

# **LUFKIN**

## **MEASURING TAPES RULES AND MECHANICAL TOOLS**



ROSE TOOLS, INC.

**GENERAL CATALOG  
NUMBER ELEVEN**

# ***LUFKIN***

MEASURING TAPES,  
RULES AND  
MECHANICAL TOOLS



ROSE TOOLS, INC.

MANUFACTURED BY

***THE LUFKIN RULE Co.***

SAGINAW, MICHIGAN, U.S.A.

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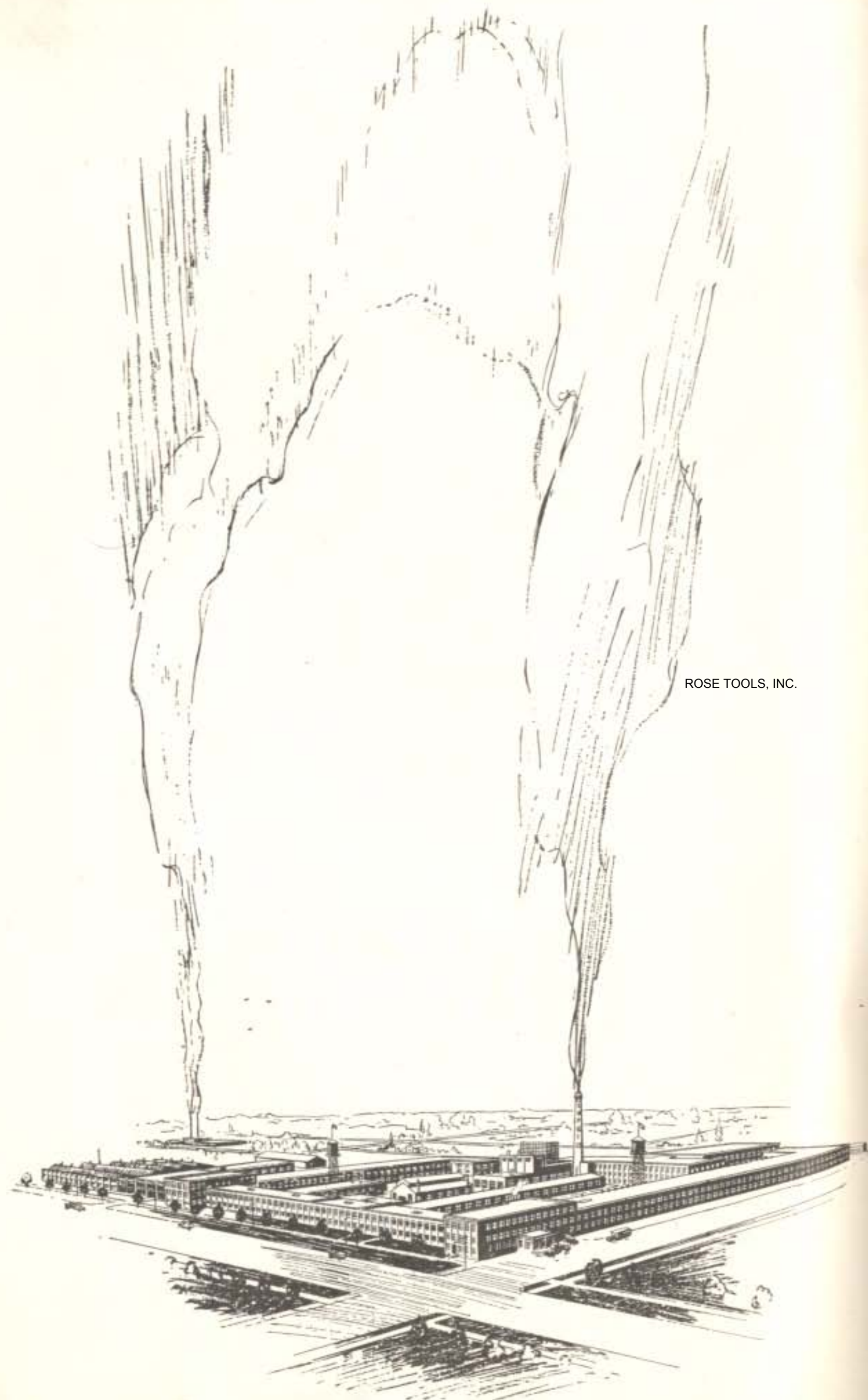
CANADIAN FACTORY

***THE LUFKIN RULE Co. of CANADA, LTD.***

WINDSOR, ONTARIO







ROSE TOOLS, INC.

# *I*ntroduction

The Lufkin Rule Company for over forty years has made Measuring Devices. It has steadily grown and has become the world's largest manufacturer in this line.

This company has been the pioneer in the development of many of its products, and the leader in the noteworthy improvements in its field over that whole period. Its goods are sold in all markets. The organizers of the original company are the heads and in active charge of the corporation of today.

***THE LUFKIN RULE Co.***





This catalog represents the developments of over forty years in Measuring Instruments and kindred lines by The Lufkin Rule Company

Not only in America, but wherever measurements are taken, our goods are the recognized standard of accuracy.

We are prepared to mark our Tapes, Rules, etc., in the regular measurements of all countries.

They have established and maintain the highest standards of quality

Our lines of Tapes and Rules are most complete; we have been leaders always in the development of new items and improvement of the old to properly meet the needs of the consumer. We offer the best of service.

The goods and the progressive general policies of The Lufkin Rule Company have made it the world's largest manufacturer of Measuring Devices.

ROSE TOOLS, INC.

THE manufacture of Fine Mechanical Tools, in the Small Tool Division, is our latest development. We have entered into this in a large way and aim to make each tool the best of its kind on the market. The distinctive organization of this Division is described in Section Three of this Catalog.

All goods are made complete in our own plants. Raw materials are selected and tested to assure their being best for the purpose; skilled mechanics are employed in the manufacture; and parts, as well as completed articles, are thoroughly inspected. Special attention is given to packing.

LUFKIN goods are carried in stock by jobbers, by hardware and supply dealers, tool stores, engineering, technical and professional supply houses, stationery and other stores in all parts of the world.

Quite apart from our regular stock goods, we make Tapes and Rules with customer's advertising upon them. For details of this Advertising Specialty Line and its separate Catalog, see last pages of this book.



For the convenience of the trade and the public  
this catalog is divided into sections, as follows:

*Section One*  
STEEL MEASURING TAPES

*Section Two*  
WOVEN MEASURING TAPES

*Section Three*  
MECHANICAL TOOLS  
(Small Tool Division)

*Section Four*  
BOXWOOD RULES

*Section Five*  
SPRING JOINT RULES

*Section Six*  
MISCELLANEOUS WOOD RULES  
ET CETERA

*Section Seven*  
LUMBER RULES  
ET CETERA

ROSE TOOLS, INC.

*Section One*  
STEEL MEASURING TAPES

OUR Steel Tapes are universally recognized as the standard of accuracy, and are a most highly developed and specialized line. We make them in patterns and grades, lengths and graduations best suited to every need.

The lines are of highest grade tape steel, specially rolled for the purpose. Among other features they have *Instantaneous* Readings and "Nubian" Finish, described below. The cases, frames and reels are of most approved construction, sturdy and reliable.

LUFKIN Steel Tapes are made to bench standards certified accurate by the United States Bureau of Standards, Washington, D. C., which Bureau, for a nominal fee, will test and issue report on any tape, showing its tension and temperature of accuracy. (Such Government test we recommend for tapes to be used on very precise work). The temperature standard for steel tapes is 68 degrees Fahrenheit (equal to 20 degrees centigrade). The coefficient of expansion of steel tapes as determined by the United States Bureau of Standards is 0.000 006 45 per degree Fahrenheit, amounting on a 100 foot tape to 0.007 74 inch per degree. The standard tension for tapes of ordinary lengths when supported throughout is 10 lbs. avoirdupois (for metric tapes, 5 kilograms).

