales are divided decimally from 5° to 90°. Patented Gudermanian Scale for direct reading of hyperbolic functions. In fabricoid case with instructions. Each

No. 1461L. UNIVERSAL DE LUXE SLIDE RULE. Same as 1461 but in leather case with instructions. Each



No. 1461

THE UNIVERSAL SLIDE RULE

THE SIMPLIFICATION OF THE CALCULATIONS OF HYPERBOLIC FUNCTIONS

Advantages

Twenty scales are contained on this slide rule. Positively no slide rule or calculating machine in the world is comparable to this Electrical Engineer's slide rule in determining the following:

1. Arc $\tan h(a+jb)$ of electrical circuits.
2. Hyperbolic Functions of complex numbers.
3. Converting Rectangular Coordinates into Polar Coordinates.
4. Converting Polar Coordinates into Rectangular Coordinates.
5. The sum or difference of squares of 2 or more quantities ($a^2+b^2-c^2$). Only one setting of the slider is necessary.
6. Trigonometric or Hyperbolic Functions at one setting.
7. Logs of any or all functions at the same time—a hairline setting.
8. Square roots of numbers—results to 5 places.
9. Performs all calculations with less settings.
10. Each scale is divided to correspond with all others and thereby this slide rule eliminates the error common to a series of settings.

Resume

The electrical engineer, the design departments and the electro-technical departments will be gratified to know that this 20-inch electrical slide rule is constructed to fit their most unusual as well as routine problems. No longer must the long route be used which other slide rules require. We do not attempt an explanation of its twenty scales herein. Please write us for free instruction booklet covering its advantages.

No. 1460L. ELECTRICAL ENGINEER'S SLIDE RULE, 20-inch of the duplex type, is constructed of laminated, oil cured and specially treated bamboo with engine divisions on the white celluloid facing. It is equipped with two cursors having the scale letters etched on the glasses, facilitating settings. The reddish hued hairlines which are set snugly against the slide rule, prevent errors in reading. This unique slide rule—already adopted by our foremost universities and technical institutions—will revolutionize methods of electrical calculations. This rule having the epoch-making non-logarithmic vector scales P', P and Q, is so designed that all complex electrical equations are quickly and far more simply handled than with a calculating machine.....Each

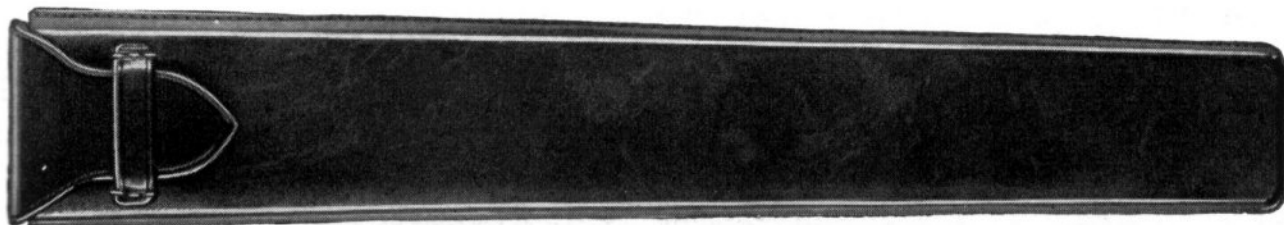
THE MIDGET 5-IN-1 SLIDE RULE

No. 1463. MIDGET SLIDE RULE. This is a circular Slide rule having eight scales on the front side and two hairline indicators. The rule is made of white enameled aluminum, 4 inches in diameter. The scales are in black so they are easy to read. An instruction book, "The Slide Rule Manual" is included with each rule and explains the use of the Midget in solving the simplest as well as many of the more complicated problems.....Each

THE WINSLOW SLIDE RULE

No. 1464. WINSLOW STRENGTH COMPUTING SLIDE RULE. This rule is made of a special, very hard, durable, but light non-metallic material. Both sides of the rule are, to all intents, alike, except that one side is used for cast iron, wrought iron and steel, and the other side for wood. However, any material may be figured because the rule can be set for any desired fiber-stress. This is a direct-reading, calculating device for solving any beam problem with mechanical precision in a few seconds. Its operation is so simple that it can be understood in a few minutes and it is not necessary to know how to use the ordinary slide rule to understand the Winslow Strength Computing Slide Rule.....Each

