



TRADE MARK



A. W. FABER



ESTABLISHED 1761


"CASTELL"

PENCIL WORKS

STEIN near Nuremberg.

London Agency: 13/14 Camomile St., E. C. 3.

MANUFACTORY OF


"CASTELL"

PRECISION
CALCULATING
RULESGEROLDSGRÜN
BAVARIA

A. W. FABER **"CASTELL"**

Precision Calculating Rules.



"CASTELL" PRECISION CALCULATING RULES are the result of many years experience combined with the employment of men of long training; they are unsurpassed for precision and usefulness.

"CASTELL" Precision Calculating Rules with Celluloid Facings,

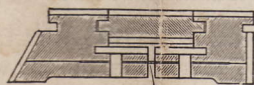
embody an arrangement which consists of the placing of metal strips edgewise in the stock and in the slide. These hold the rule quite straight lengthways; moreover, should the rule become bent by some unusual cause, they permit it to be straightened to the original position; thus enabling a complete agreement between stock and slide to be always maintained.

Further, in order to give

Full Guarantee

for a regular and even movement of the slide, essential to a rapid and accurate working of the rule, A.W. FABER  **"CASTELL"**  PRECISION CALCULATING RULES are now provided with

Spring Steel Base.



Steel Base.

Patent No. 10753.

A slit extends throughout the whole length of the rule, and the two sides of the stock being united by spring steel plates, have a closing action on the slide. Therefore the possibility of warping, due to atmospheric changes, is reduced, and under ordinary conditions the satisfactory working of the rule ensured.

All Celluloid scales have mathematically exact engraved hair line divisions, and are prevented from being displaced by taper wooden pegs.

TREATMENT OF SLIDE RULES. Slide rules should be kept in a dry (not warm) place and in particular they should be protected from damp and the sun's rays. When used in a very damp atmosphere, or if the slide should move too stiffly, it is advisable to apply vaseline to the slide and its guides. It is advisable to repeat this treatment from time to time.

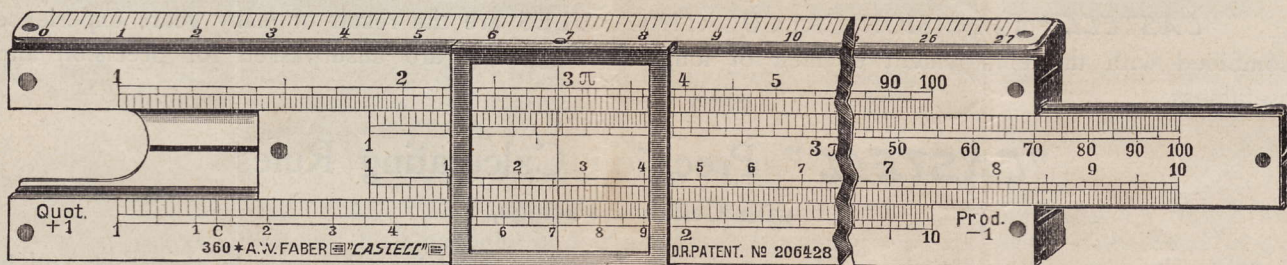
Slide rules that have become dirty should be cleaned with a soft rag moistened with petrol. Treatment of slide rules with liquids which dissolve celluloid, as spirits of wine, is to be avoided.



A. W. FABER "CASTELL" Precision Calculating Rules.

Brief instructions are supplied free with every rule, but, for full study, the Book of Instructions, issued in all principal languages and containing numerous examples, is recommended. It is indispensable to students, but valuable also to those already conversant with the use of the calculating rule.

Standard Pattern.



No. 360 (Reduced size).

No. 360 "CASTELL" PRECISION CALCULATING RULE, 10 in. scale length, with white celluloid surface and ORDINARY aluminium cursor with glass. On the upper face of the rule are the two usual logarithmic scales for multiplication and division, squaring and cubing, and the extraction of square and cube roots. On the under side of the slide are the sine and tangent scales, SS and TT, for carrying out trigonometrical calculations, and the logarithmic scale LL, by means of which higher powers and roots can easily be determined.

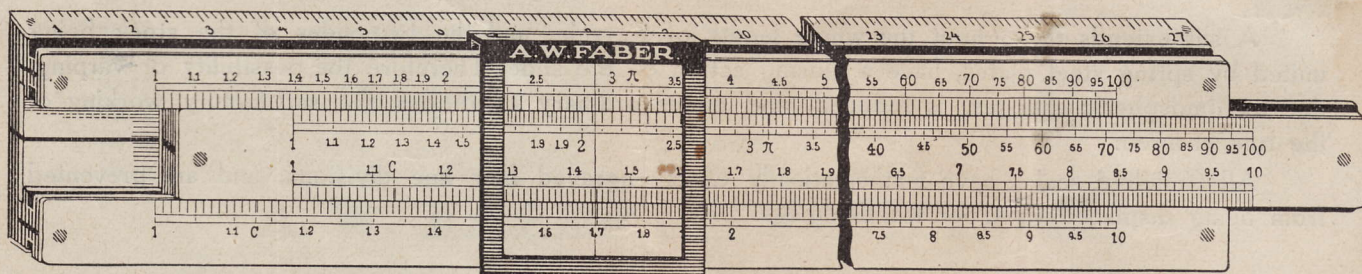
This is a very important rule, which is of great service for technical and commercial calculations. It appeals to the Architect, the Constructional Engineer, the Mechanical Engineer, the Electrical Engineer, the Physicist and the Chemist.