*Instantaneous*  
READINGS

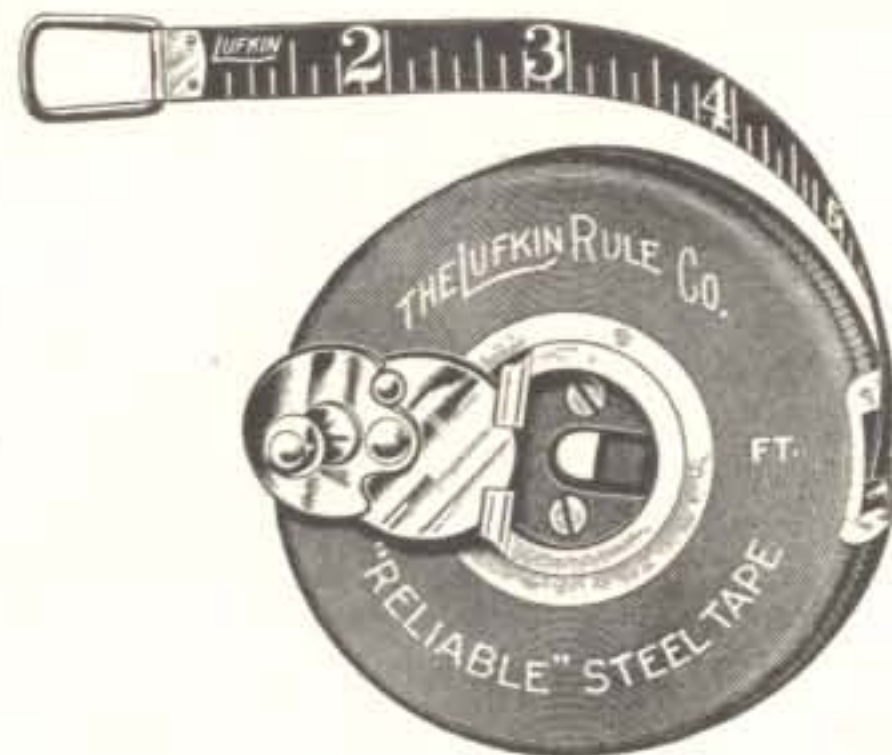


Our Steel Tapes have *Instantaneous* Readings, a great improvement in numbering, of which we are the originators. The above illustration conveys the idea. Briefly described, it is the last preceding foot number repeated at each inch or tenth throughout the tape, in small, yet easily read figures. This keeps the total reading directly before the eye, eliminates the chance of error in running back to the last foot, and saves time. The same system is used on our metric steel tapes.

"NUBIAN" FINISH

This is the standard finish of our Steel Tapes. It consists of a dead black background, against which the raised lines and figures in the natural steel color are in marked contrast, making them most legible. This finish wears and looks well, and resists rust.





### "RELIABLE" STEEL TAPES

*Instantaneous* Readings. "Nubian" Finish.

THE FINEST AND BEST TAPE IN THE WORLD

This is a tape suitable for all general measuring work. It is made throughout of specially selected materials, and in design, construction and finish represents the best of our long experience in the making of tapes.

Line is distinctly marked. Case is of cordovan-brown genuine leather, handsomely finished. It is closely hand-stitched and has steel liner heavily brass plated. Trimmings are nickel plated. The winding handle is double-folding flush pattern, opened by pressing on opposite side. It has extension finger hold, affording most firm grip. Measurements guaranteed accurate.

#### WITH THREE-EIGHTHS INCH TAPES

Marked feet, inches and 8ths of inches, one side only

No.	200	201	203	204	205	206	207
Length, feet	25	33	50	66	75	100	150
Weight each, ozs.	9	10	13	15	18	21	32
Price, each	\$5.45	\$6.30	\$8.60	\$10.90	\$12.50	\$15.00	\$22.00

Marked feet, 10ths and 100ths of feet, one side only

No.	200D	201D	203D	204D	205D	206D	207D
Length, feet	25	33	50	66	75	100	150
Weight each, ozs.	9	10	13	15	18	21	32
Price, each	\$5.45	\$6.30	\$8.60	\$10.90	\$12.50	\$15.00	\$22.00

Marked metric only, one side only

(First decimetre in mm., balance of length in cm.)

No.	200 1/2 M	201M	203M	204M	205 1/2 M	206M	207M
Length, metres	5	10	15	20	25	30	50
Weight each, ozs.	8	10	13	15	19	21	35
Price, each	\$5.25	\$6.30	\$8.60	\$10.90	\$13.40	\$15.00	\$24.00

Marked metric and English

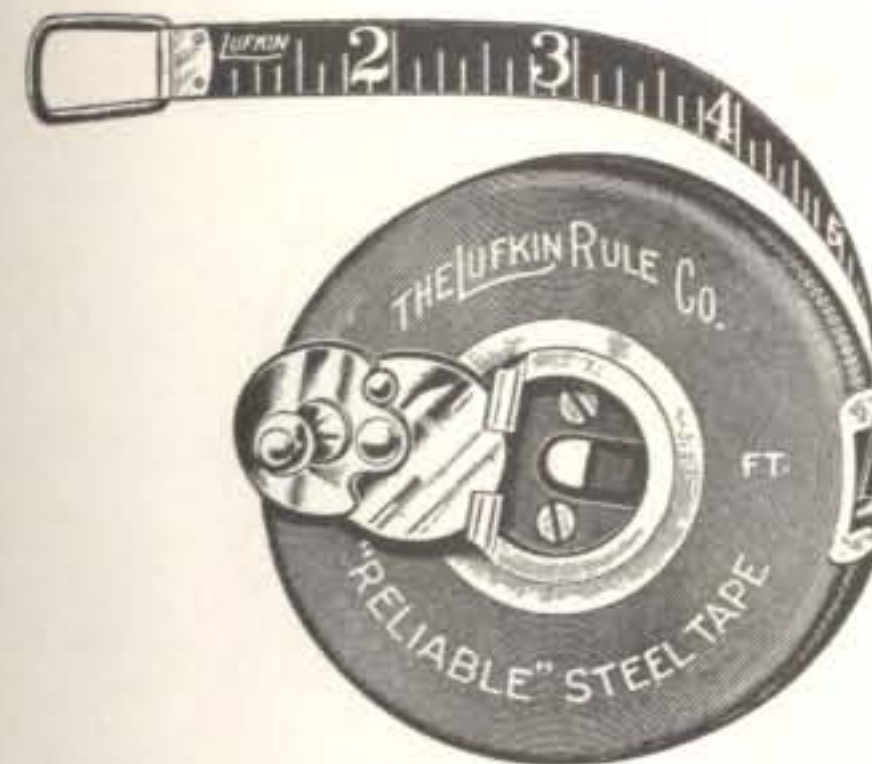
One side metric (first decimetre in mm., balance of length in cm.)  
One side English (feet, inches and 8ths of inches)

No.	200 1/2 ME	201ME	203ME	204ME	205 1/2 ME	206ME	207ME
No.	200EM	201EM	203EM	204EM	205EM	206EM	207EM
Lgth. metres	5	7 1/2	10	15	20	25	30
Lgth. feet	15	25	33	50	66	75	82
Wt. ea., ozs.	8	9	10	13	15	18	21
Price, each	\$5.60	\$6.00	\$7.00	\$9.60	\$12.25	\$14.00	\$15.00

(ME tapes are assembled in case with metric on front, English on back)  
(EM tapes are assembled in case with English on front, metric on back)

Packing: One in a box

NOTE—We no longer regularly list "Reliable" tapes marked links on back, as this graduation is not extensively used. The prices of No. 200 and No. 200D series tapes above are reduced accordingly. If links on back are wanted, add 1c per foot to above list prices. Specify as "200L", "200DL", etc.  
"Reliable" tapes marked feet, inches and 16ths, price, 5% extra.



### "RELIABLE" STEEL TAPES (HALF INCH WIDE)

*Instantaneous* Readings. "Nubian" Finish.

A TAPE OF THE HIGHEST GRADE AND EXTRA DURABILITY

Like the "Reliable" tapes of other widths, this one stands foremost among all measuring tapes. It is made from most choice materials and by the best methods known.

This line, being 1/2 inch wide, has extra durability. Its markings are clear and very legible. The cordovan-brown genuine leather case is closely hand-stitched and nicely finished. It has heavily brass plated steel liner and all trimmings are nickel plated. The double-folding flush handle is opened by pressing on opposite side and has extension finger hold, giving a firm grip for winding. Measurements guaranteed accurate.

#### WITH ONE-HALF INCH TAPES

Marked feet, inches and 8ths of inches, one side only

No.	300	301	303	304	305	306	307
Length, feet	25	33	50	66	75	100	150
Weight each, ozs.	11	13	16	20	23	27	40
Price, each	\$6.00	\$7.00	\$9.60	\$12.25	\$14.00	\$17.00	\$25.00

Marked feet, 10ths and 100ths of feet, one side only

No.	300D	301D	303D	304D	305D	306D	307D
Length, feet	25	33	50	66	75	100	150
Weight each, ozs.	11	13	16	20	23	27	40
Price, each	\$6.00	\$7.00	\$9.60	\$12.25	\$14.00	\$17.00	\$25.00

Marked metric only, one side only

(First decimetre in mm., balance of length in cm.)