SLIDE RULE CASES



SLIDE RULE CASES

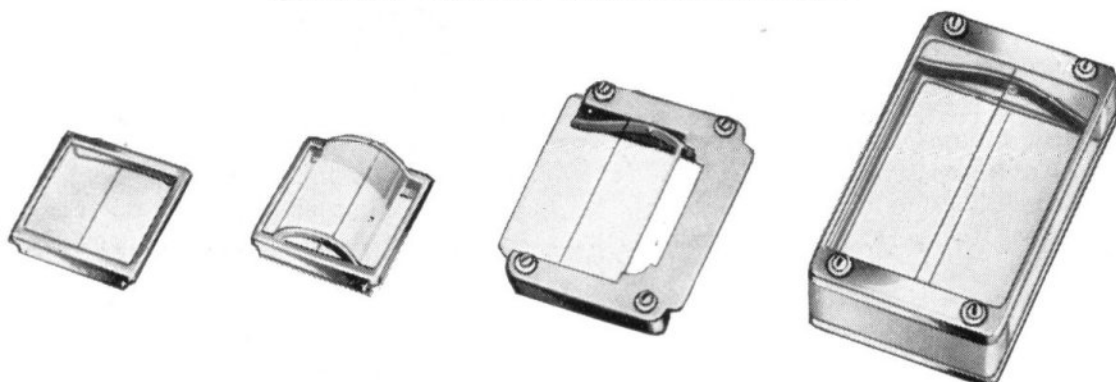
When ordering Slide Rule Cases, kindly state type and length of rule for which case is desired.

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------|------|
| | Each |
| No. 1465. LEATHERETTE CASE, for 5-inch Mannheim and Multiphase Slide Rule.... | |
| No. 1465A. LEATHERETTE CASE, for 10-inch Mannheim Multiphase, Multiphase Duplex, Electrical and Multitrig Slide Rules..... | |
| No. 1465B. LEATHERETTE CASE, for 20-inch Mannheim, Multiphase and Multitrig Slide Rules | |
| No. 1465C. LEATHER CASE, for 5-inch Mannheim and Multiphase Slide Rules..... | |
| No. 1465D. LEATHER CASE, for 10-inch Mannheim, Multiphase, Multiphase Duplex, Electrical and Multitrig Slide Rules | |
| No. 1465E. LEATHER CASE, for 20-inch Mannheim, Multiphase and Multitrig Slide Rules | |

SLIDE RULE MANUALS

1. Elementary Slide Rule Manual
2. A self-instructing text book with exercises for beginners. For use with slide rules of all makes. By H. Ritow.

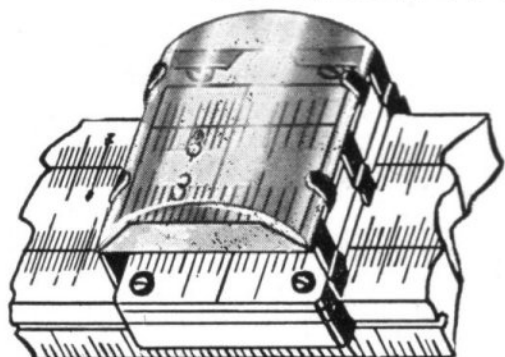
SLIDE RULE INDICATORS



Rule No.	Complete Indicator		Complete Magnifying Indicator		Glass Only		Glass Only with Magnifier	
	No.	Each	No.	Each	No.	Each	No.	Each
1437	1473				1473G			
1438	1473A				1473AG			
1440	1472		1474M		1472G		1474GM	
1441	1474M		1474M		1472G		1474GM	
1443-44	1470				1470G			
1445	1470A				1470AG			
1446	1471		1471 with 1480GM		1471G		1480GM	
1448	1475		1476M		1475G		1476GM	
1448M	1476M		1476M		1475G		1476GM	
1449	1479		1471 with 1480GM		1479G		1480GM	
1449M	1480M		1471 with 1480GM		1479G		1480GM	
1449T	1471		1471 with 1480GM		1471G		1480GM	
1450	1481		1482M		1481G		1482GM	
1451	1475		1476M		1475G		1476GM	
1452	1479		1471 with 1480GM		1479G		1480GM	
1452-3	1479-3				1479G-3			
1452M	1480M		1471 with 1480GM		1479G		1480GM	
1452T	1471		1471 with 1480GM		1471G		1480GM	
1453	1487M		1487M		1487G		1487GM	
1454	1481		1482M		1481G		1482GM	
1455	1479		1471 with 1480GM		1479G		1480GM	
1456	1481		1482M		1481G		1482GM	
1456M	1482M		1482M		1481G		1482GM	
1458	1483		1483 with 1480GM		1483G		1480GM	
1459	1484		1484 with 1485GM		1484G		1485GM	
1460	1485		1485 with 1485GM		1485G		1485GM	
1461	1485		1485 with 1485GM		1485G		1485GM	

No. 1479-3 and 1479G-3 are indicators and glasses with three hair-lines.

MAGNIFIER FOR DUPLEX TYPE RULES



Special magnifiers for Duplex type Slide Rules. Has wide glass that covers entire width of rule. Securely mounted on metal frame, with spring prongs for attaching to metal rim cursors of rules.

Each

- No. 1480GM, Small.....
- No. 1485GM, Large.....