No. 380 "CASTELL" PRECISION CALCULATING RULE, 19 $\frac{1}{2}$ in. scale length, with white celluloid surface and ORDINARY aluminium cursor with glass. Similar to rule No. 360 in arrangement.

No. 369 "CASTELL" PRECISION CALCULATING RULE, Pocket Size, 5 in. scale length, with white celluloid surface and ORDINARY aluminium cursor with glass. Similar to rule No. 360 in arrangement.

No. 389 "CASTELL" PRECISION CALCULATING RULE, Pocket Size, 4 in. scale length, with white celluloid surface and ORDINARY aluminium cursor with glass. Similar to rules Nos. 360 and 369 in arrangement.

Students' Rule.



No. 361 (Reduced size).

No. 361 "CASTELL" PRECISION CALCULATING RULE, 10 in. scale length, with white celluloid surface and ORDINARY aluminium cursor with glass. On the face of the rule are the two usual logarithmic scales with decimal figuring 1, 1.1, 1.2, 1.3 for multiplication and division, squaring and cubing, together with the extraction of square and cube roots.

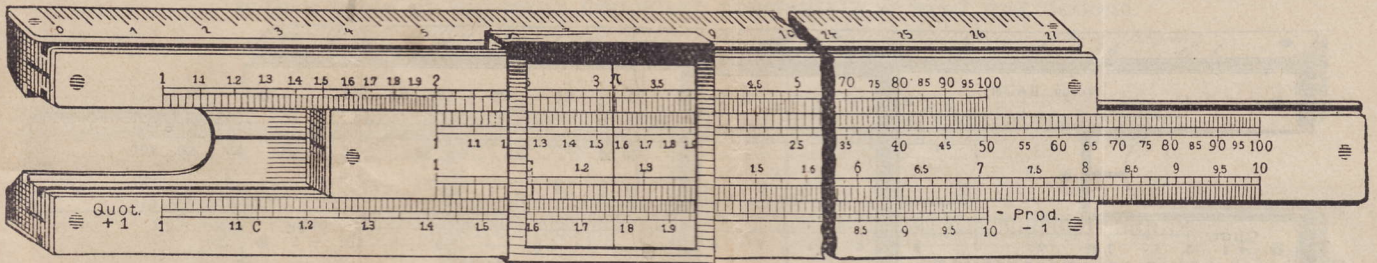
On the upper bevelled edge is a centimeter scale and at the bottom an inch scale. This rule is specially suitable for use in intermediate and technical schools.

When ordering cursors, the exact width of the surface of the rule should always be given in addition to the number of the rule.

A. W. FABER "CASTELL"

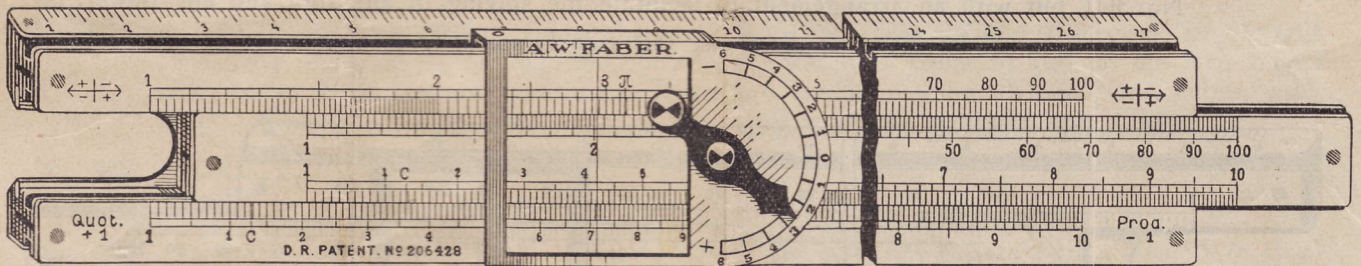
Precision Calculating Rules.

Each rule in a cardboard case
with a table of the most important constants and brief instructions.



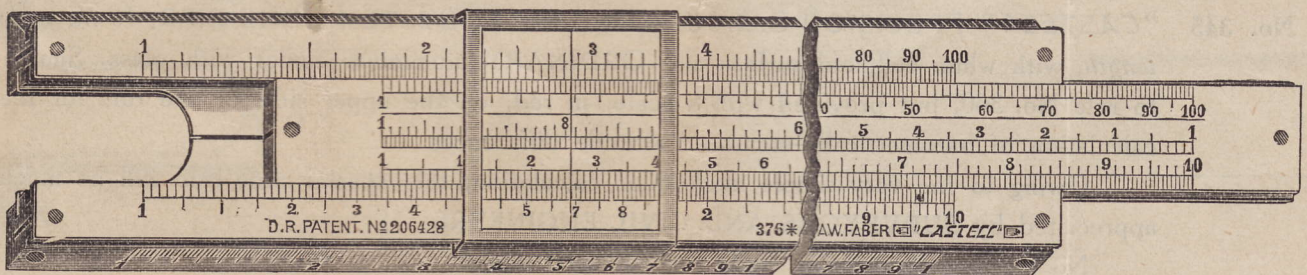
No. 363 (Reduced size).

No. 363 "CASTELL" PRECISION CALCULATING RULE, 10 in. scale length, with white celluloid surface and ORDINARY aluminium cursor with glass. Similar to rule No. 360 in arrangement, but with decimal figuring 1, 1.1, 1.2, 1.3 . . .