No.	300 1/2 M	301M	303M	304M	305 1/2 M	306M	307M
Length, metres	5	10	15	20	25	30	50
Weight each, ozs.	10	13	16	20	24	27	43
Price, each	\$5.75	\$7.00	\$9.60	\$12.25	\$15.00	\$17.00	\$28.00

Marked metric and English

One side metric (first decimetre in mm., balance of length in cm.)  
One side English (feet, inches and 8ths of inches)

No.	300 1/2 ME	301ME	303ME	304ME	305 1/2 ME	306ME	307ME
No.	300EM	301EM	303EM	304EM	305EM	306EM	307EM
Lgth. metres	5	7 1/2	10	15	20	25	30
Lgth. feet	15	25	33	50	66	75	82
Wt. ea., ozs.	10	11	13	16	20	23	27
Price, ea.	\$6.00	\$6.50	\$7.70	\$10.60	\$13.60	\$15.50	\$16.80

(ME tapes are assembled in case with metric on front, English on back)  
(EM tapes are assembled in case with English on front, metric on back)

Packing: One in a box

NOTE—We no longer regularly list "Reliable" tapes marked links on back, as this graduation is not extensively used. The prices of No. 300 and No. 300D series tapes above are reduced accordingly. If links on back are wanted, add 1c per foot to above list prices. Specify as "300L", "300DL", etc.  
"Reliable" tapes marked feet, inches and 16ths, price, 5% extra.





### "RELIABLE" STEEL TAPES (EXTRA WIDE)

*Instantaneous Readings.* "Nubian" Finish.

EXTRA STRENGTH AND LARGE, MOST LEGIBLE FIGURES  
ARE FEATURES OF THESE WIDE TAPES

These are the widest steel tapes we make. Being "Reliable" brand, they are of the very finest materials and construction.

While in thickness identically same as the tapes on previous pages, the greater width gives these lines more body. It also accommodates larger figures. The cases are of cordovan-brown genuine leather, closely hand-stitched and well finished. They have heavily brass plated steel liner and nickel plated trimmings. Double-folding flush handle is opened by pressing on opposite side, and has extension finger hold, affording good grip for winding. Measurements guaranteed accurate.

#### WITH FIVE-EIGHTHS INCH TAPES

Marked one side only					
Feet, inches and 8ths of inches....No.	341	343	344	345	346
Feet, 10ths and 100ths of feet....No.	341D	343D	344D	345D	346D
Length, feet.....	33	50	66	75	100
Weight each, ozs.....	15	19	24	27	31
Price, each.....	\$8.40	\$11.40	\$14.70	\$16.70	\$20.40

Marked metric and English					
One side metric (first decimetre in mm., balance of length in cm.)					
One side English (feet, inches and 8ths of inches)					
No. ....	341ME	343ME	344ME	345ME	346ME
Length, metres.....	10	15	20	22	25
Length, feet.....	33	50	66	75	82
Weight each, ozs.....	15	19	24	27	28
Price, each.....	\$9.00	\$12.40	\$16.00	\$18.20	\$19.60

#### WITH THREE-QUARTERS INCH TAPES

Marked one side only					
Feet, inches and 8ths of inches....No.	351	353	354	355	356
Feet, 10ths and 100ths of feet....No.	351D	353D	354D	355D	356D
Length, feet.....	33	50	66	75	100
Weight each, ozs.....	18	22	27	30	33
Price, each.....	\$9.40	\$12.90	\$16.50	\$18.70	\$23.00

Marked metric and English					
One side metric (first decimetre in mm., balance of length in cm.)					
One side English (feet, inches and 8ths of inches)					
No. ....	351ME	353ME	354ME	355ME	356ME
Length, metres.....	10	15	20	22	25
Length, feet.....	33	50	66	75	82
Weight each, ozs.....	18	22	27	30	31
Price, each.....	\$10.00	\$13.90	\$17.80	\$20.00	\$21.40

Packing: One in a box

NOTE—We no longer regularly list "Reliable" tapes marked links on back, as this graduation is not extensively used. The prices of No. 341, No. 341D, and No. 351 and No. 351D series tapes above, are reduced accordingly. If links on back are wanted, add 1c per foot to above list prices. Specify as "341L", "341DL", etc.



### "RELIABLE JUNIOR" STEEL TAPES

*Instantaneous Readings.* "Nubian" Finish.

THE FINEST, LIGHT WEIGHT, LONG STEEL TAPE MADE;  
A MINIATURE "RELIABLE" TAPE

This, while a 1/4 inch wide light weight steel tape, will give good service. Though small and convenient to carry anywhere, it is long enough to take usual measurements. It is about one-half the size and weight of the 3/8 inch wide "Reliable" and embodies its improved features.

Case is of cordovan-brown genuine leather, hand-stitched, with brass plated steel liner and nickel plated trimmings. Double-folding flush winding handle is opened by pressing on opposite side, and has extension finger hold. Measurements guaranteed accurate.

#### WITH LIGHT WEIGHT, ONE-QUARTER INCH TAPES

Marked feet, inches and 16ths of inches, one side only					
No. ....	100	101	103	104	105
Length, feet.....	25	33	50	66	75
Weight each, ozs.....	5	6	7	9	10
Price, each.....	\$5.10	\$5.65	\$7.70	\$9.70	\$11.10

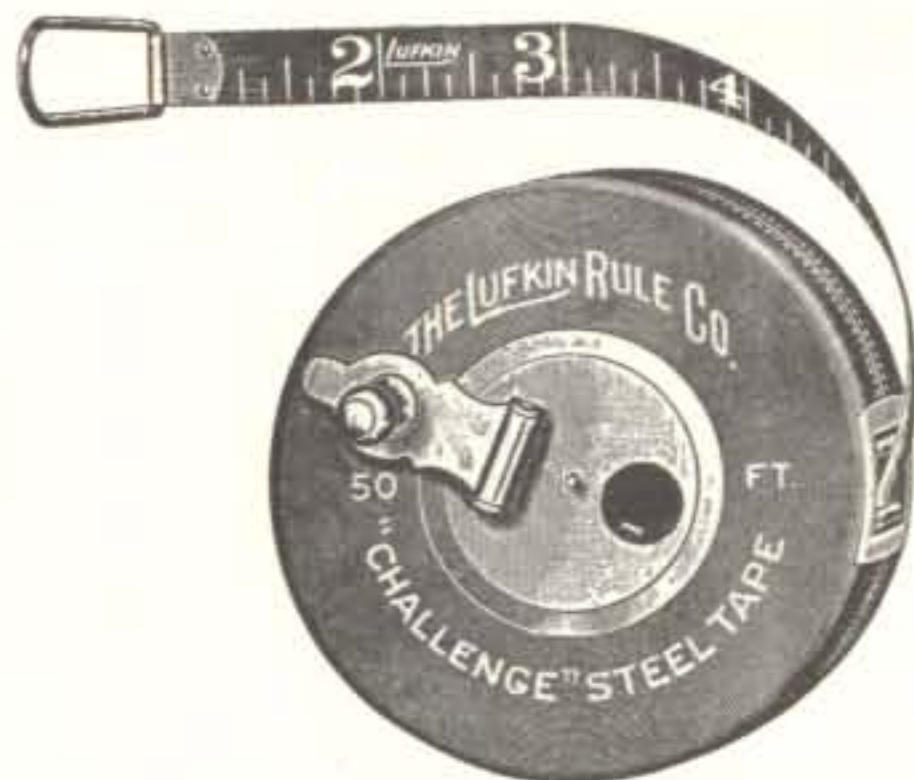
Marked feet, 10ths and 100ths of feet, one side only					
No. ....	100D	101D	103D	104D	105D
Length, feet.....	25	33	50	66	75
Weight each, ozs.....	5	6	7	9	10
Price, each.....	\$5.10	\$5.65	\$7.70	\$9.70	\$11.10

Marked metric only, one side only					
(First decimetre in mm., balance of length in cm.)					
No. ....	100M	101M	103M	104M	105M
Length, metres.....	5	10	15	20	25
Weight each, ozs.....	4	6	7	9	11
Price, each.....	\$4.80	\$5.65	\$7.70	\$9.70	\$11.60

Marked metric and English					
One side metric (first decimetre in mm., balance of length in cm.)					
One side English (feet, inches and 16ths of inches)					
No. ....	100ME	101ME	103ME	104ME	105ME
Length, metres.....	5	10	15	20	22
Length, feet.....	15	25	33	50	66
Wt. each, ozs.....	4	5	6	7	9
Price, each.....	\$5.10	\$5.60	\$6.30	\$8.70	\$11.00

Packing: One in a box





### "CHALLENGE" STEEL TAPES

*Instantaneous* Readings. "Nubian" Finish.

FOR YEARS THIS HAS BEEN THE MOST WIDELY USED  
GENERAL PURPOSE STEEL TAPE

Particularly recommended for all kinds of general measuring; has long been especially popular in construction and similar work. Even where subject to continuous and hard use the "Challenge" gives satisfactory service.

Line of highest grade tape steel with distinct markings. Case of selected genuine russet leather, hand-stitched, and with substantial plated steel liner. Folding flush handle is opened by pressing pin on opposite side. Trimmings nickel plated. Measurements guaranteed accurate.

#### WITH THREE-EIGHTHS INCH TAPES

Marked feet, inches and 8ths of inches, one side only							
No. ....	260	261	263	264	265	266	267
Length, feet ....	25	33	50	66	75	100	150
Weight each, ozs. ....	8	9	11	14	17	21	31
Price, each ....	\$4.90	\$5.30	\$6.00	\$7.50	\$7.80	\$10.20	\$17.00

Marked feet, 10ths and 100ths of feet, one side only							
No. ....	260D	261D	263D	264D	265D	266D	267D
Length, feet ....	25	33	50	66	75	100	150
Weight each, ozs. ....	8	9	11	14	17	21	31
Price, each ....	\$4.90	\$5.30	\$6.00	\$7.50	\$7.80	\$10.20	\$17.00

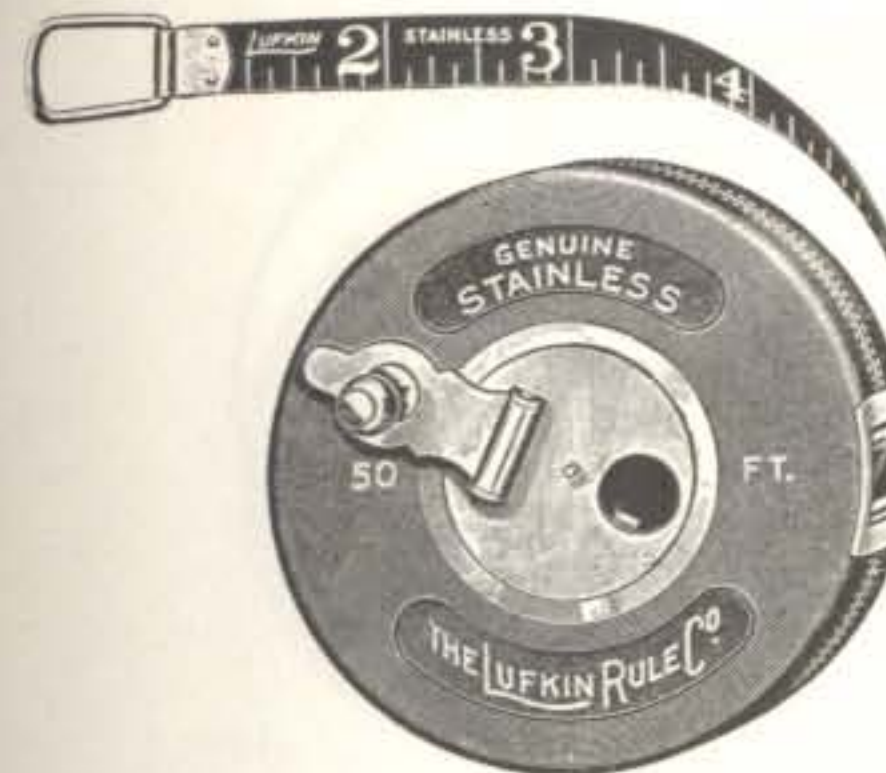
Marked metric only, one side only (First decimetre in mm., balance of length in cm.)							
No. ....	260 1/2 M	261M	263M	264M	265 1/2 M	266M	267M
Length, metres ....	5	10	15	20	25	30	50
Weight each, ozs. ....	7	9	11	14	18	20	34
Price, each ....	\$4.30	\$5.30	\$6.00	\$7.50	\$8.50	\$10.20	\$18.00

Marked metric and English One side metric (first decimetre in mm., balance of length in cm.) One side English (feet, inches and 8ths of inches)									
No. ....	260 1/2 ME	261ME	263ME	264ME	265 1/2 ME	266ME	267ME		
No. ....	260EM	261EM	263EM	264EM	265EM	266EM	267EM		
Length, metres ....	5	7 1/2	10	15	20	22	25	30	50
Length, feet ....	15	25	33	50	66	75	82	100	164
Wt. each, ozs. ....	7	8	9	11	14	17	18	20	34
Price, each ....	\$4.60	\$5.40	\$6.00	\$7.00	\$8.80	\$9.30	\$10.15	\$12.20	\$21.00

(ME tapes are assembled in case with metric on front, English on back)  
(EM tapes are assembled in case with English on front, metric on back)

Packing: One in a box

NOTE—"Challenge" tapes marked feet, inches and 16ths, price, 5% extra.  
For 1/2 inch wide "Challenge" tapes, see page 13.



### STAINLESS STEEL TAPES

("Challenge" Pattern)

RUST PROOF NON-CORROSIVE

STAINLESS TAPES ARE IDEAL FOR USE WHEREVER CONDITIONS  
COMMONLY CAUSING RUST OR CORROSION ARE PRESENT

The lines in these tapes are of standard weight and of Genuine Stainless Steel, rust proof and non-corrosive. This material also is of suitable temper for tapes, in that respect closely approaching ordinary tape steel. Our Stainless Steel Tapes hold their shape well, far better than lines made of other rust proof materials such as phosphor bronze and monel metal. The tapes below have *Instantaneous* Readings, and "Nubian" Finish, aids to accurate and quick reading.

The cases are of selected genuine leather, hand-stitched, and with substantial plated steel liners. Folding flush handle is opened by pressing pin on opposite side. Trimmings nickel plated. Measurements guaranteed accurate.

#### WITH THREE-EIGHTHS INCH STAINLESS TAPES

Marked feet, inches and 8ths of inches, one side only				
No. ....	S-260	S-263	S-265	S-266
Length, feet ....	25	50	75	100
Price, each ....	\$6.65	\$10.00	\$12.90	\$15.00

Marked feet, 10ths and 100ths of feet, one side only				
No. ....	S-260D	S-263D	S-265D	S-266D
Length, feet ....	25	50	75	100
Price, each ....	\$6.65	\$10.00	\$12.90	\$15.00

#### WITH ONE-HALF INCH STAINLESS TAPES

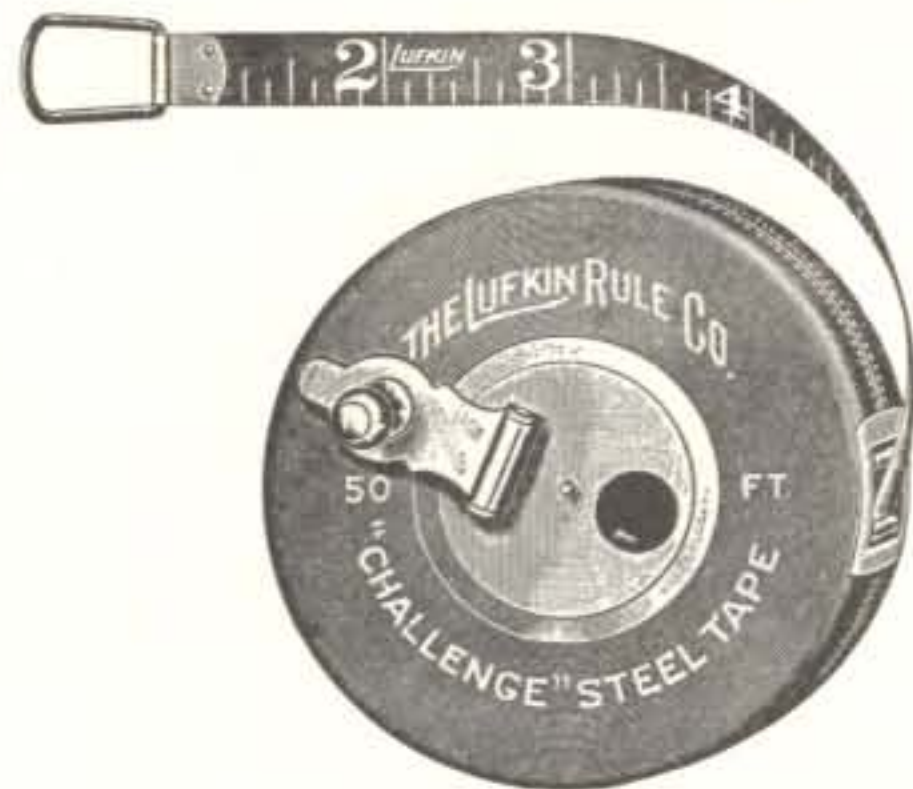
Marked feet, inches and 8ths of inches, one side only				
No. ....	S-360	S-363	S-365	S-366
Length, feet ....	25	50	75	100
Price, each ....	\$7.50	\$11.25	\$15.50	\$20.00