No. 367 (Reduced size).

No. 367 "CASTELL" PRECISION CALCULATING RULE, 10 in. scale length, with white celluloid surface and DIGIT REGISTERING aluminium cursor with glass. Similar to rule No. 360 in arrangement, but with indication marks on the stock.



No. 376 (Reduced size).

No. 376 "CASTELL" PRECISION CALCULATING RULE, 10 in. scale length, with white celluloid surface and ORDINARY aluminium cursor with glass. Similar to rule No. 360, but provided with a reciprocal scale in the centre of the upper side of the slide and a scale for cubes on one edge.

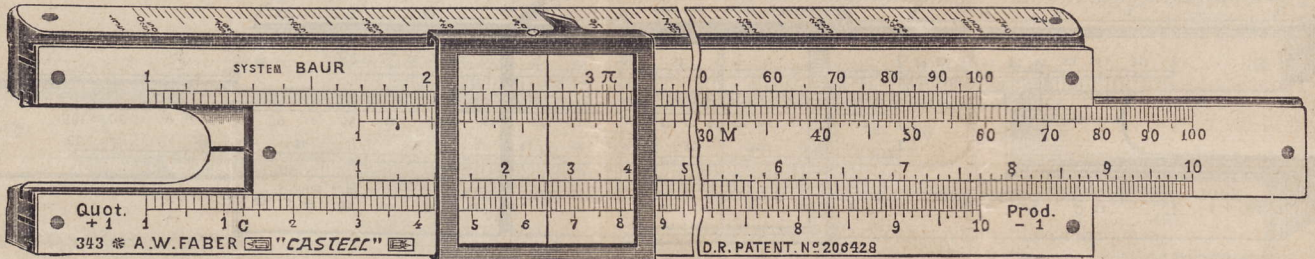
No. 390 "CASTELL" PRECISION CALCULATING RULE, Pocket Size, 5 in. scale length, with white celluloid surface and ORDINARY aluminium cursor with glass. Similar to rule No. 376 in arrangement.

When ordering cursors, the exact width of the surface of the rule should always be given in addition to the number of the rule.



A. W. FABER "CASTELL" Precision Calculating Rules.

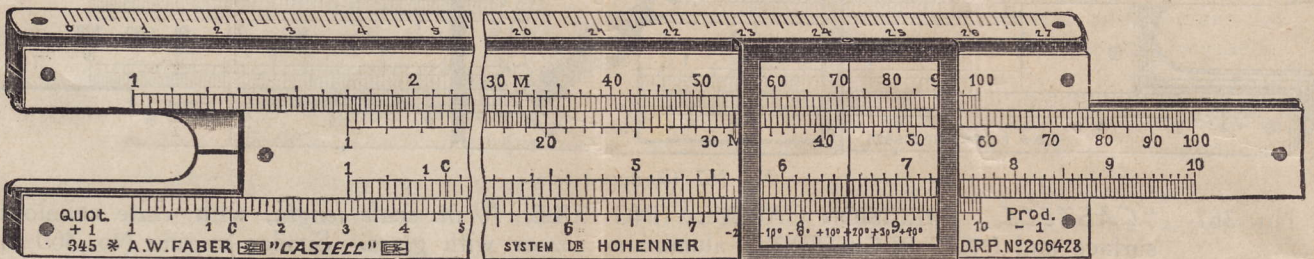
Each rule in a cardboard case with a table of the most important constants and brief instructions.



No. 343 (Reduced size).

No. 343 "CASTELL" PRECISION CALCULATING RULE, SYSTEM BAUR, 10 in. scale length, with white celluloid surface and ORDINARY aluminium cursor with glass. Similar to rule No. 360, but with an arrangement to facilitate the solving of any root and any power.

In view of its many applications, this rule is specially recommended for general use.



No. 345 (Reduced size).

No. 345 "CASTELL" PRECISION CALCULATING RULE, SYSTEM HOHENNER, 10 in. scale length, with white celluloid surface and ORDINARY aluminium cursor with glass. Similar to rule No. 360, but provided with a scale, in red, on the upper side of the rule for the calculation of barometrically-measured altitude differences.



Owing to the very simple method of calculation, this special slide rule will be much appreciated by SURVEYORS AND CIVIL ENGINEERS.

No increase in price is made for the extra scale.

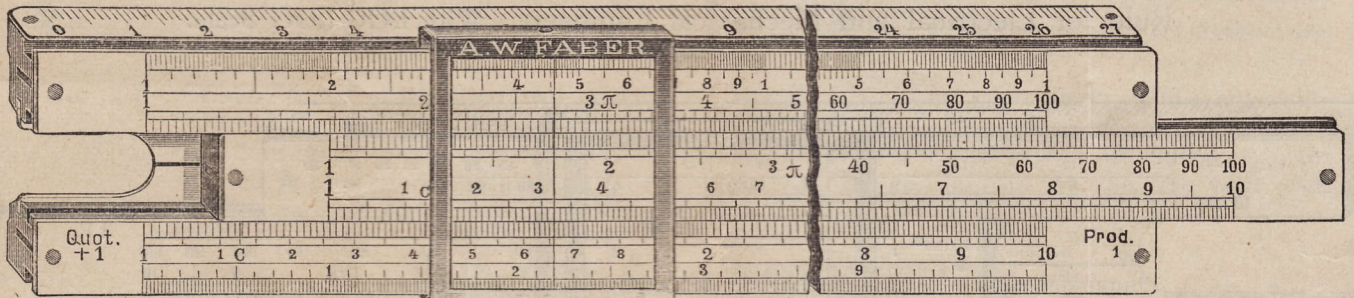
No. 349 "CASTELL" PRECISION CALCULATING RULE, 5 in. scale length (Pocket Size). Similar to rule No. 345 in arrangement.