Marked feet, 10ths and 100ths of feet, one side only				
No. ....	S-360D	S-363D	S-365D	S-366D
Length, feet ....	25	50	75	100
Price, each ....	\$7.50	\$11.25	\$15.50	\$20.00

Packing: One in a box

NOTE:—We can supply 3/4" and 1/2" wide Stainless Steel Tapes also in "Reliable" pattern leather cases, and in metal arm frames, and the 3/4" tape in "Rival" pattern metal case.





### "CHALLENGE" STEEL TAPES (HALF-INCH WIDE)

*Instantaneous Readings.* "Nubian" Finish.

EXTRA DURABLE, THEREFORE POPULAR FOR HEAVY DUTY,  
AS HIGHWAY WORK, AND AROUND MILLS, ETC.

Same as the  $\frac{3}{8}$  inch "Challenge" on page 12, but with line  $\frac{1}{2}$  inch wide. This extra width makes the tape somewhat sturdier. These  $\frac{1}{2}$  inch tapes are suitable for practically any work to which  $\frac{3}{8}$  inch "Challenge" tapes are put.

Line of highest grade tape steel, distinctly marked. Case of selected genuine russet leather, hand-stitched, and with substantial plated steel liner. Folding flush handle is opened by pressing pin on opposite side. Trimmings nickel plated. Measurements guaranteed accurate.

#### WITH ONE-HALF INCH TAPES

##### Marked feet, inches and 8ths of inches, one side only

No.	360	361	363	364	365	366	367
Length, feet	25	33	50	66	75	100	150
Weight each, ozs.	9	11	14	17	21	25	38
Price, each	\$5.60	\$6.00	\$6.75	\$8.30	\$9.00	\$11.25	\$19.00

##### Marked feet, 10ths and 100ths of feet, one side only

No.	360D	361D	363D	364D	365D	366D	367D
Length, feet	25	33	50	66	75	100	150
Weight each, ozs.	9	11	14	17	21	25	38
Price, each	\$5.60	\$6.00	\$6.75	\$8.30	\$9.00	\$11.25	\$19.00

##### Marked metric only, one side only (First decimetre in mm., balance of length in cm.)

No.	360 1/2 M	361M	363M	364M	365 1/2 M	366M	367M
Length, metres	5	10	15	20	25	30	50
Weight each, ozs.	8	11	14	17	22	25	41
Price, each	\$4.75	\$6.00	\$6.75	\$8.30	\$10.00	\$11.25	\$21.00

##### Marked metric and English

One side metric (first decimetre in mm., balance of length in cm.)  
One side English (feet, inches and 8ths of inches)

No.	360 1/2 ME	361ME	363ME	364ME	365 1/2 ME	366ME	367ME
No.	360EM	361EM	363EM	364EM	365EM	366EM	367EM
Length, metres	5	7 1/2	10	15	20	25	30
Length, feet	15	25	33	50	66	75	82
Wt. each, ozs.	8	9	11	14	17	21	25
Price, each	\$5.00	\$6.10	\$6.70	\$7.75	\$9.60	\$10.50	\$11.65

(ME tapes are assembled in case with metric on front, English on back)  
(EM tapes are assembled in case with English on front, metric on back)

Packing: One in a box

NOTE—"Challenge" tapes marked feet, inches and 16ths, price, 5% extra.



### "CHALLENGE JUNIOR" STEEL TAPES

*Instantaneous Readings.* "Nubian" Finish.

A LONG STEEL TAPE, YET OF SIZE AND WEIGHT NOT INCONVENIENT  
OR BURDENSOME TO CARRY ANYWHERE

A counterpart of the "Challenge", but about one-half its size and weight. At the same time this "Junior" pattern is well built and with reasonable care will give years of good service.

Line of highest grade tape steel, distinctly marked. Case of selected genuine russet leather, hand-stitched, with plated steel liner. Folding flush handle is opened by pressing pin on opposite side. Trimmings nickel plated. Measurements guaranteed accurate.

#### WITH LIGHT WEIGHT, ONE-QUARTER INCH TAPES

##### Marked feet, inches and 16ths of inches, one side only

No.	1260	1261	1263	1264	1265	1266
Length, feet	25	33	50	66	75	100
Weight each, ozs.	4	5	7	8	9	12
Price, each	\$4.70	\$5.00	\$5.70	\$7.10	\$7.50	\$9.60

##### Marked feet, 10ths and 100ths of feet, one side only

No.	1260D	1261D	1263D	1264D	1265D	1266D
Length, feet	25	33	50	66	75	100
Weight each, ozs.	4	5	7	8	9	12
Price, each	\$4.70	\$5.00	\$5.70	\$7.10	\$7.50	\$9.60

##### Marked metric only, one side only

(First decimetre in mm., balance of length in cm.)

No.	1260 1/2 M	1261M	1263M	1264M	1265 1/2 M	1266M
Length, metres	5	10	15	20	25	30
Weight each, ozs.	3	5	7	8	10	12
Price, each	\$4.40	\$5.00	\$5.70	\$7.10	\$8.20	\$9.60

##### Marked metric and English

One side metric (first decimetre in mm., balance of length in cm.)

One side English (feet, inches and 16ths of inches)

No.	1260 1/2 ME	1261ME	1263ME	1264ME	1265 1/2 ME	1266ME
No.	1260EM	1261EM	1263EM	1264EM	1265EM	1266EM
Length, metres	5	7 1/2	10	15	20	25
Length, feet	15	25	33	50	66	75
Weight each, ozs.	3	4	5	7	8	10
Price, each	\$4.70	\$5.20	\$5.60	\$6.70	\$8.40	\$9.00

(ME tapes are assembled in case with metric on front, English on back)  
(EM tapes are assembled in case with English on front, metric on back)

Packing: One in a box





### "RIVAL" STEEL TAPES

*Instantaneous Readings.* "Nubian" Finish.

A GENERAL PURPOSE STEEL TAPE IN METAL CASE

Some people prefer a metal to a leather case, and for certain classes of work it is best. We recommend the "Rival" for use around steel and tube mills, or wherever a tape case comes much in contact with oil, grease or grit.

Line of highest grade tape steel, distinctly marked. Case of steel, nickel plated, and with knurled edge, which affords a firm grip. Folding flush handle is opened by pressing pin on opposite side. Measurements guaranteed accurate.

#### WITH THREE-EIGHTHS INCH TAPES

Marked feet, inches and 8ths of inches, one side only

No.	240	241	243	244	245	246
Length, feet	25	33	50	66	75	100
Weight each, ozs.	8	9	11	14	15	20
Price, each	\$4.45	\$4.80	\$5.40	\$6.85	\$7.20	\$9.25

Marked feet, 10ths and 100ths of feet, one side only

No.	240D	241D	243D	244D	245D	246D
Length, feet	25	33	50	66	75	100
Weight each, ozs.	8	9	11	14	15	20
Price, each	\$4.45	\$4.80	\$5.40	\$6.85	\$7.20	\$9.25

Marked metric only, one side only  
(First decimetre in mm., balance of length in cm.)

No.	240 1/2 M	241M	243M	244M	245 1/2 M	246M
Length, metres	5	10	15	20	25	30
Weight each, ozs.	7	9	11	14	16	20
Price, each	\$4.00	\$4.80	\$5.40	\$6.85	\$7.90	\$9.25

#### Marked metric and English

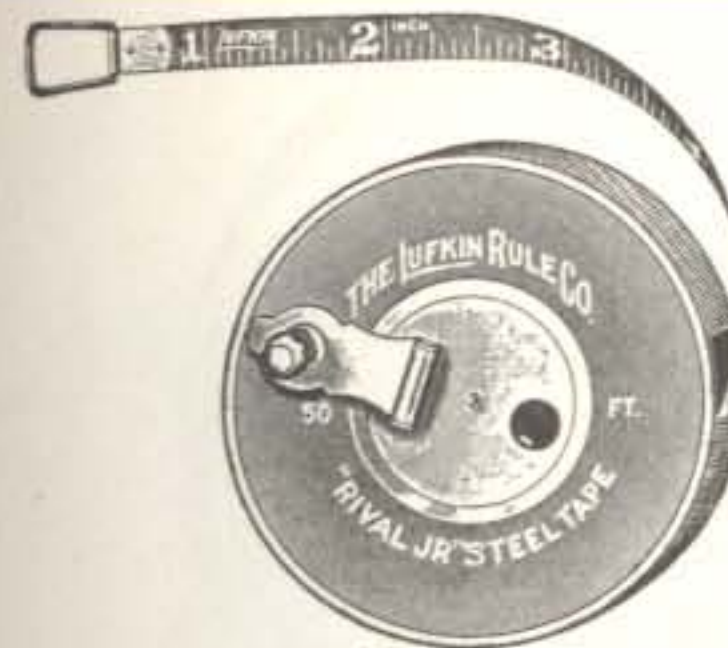
One side metric (first decimetre in mm., balance of length in cm.)  
One side English (feet, inches and 8ths of inches)

No.	240 1/2 ME	241ME	243ME	244ME	245 1/2 ME	246ME
No.	240EM	241EM	243EM	244EM	245EM	246EM
Length, metres	5	7 1/2	10	15	20	22
Length, feet	15	25	33	50	66	75
Wt. each, ozs.	7	8	9	11	14	15
Price, each	\$4.30	\$5.00	\$5.45	\$6.40	\$8.20	\$9.50

(ME tapes are assembled in case with metric on front, English on back)  
(EM tapes are assembled in case with English on front, metric on back)

Packing: One in a box

NOTE—"Rival" tapes marked feet, inches and 16ths, price, 5% extra.



### "RIVAL JUNIOR" STEEL TAPES

*Instantaneous Readings.* "Nubian" Finish.

A COMPACT, LIGHT WEIGHT LONG STEEL TAPE, CONVENIENT TO CARRY IN THE POCKET ANYWHERE

The "Rival Junior" is a miniature "Rival" tape. It has an exceptionally neat appearance, and, while small, is of good construction and with reasonable care holds up well.

Line of highest grade tape steel, distinctly marked. Case of steel, nickel plated, and with knurled edge, affording good grip. Folding flush handle is opened by pressing pin on opposite side. Measurements guaranteed accurate.

#### WITH LIGHT WEIGHT, ONE-QUARTER INCH TAPES

Marked feet, inches and 16ths of inches, one side only

No.	1240	1241	1243	1244	1245	1246
Length, feet	25	33	50	66	75	100
Weight each, ozs.	4	5	7	8	9	12
Price, each	\$4.20	\$4.60	\$5.15	\$6.50	\$6.85	\$8.75

Marked feet, 10ths and 100ths of feet, one side only

No.	1240D	1241D	1243D	1244D	1245D	1246D
Length, feet	25	33	50	66	75	100
Weight each, ozs.	4	5	7	8	9	12
Price, each	\$4.20	\$4.60	\$5.15	\$6.50	\$6.85	\$8.75

Marked metric only, one side only  
(First decimetre in mm., balance of length in cm.)

No.	1240 1/2 M	1241M	1243M	1244M	1245 1/2 M	1246M
Length, metres	5	10	15	20	25	30
Weight each, ozs.	3	5	7	8	10	12
Price, each	\$4.00	\$4.60	\$5.15	\$6.50	\$7.60	\$8.75

#### Marked metric and English

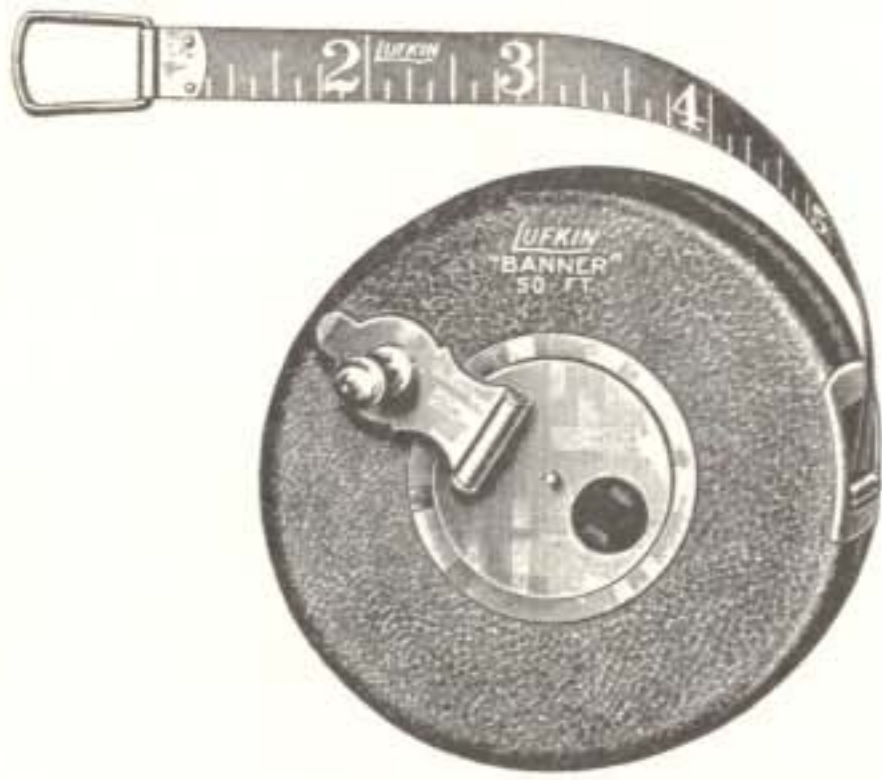
One side metric (first decimetre in mm., balance of length in cm.)  
One side English (feet, inches and 16ths of inches)

No.	1240 1/2 ME	1241ME	1243ME	1244ME	1245 1/2 ME	1246ME
No.	1240EM	1241EM	1243EM	1244EM	1245EM	1246EM
Length, metres	5	7 1/2	10	15	20	22
Length, feet	15	25	33	50	66	75
Weight each, ozs.	3	4	5	7	8	10
Price, each	\$4.30	\$5.10	\$5.25	\$6.15	\$7.80	\$9.00

(ME tapes are assembled in case with metric on front, English on back)  
(EM tapes are assembled in case with English on front, metric on back)

Packing: One in a box





“BANNER” STEEL TAPES

*Instantaneous* Readings. “Nubian” Finish.

THE “BANNER” AFFORDS AT A MOST MODERATE PRICE THE ACCURACY OBTAINABLE ONLY IN A STEEL TAPE

This is by far the best of all popular priced steel tapes on the market. It is popularizing steel tapes with many who have previously used only woven lines. It meets a widespread demand.

Line of highest quality tape steel, distinctly marked. Case of mottled black imitation leather, a material of extraordinary durability and of good appearance. It is hand-stitched, has plated steel liner, and its trimmings are nickel plated. Folding flush handle is opened by pressing pin on opposite side. Measurements guaranteed accurate.

WITH THREE-EIGHTHS INCH TAPES

Marked feet, inches and 8ths of inches, one side only				
No. ....	550	553	555	556
Length, feet .....	25	50	75	100
Weight each, ozs. ....	7	11	17	19
Price, each .....	\$4.20	\$5.25	\$6.85	\$8.75

Marked metric only, one side only (First decimetre in mm., balance of length in cm.)						
No. ....	550 ½ M	551M	553M	554M	555 ½ M	556M
Length, metres .....	5	10	15	20	25	30
Weight each, ozs. ....	6	8	11	14	18	19
Price, each .....	\$3.85	\$4.70	\$5.25	\$6.40	\$7.60	\$8.75

Marked metric and English One side metric (first decimetre in mm., balance of length in cm.) One side English (feet, inches and 8ths of inches)							
No. ....	550 1/2 ME	551ME	553ME	554ME	555 1/2 ME	556ME	
No. ....	550EM	551EM	553EM	554EM	555EM	556EM	
Length, metres ...	5	7 1/2	10	15	20	22	25
Length, feet ....	15	25	33	50	66	75	82
Weight each, ozs.	6	7	8	11	14	17	18
Price, each. ....	\$4.15	\$4.70	\$5.40	\$6.25	\$7.70	\$8.35	\$9.25
(ME tapes are assembled in case with metric on front, English on back) (EM tapes are assembled in case with English on front, metric on back)							

Packing: One in a box

Note—“Banner” tapes are furnished marked feet, 10ths and 100ths of feet when so ordered.