No. 346 "CASTELL" PRECISION CALCULATING RULE, 10 in. scale length, with white celluloid surface and ORDINARY aluminium cursor with glass. Similar to rule No. 360, but with a scale for cubes on one edge as on Rule No. 344 and System Hohenner (as Rule No. 345).

When ordering cursors, the exact width of the surface of the rule should always be given in addition to the number of the rule.

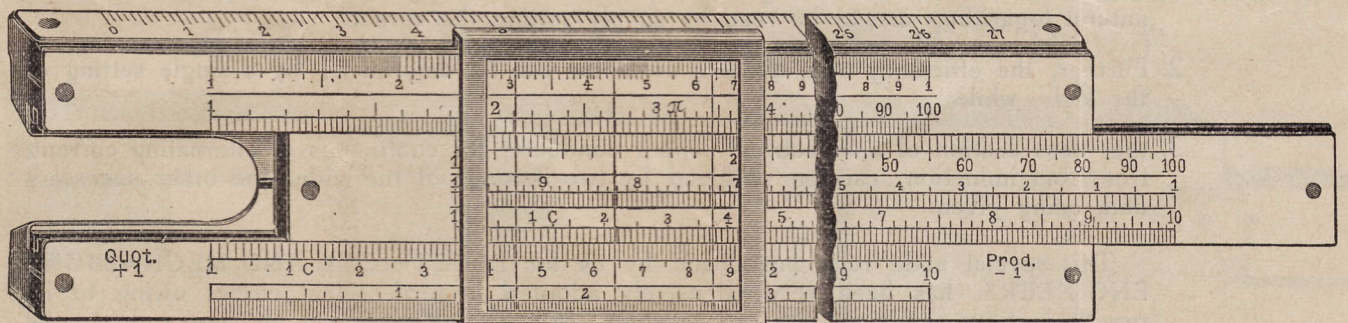
A. W. FABER  "CASTELL" 
Precision Calculating Rules
SYSTEM RIETZ.

Each rule in a cardboard case
with a table of the most important constants and brief instructions.



No. 375 (Reduced size).

- No. 375 "CASTELL" PRECISION CALCULATING RULE, SYSTEM RIETZ, 10 in. scale length, with usual log. divisions as on rule 360, but a little wider, in order to add on the face special log. scales for cubes and logarithms. This simplifies the reading of logarithms, cubes, cubic roots; therefore this rule is in general use in all technical institutes and offices.
- No. 385 "CASTELL" PRECISION CALCULATING RULE, SYSTEM RIETZ, 19 $\frac{1}{2}$ in. scale length. Similar to rule No. 375 in arrangement.
- No. 386 "CASTELL" PRECISION CALCULATING RULE, SYSTEM RIETZ, Pocket Size, 5 in. scale length. Similar to rule No. 375 in arrangement.



No. 387 (Reduced size).

- No. 387 "CASTELL" PRECISION CALCULATING RULE, SYSTEM RIETZ, with Reciprocal Scale, 10 in. scale length, with white celluloid surface and ORDINARY aluminium cursor with 3-line glass. Similar to rule No. 375, but provided with a reciprocal scale in the centre of the face of the rule.
- No. 397 "CASTELL" PRECISION CALCULATING RULE, SYSTEM RIETZ, with Reciprocal Scale, Pocket Size, 5 in. scale length. Similar to rule No. 387 in arrangement.

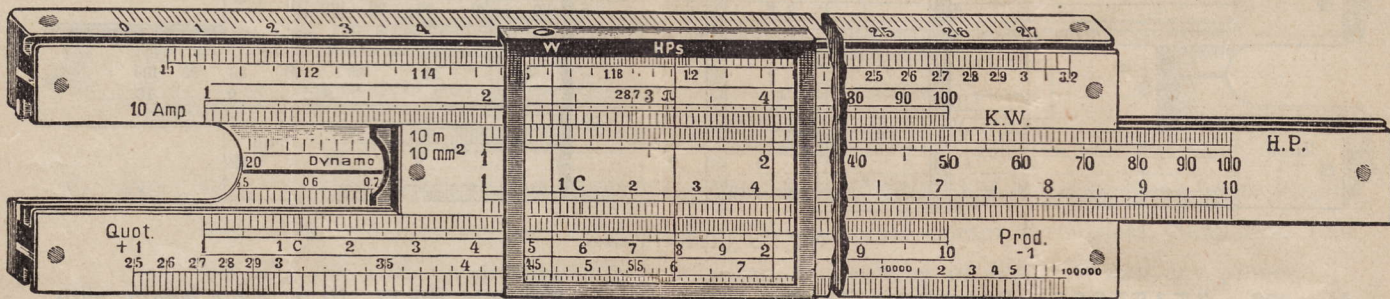
When ordering cursors, the exact width of the surface of the rule should *always* be given in addition to the number of the rule.



A. W. FABER "CASTELL" Precision Calculating Rules.

Each rule in a cardboard case
with a table of the most important constants and brief instructions.