IMPROVED “UNIVERSAL” STEEL TAPES

*Instantaneous* Readings “Nubian” Finish

A Steel Tape so low in price that no carpenter or other mechanic can afford to be without it. The “Universal” gives the accuracy obtainable only in a steel tape, and sells at a popular price.

A 3/8 inch wide, standard weight, steel tape, clearly marked. The metal-lined case is covered with mottled, tan-colored imitation leather, a good looking and extra durable material, and has a 3/16 inch wide, flat flush, nickel plated edge band. Folding flush handle opened by pressing pin on opposite side. All trimmings are nickel plated

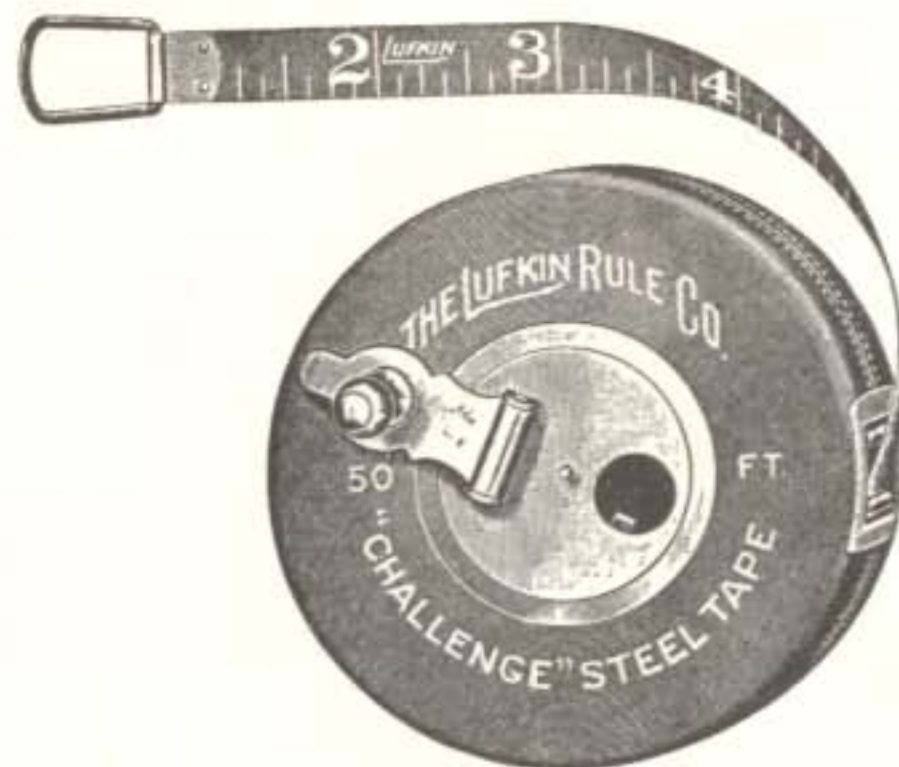
WITH THREE-EIGHTHS INCH STEEL TAPES

Marked Feet, Inches, and 8ths of Inches, One Side Only				
No. ....	540	543	545	546
Length, feet .....	25	50	75	100
Weight each, ozs. ....	6	10	15	17
Price, each .....	\$2.60	\$2.90	\$4.00	\$5.00

Packing: One in a box

NOTE:—Stock numbers are changed from No. 560 to No. 540 Series.





### "CHALLENGE" STEEL TAPES WITH DIAMETER MEASUREMENT

*Instantaneous Readings.* "Nubian" Finish.

CONVENIENT FOR DETERMINING THE DIAMETER OF PULLEYS,  
SHAFTING, PIPING, COLUMNS, TANKS, ETC.

Standard pattern "Challenge" tapes but with diameter marking. Line marked one side feet, inches and 8ths of inches, other side diameter equivalents of circumferences in diameter feet and inches, with extra diameter inch first end subdivided to 64ths. With this tape one can read directly not only the circumference of any cylindrical body, but its diameter down to 64ths of an inch, by applying tape to circumference.

Highest grade tape steel, distinctly marked. Blank space first end. Case of selected genuine russet leather with plated steel liner. Nickel plated trimmings. Folding flush handle opened by pressing pin on opposite side. Measurements guaranteed accurate.

#### WITH THREE-EIGHTHS INCH TAPES

No. 261P	Length 33 feet.	Weight each, 9 ozs.	Each, . . . . .	\$7.00
No. 263P	Length 50 feet.	Weight each, 11 ozs.	Each, . . . . .	8.40

### "CHALLENGE" STEEL TAPES IN CONSECUTIVE INCHES

"Nubian" Finish

FOR ANY WORK REQUIRING LONG MEASUREMENTS  
EXPRESSED IN INCHES

Standard pattern "Challenge" tapes but with inches numbered consecutively, i. e., 25 foot tape has inches numbered 1 to 300, 50 foot tape 1 to 600.

High grade steel line, distinctly marked. Case of selected genuine russet leather with plated metal liner, and nickel plated trimmings. Folding flush handle opened by pressing pin on opposite side. Measurements guaranteed accurate.

#### WITH THREE-EIGHTHS INCH TAPES

Marked one side only, consecutive inches to eighths of inches				
No. 260C	Length 300 inches (25 ft.)	Weight each, 8 ozs.	Each, . . . . .	\$6.40
No. 263C	Length 600 inches (50 ft.)	Weight each, 11 ozs.	Each, . . . . .	7.80
(Tapes can be furnished marked one side consecutive inches to 8ths, other side feet, inches and 8ths.)				

Packing: All packed one in a box



### "CHALLENGE" TREE TAPES

*Instantaneous Readings.* "Nubian" Finish.

GIVE AT A DIRECT READING THE DIAMETER AS WELL AS THE  
CIRCUMFERENCE OF THE TREE

This steel tape is used by the United States Forest Service, as well as by private foresters, and in ranger schools, etc. The line is marked one side regular feet, 10ths and 100ths of feet, other side diameter equivalents of circumferences in diameter feet, inches and 10ths of inches. Blank space first end. It is equipped for fastening to the tree with spike or peg, which folds down for convenience in carrying. Highest grade tape steel, distinctly marked. Case of selected genuine russet leather with plated steel liner. Folding flush handle opened by pressing pin on opposite side.

#### WITH THREE-EIGHTHS INCH TAPES

No. 261TP	Length, 33 feet.	Weight each, 10 ozs.	Each, \$ 9.00
No. 263TP	Length, 50 feet.	Weight each, 12 ozs.	Each 11.25



### "ARTISAN" TREE TAPE

"Nubian" Finish

A FORESTER'S TAPE OF MEDIUM LENGTH IN METAL CASE

This item is also standard equipment of United States foresters. The steel line is marked on the front 20 feet in feet, 10ths and 100ths of feet, on the back in diameter equivalents of circumferences in consecutive diameter inches and 10ths of inches up to 76 inches. Blank space first end. Tape is fitted with a pointed metal hook for catching bark of trees. Put up in nickel plated steel case with knurled edge, affording a firm grip. Hole in edge of case into which point of hook fits for protection in carrying. Folding flush handle is opened by pressing pin on opposite side.

No. 120TP	Length, 20 feet.	Width, 3/8 inch.	Weight each, 6 ozs.	Each, . . . . .	\$4.50
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Packing: All packed one in a box

NOTE—For Biltmore or Forest Cruiser Sticks, see Section Seven.





### ENGINEERS PATTERN STEEL TAPES

*Instantaneous* Readings. "Nubian" Finish.

A STURDY TAPE AND CASE DESIGNED FOR ENGINEERING,  
SURVEYING AND OTHER HEAVY WORK

A quarter-inch tape, 50 per cent heavier than standard  $\frac{3}{8}$  inch lines, and put up in steel lined leather case. It is the width and weight best for heavy work. For carrying, a case tape is by many preferred to a frame tape.

The line, of highest grade tape steel, is distinctly marked, with measurements beginning at end. It is readily removed from case and is supplied with a pair of detachable rings. The case is narrow, of selected genuine russet leather, hand-stitched, with substantial plated steel liner. Folding flush handle is opened by pressing pin on opposite side. Measurements guaranteed accurate.