Rule for Electrical and Mechanical Engineers. With LOG-LOG Scale.



No. 378 (Reduced size).

No. 378 "CASTELL" PRECISION CALCULATING RULE, 10 in. scale length, with white celluloid surface and ORDINARY aluminium cursor with 3-line glass. In addition to the same scales as on rule No. 360, this carries three other logarithmic scales,

1. by means of which powers and roots of the form a^x and $\sqrt[x]{a}$ can be calculated, where a and x may be fractional. The length of the rule imposes a limit to the scale, and having regard to the most usual values required, it is arranged in such a way that a is between 1.1 and 100 000, x between 0.1 and 10, but the result may be found also in nearly all other cases. Owing to the provision of new power scales, powers of e and natural logarithms are to be read by simply setting the cursor.
2. Further, the efficiency of a dynamo or motor can be determined by a single setting of the slide, while
3. the cross section of an electrical copper conductor for continuous or alternating current, free from induction, can be obtained by two settings of the slide, the other necessary data being given.

This special slide rule, introduced by us for ELECTRICAL AND MECHANICAL ENGINEERS, has been very extensively adopted in professional circles owing to its practical utility and simplicity of operation. It is an indispensable aid not only to the Special Engineer, but also to the Manufacturer and Works Manager.

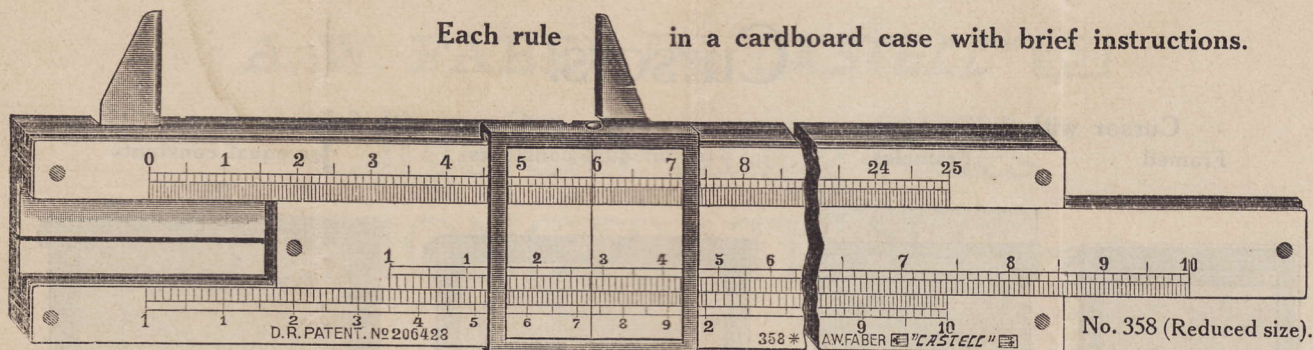
No. 388 "CASTELL" PRECISION CALCULATING RULE, 19½ in. scale length, with white celluloid surface and ORDINARY aluminium cursor. Similar to rule No. 378 in arrangement.

No. 379 "CASTELL" PRECISION CALCULATING RULE, Pocket Size, 5 in. scale length, with white celluloid surface and ORDINARY aluminium cursor with glass. Similar to rule No. 378 in arrangement.

When ordering cursors, the exact width of the surface of the rule should *always* be given in addition to the number of the rule.

A. W. FABER "CASTELL" Precision Calculating Rules.

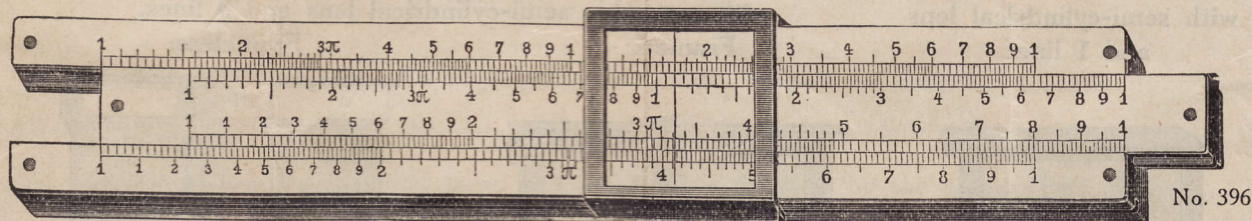
Each rule in a cardboard case with brief instructions.



- No. 358 "CASTELL" PRECISION CALCULATING RULE, 10 in. scale length, with white celluloid surface and ORDINARY aluminium cursor with glass. This rule serves for determining the density of grains and spikelets of ears in different kinds of cereals. In addition to the above, any desired multiplication or division can be carried out by the rule with great facility and rapidity.

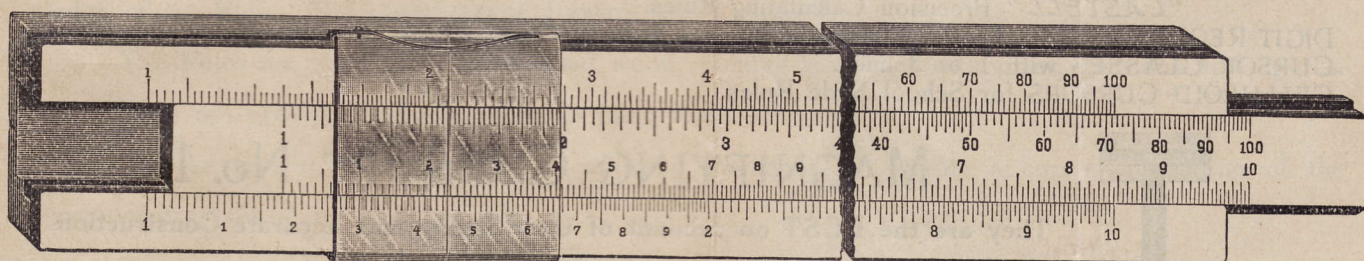
Slide Rules for advertisements.

(These Rules can be supplied with special imprint and for this reason are specially suitable for advertising purposes.)



- No. 396 "CASTELL" PRECISION CALCULATING RULE, flat, 5 in. scale length, $\frac{1}{16}$ in. thick, with white celluloid surface and ORDINARY aluminium cursor with glass. The back of this rule is also faced with celluloid and serves for advertisements.
- No. 338 "CASTELL" PRECISION CALCULATING RULE, flat, 5 in. scale length, $\frac{3}{16}$ in. thick, similar to rule No. 396 in arrangement.

A. W. FABER SCHOOL SLIDE RULE.



No. 339 (Reduced size).

- No. 339 SCHOOL SLIDE RULE, 10 in. scale length, with celluloid surface and celluloid cursor, suitable for elementary students. The scales are in every respect as accurate as on our ORDINARY technical slide rules. The seldom used trigonometrical divisions are omitted, but problems involving multiplication, division, squares, cubes, square roots, cube roots can be worked as correctly and as easily as on the standard rules.

This rule has no Spring Steel Base.

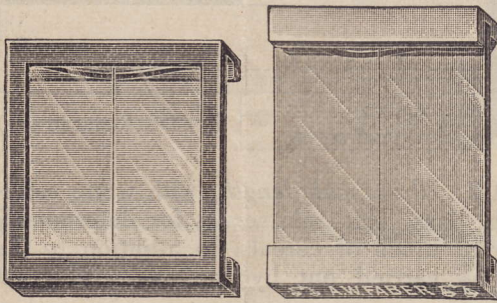
- No. 332 SCHOOL SLIDE RULE, Pocket Size, 5 in. scale length, with celluloid surface and celluloid cursor. Similar to rule No. 339 in arrangement.

When ordering cursors, the exact width of the surface of the rule should **always** be given in addition to the number of the rule.

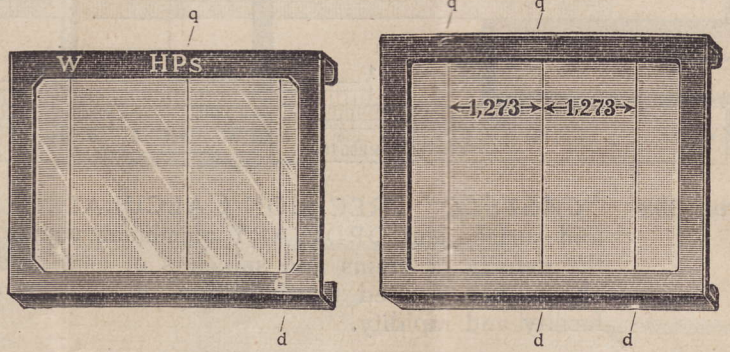


A. W. FABER "CASTELL" Cursors.

Cursor with 1 line
Framed Frameless

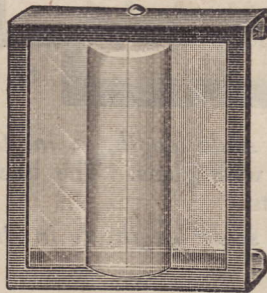


Cursor with 3 lines
for unequal constants for equal constants

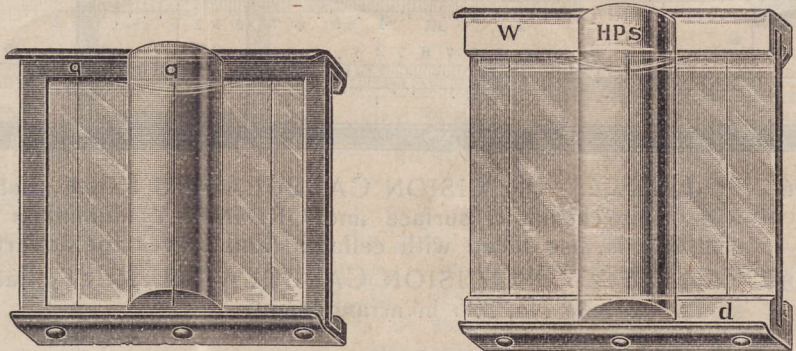


MAGNIFYING CURSORS No. 2.

with semi-cylindrical lens
and 1 line.



with moveable semi-cylindrical lens and 3 lines.
Framed. Frameless.



CURSORS (with or without frame, with 1 or 3 lines, with semi-cylindrical lens or ordinary) for all "CASTELL" Precision Calculating Rules.

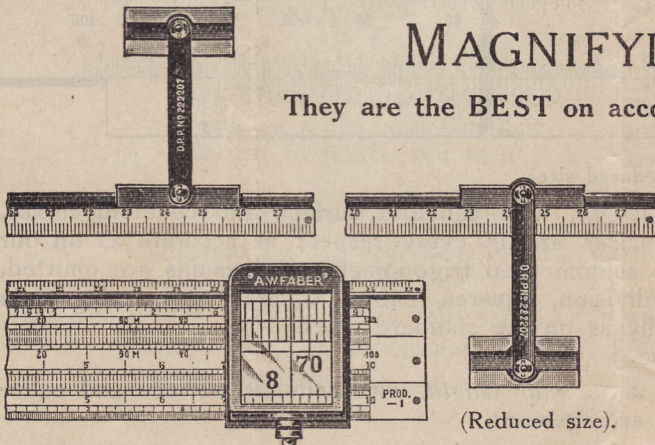
DIGIT REGISTERING CURSORS (illustrated on page 3) for all "CASTELL" Precision Calculating Rules.

CURSOR GLASSES with 1 or 3 lines.

CELLULOID CURSORS for School Slide Rules.



MAGNIFYING CURSORS No. 1.

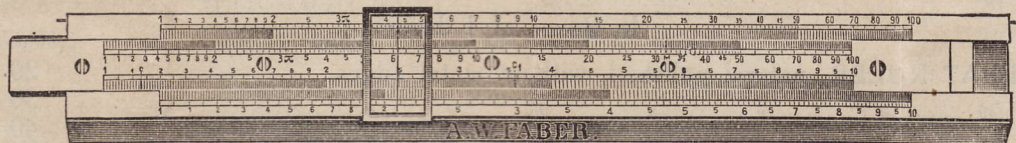
They are the BEST on account of their Strong and Accurate Construction.



The Magnifier is formed of 2 polished periscope lenses, by which the best possible reading is obtained. A further obvious advantage lies in the fact that as the lens holder is supported at one side only, any shadowing of the scale is avoided. The Magnifier being arranged to turn under the rule, the reading of the scales on the under side of the slide can also be rapidly obtained with the correct focus.

When ordering cursors, the exact width of the surface of the rule should always be given in addition to the number of the rule.

A. W. FABER  "CASTELL" 
Large Calculating Rules
for DEMONSTRATION Purposes.



Rule No. 336, $49\frac{3}{4}$ in. long, scale length $39\frac{1}{2}$ in.

" " 337, $99\frac{1}{2}$ " " " " 79 "

These Extra Large Rules have been prepared for the purpose of assisting teachers in colleges and technical schools to explain the details and working of the Calculating Rule to their pupils, the scales and figures being sufficiently large to be read at a distance by the whole class.

Though being four or nine times the size of the Rules of regular length, No. 360, &c., all the positions on either Rule, whether long or short, are in exact proportion to each other. This enables A. W. FABER'S Instruction Book to be used also for these Demonstration Rules.

The back of the slide has the scales for sines, logarithms and tangents.

The Cursor consists of a wooden frame with wire line, and travels in a groove along the upper edge of the Rule. It is easily moved forward and backward.

The Rules are made of well-seasoned wood, painted in white, with black divisions and figures.

They are provided with 2 eyelets to hang them.

On the reverse side they can be adjusted by screws to enable a correct regulation of the movement of the slide.

When ordering cursors, the exact width of the surface of the rule should always be given in addition to the number of the rule.



A. W. FABER'S Flat Rulers or Straight Edges.

MARKED IN INCHES OR CENTIMETERS.



Reduced size.



Sectional view Actual size.

In Boxes of 1 dozen.

No.	Description	Length	
		Centimeters	Inches
No. 1602	FLAT RULER, natural polished, without metal edges	20	8
" 1603	" " " " " " " " " " " "	30	12
" 1604	" " " " " " " " " " " "	40	15
" 1605	" " " " " " " " " " " "	50	18
" 1612	FLAT RULER, natural polished, with metal edges	20	8
" 1613	" " " " " " " " " " " "	30	12
" 1614	" " " " " " " " " " " "	40	15
" 1615	" " " " " " " " " " " "	50	18
" 1616	" " " " " " " " " " " "	60	24
" 1617	" " " " " " " " " " " "	70	27
" 1618	" " " " " " " " " " " "	80	30
" 1619	" " " " " " " " " " " "	100	36

Flat Rulers or Scales

WITH METAL EDGES. Stamped in Gold: A. W. FABER.

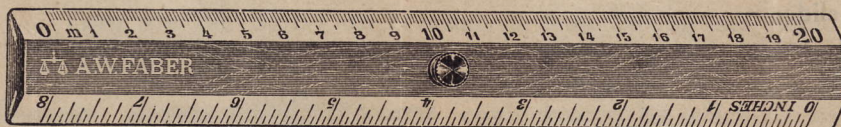


In Boxes of 1 dozen.

No. 2693	DOUBLE BEVELLED SCALE, without metal button, natural polished	30	12
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This Scale is marked on one bevel in inches, divided as under:

First four inches	Second four inches	Third four inches
divided into $\frac{1}{8}$ ths.	$\frac{1}{10}$ ths.	$\frac{1}{16}$ ths.
and the other in $\frac{1}{2}$ mm.		



No. 2692	DOUBLE BEVELLED SCALE, with metal button, natural polished	20	8
" 2694	" " " " " " " " " " " "	40	15
" 2695	" " " " " " " " " " " "	50	18
" 2696	" " " " " " " " " " " "	60	24
" 2698	" " " " " " " " " " " "	80	30
" 2699	" " " " " " " " " " " "	100	36

These scales are marked on one bevel in $\frac{1}{16}$ inches on the other in $\frac{1}{2}$ mm.

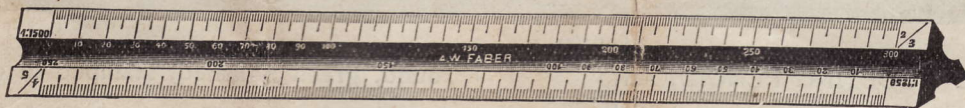


A. W. FABER'S Triangular Scales.

ONE SIDE DIVIDED INTO INCHES, THE OTHER INTO CENTIMETERS.

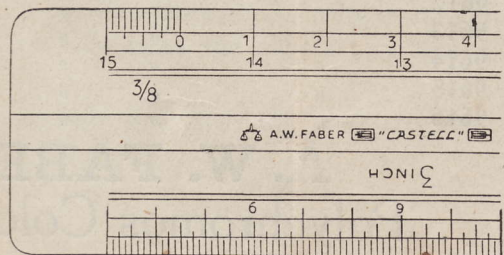
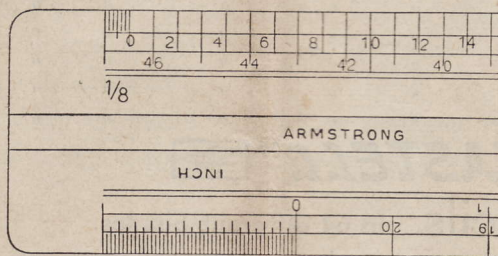


	Length	
	Centimeters	Inches
No. 742 TRIANGULAR BOXWOOD SCALE, polished	20	8
" 743 " " " "	30	12
" 744 " " " "	40	15
" 745 " " " "	50	18
" 762 FLAT BOXWOOD SCALE, polished	20	8
" 763 " " " "	30	12
" 764 " " " "	40	15
" 765 " " " "	50	18



No. 792 REDUCTION SCALE, boxwood, natural polished, triangular, with 6 divisions: 1:1000, 1:2000, 1:2500, 1:500, 1:1250, 1:1500	20	8
" 793 " " boxwood, natural polished, triangular, with 6 divisions: 1:1000, 1:2000, 1:2500, 1:500, 1:1250, 1:1500	30	12

A. W. FABER'S Highly Finished Celluloid Edged Scales.



No. 2742 ^{C/A} "ARMSTRONG" SCALE, boxwood, celluloid edges	6
" 2743 ^{C/A} " " " " " "	12
" 2745 ^{C/A} " " " " " "	18

Each rule has four scales divided: $\frac{1}{8}$ " & $\frac{1}{4}$ ", $\frac{1}{2}$ " & 1", $\frac{3}{8}$ " & $\frac{3}{4}$ ", $1\frac{1}{2}$ " & 3".

Also with "ENGINEERS" and "DRAUGHTSMAN" divisions.



A. W. FABER, established 1761, **"CASTELL"** **PENCIL WORKS**
STEIN near Nuremberg.

A. W. FABER **"CASTELL"**



No. 9000.

No. 9000 **"CASTELL"** PENCIL, hexagon, green polished, stamped in gold
16 Degrees: 6B, 5B, 4B, 3B, 2B, B (soft)
HB, F (medium)
H, 2H, 3H, 4H, 5H, 6H, 7H, 8H (hard)



No. 9022.

No. 9022 **"CASTELL"** ARTISTS' PENCIL, hexagon, green polished, stamped in gold, with white hexagon celluloid end and improved metal point
16 Degrees: 6B, 5B, 4B, 3B, 2B, B (soft)
HB, F (medium)
H, 2H, 3H, 4H, 5H, 6H, 7H, 8H (hard)

The No.9022 **"CASTELL"** ARTISTS' PENCIL has the advantage that the lead can neither break nor slip back, and the metal point is prevented from becoming detached by the outer metal flange. These are most important points for draughtsmen and deserve particular attention.

No. 9030 **"CASTELL"** LEADS, 5½ in., for No. 9022, 6B to 8H, 6 in a flat cardboard box.



No. 9100.

No. 9100	"CASTELL" COPYING PENCIL,	soft,	round, green polished, stamped in gold
" 9100 1/2	"	medium,	" " " " " "
" 9101	"	hard,	" " " " " "
" 9116	"	black,	" " " " " "
" 9117	"	extra hard,	" " " " " "
" 9121	"	extra-extra hard,	" " " " " "
" 9122	"	new blue,	" " " " " "



No. 9609.

No. 9110	"CASTELL" COPYING INK PENCIL,	hard, violet, round, green polished, stamped in gold
" 9111	"	soft, " " " " " "
" 9609	"	red, " " " " " "
" 9610	"	blue, " " " " " "
" 9611	"	green, " " " " " "
" 9612	"	yellow, " " " " " "
" 9613	"	carmine, " " " " " "
" 9614	"	orange, " " " " " "
" 9615	"	brown, " " " " " "
" 9616	"	new blue, " " " " " "

A. W. FABER **"CASTELL"**

Polychromos Coloured Pencils. In 64 different Shades.



No. 9201.

No. 9201 **"CASTELL"** POLYCHROMOS COLOURED PENCILS, round, polished same colours as the chalks, stamped in gold, in 64 different colours.
" 9227 Box with 12 **"CASTELL"** Polychromos Pencils, 4¼ in. long, pointed, assorted colours for Engineers
" 9229 " " 12 " " " " 4¼ " " " " " " Electrical Engineers
" 9234 " " 12 " " " " 4¼ " " " " " " Architects.