### WITH STANDARD, ONE-QUARTER INCH ENGINEERS TAPES

Marked feet, inches and 8ths of inches, one side only

No.	231	233	234	235	236
Length, feet	33	50	66	75	100
Weight each, ozs.	13	17	21	22	25
Price, each	\$7.50	\$8.75	\$11.30	\$12.50	\$15.60

Marked feet, 10ths and 100ths of feet, one side only

No.	231D	233D	234D	235D	236D
Length, feet	33	50	66	75	100
Weight each, ozs.	13	17	21	22	25
Price, each	\$7.50	\$8.75	\$11.30	\$12.50	\$15.60

Marked metric only, one side only

(First decimetre in mm., balance of length in cm.)

No.	231M	233M	234M	235 $\frac{1}{2}$ M	236M
Length, metres	10	15	20	25	30
Weight each, ozs.	13	17	21	23	25
Price, each	\$7.50	\$8.75	\$11.30	\$13.20	\$15.60

Marked metric and English

One side metric (first decimetre in mm., balance of length in cm.)  
One side English (feet, inches and 8ths of inches)

No.	231ME	233ME	234ME	235 $\frac{1}{2}$ ME	236ME
No.	231EM	233EM	234EM	235EM	236EM
Length, metres	10	15	20	22	25
Length, feet	33	50	66	75	82
Weight each, ozs.	13	17	21	22	23
Price, each	\$8.20	\$9.75	\$12.60	\$14.00	\$14.85

(ME tapes are assembled in case with metric on front, English on back)  
(EM tapes are assembled in case with English on front, metric on back)

Packing: One in a box

NOTE—For Engineers Pattern Tapes in frames, see page 22.



### "WOLVERINE" STEEL TAPES

*Instantaneous* Readings. "Nubian" Finish.

POPULAR ABOUT MINES AND OTHER PLACES REQUIRING ACCURACY  
UNDER SEVERE CONDITIONS OF USE

An Engineers Pattern heavy line on perforated metal disk reel. While somewhat more compact than a frame, this reel also allows for dirt accumulation and for its drying out.

The line, of highest grade tape steel, distinctly marked, is engineers style, i. e., measures from end of tape, is detachable from reel and supplied with two rings. The metal reel is in dull finish, strong, and of good appearance. It has folding winding handle and adjustable strap handle, which affords a firm hold. Measurements guaranteed accurate

### WITH STANDARD, ONE-QUARTER INCH ENGINEERS TAPES

Marked feet, inches and 8ths of inches, one side only

No.	1373	1374	1375	1376	1377
Length, feet	50	66	75	100	150
Weight each, ozs.	18	23	25	30	47
Price, each	\$11.10	\$13.50	\$15.00	\$19.00	\$28.00

Marked feet, 10ths and 100ths of feet, one side only

No.	1373D	1374D	1375D	1376D	1377D
Length, feet	50	66	75	100	150
Weight each, ozs.	18	23	25	30	47
Price, each	\$11.10	\$13.50	\$15.00	\$19.00	\$28.00

Marked metric only, one side only

(First decimetre in mm., balance of length in cm.)

No.	1373M	1374M	1375 $\frac{1}{2}$ M	1376M	1377M
Length, metres	15	20	25	30	50
Weight each, ozs.	18	23	27	30	50
Price, each	\$11.10	\$13.50	\$15.75	\$19.00	\$30.00

Marked metric and English

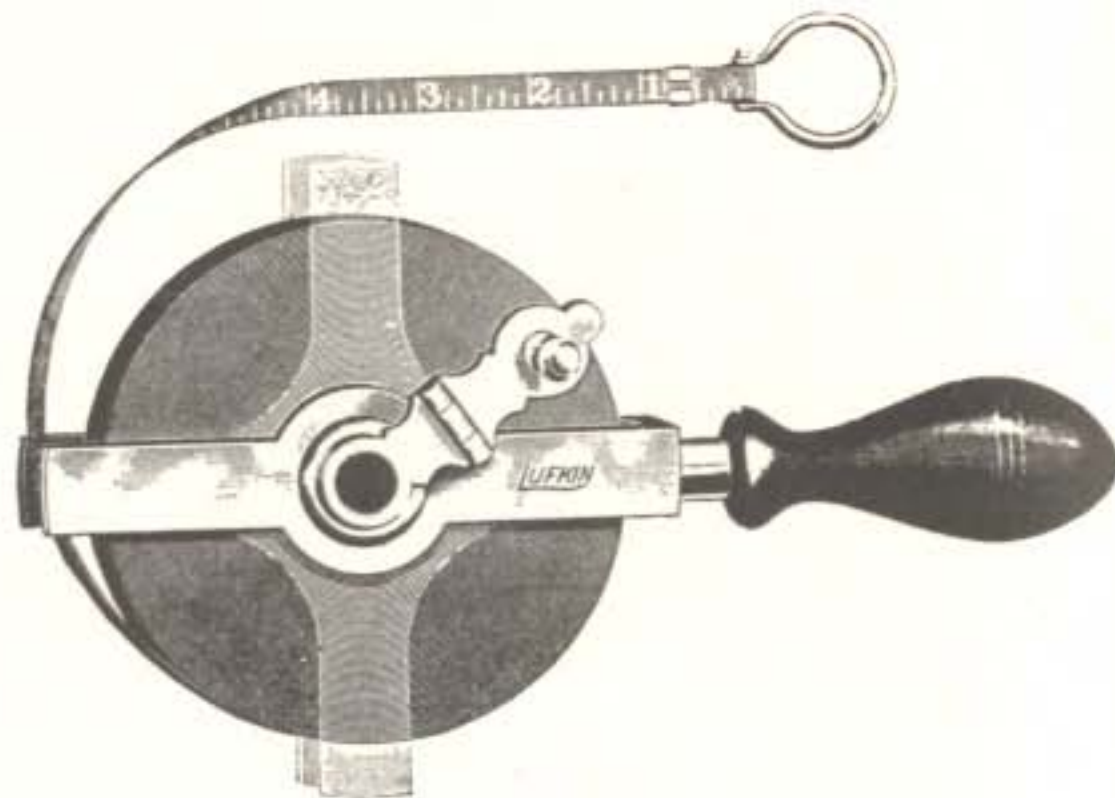
One side metric (first decimetre in mm., balance of length in cm.)  
One side English (feet, inches and 8ths of inches)

No.	1373ME	1374ME	1375 $\frac{1}{2}$ ME	1376ME	1377ME
No.	1373EM	1374EM	1375EM	1376EM	1377EM
Length, metres	15	20	22	25	30
Length, feet	50	66	75	82	100
Weight each, ozs.	18	23	25	27	30
Price, each	\$12.10	\$14.80	\$16.60	\$17.25	\$21.00

(ME tapes are assembled in reel with metric on front, English on back)  
(EM tapes are assembled in reel with English on front, metric on back)

Packing: One in a box





### ENGINEERS PATTERN FRAME STEEL TAPES With Folding Winding Handle

*Instantaneous* Readings. "Nubian" Finish.

AN ENGINEERS STRONG TAPE AND FRAME, SERVICEABLE EVEN UNDER SEVERE CONDITIONS

Our Engineers Pattern heavy tape on open metal frame. Frames take care of dirt or other accumulation better than enclosed cases, they also give a firm hold and extra winding leverage.

Line of highest grade tape steel, distinctly marked. Readily removed from frame and supplied with a pair of detachable rings. Substantial metal frame, heavily nickel plated, with polished hardwood handle. Measurements guaranteed accurate.

#### WITH STANDARD, ONE-QUARTER INCH ENGINEERS TAPES

No.	Marked feet, inches and 8ths of inches, one side only						
	271	273	274	275	276	277	278
Length, feet	33	50	66	75	100	150	200
Weight each, ozs.	17	19	21	23	31	36	42
Price, each	\$6.70	\$8.35	\$9.85	\$11.90	\$14.20	\$21.50	\$27.80

No.	Marked feet, 10ths and 100ths of feet, one side only						
	271D	273D	274D	275D	276D	277D	278D
Length, feet	33	50	66	75	100	150	200
Weight each, ozs.	17	19	21	23	31	36	42
Price, each	\$6.70	\$8.35	\$9.85	\$11.90	\$14.20	\$21.50	\$27.80

No.	Marked metric only, one side only (First decimetre in mm., balance of length in cm.)					
	271M	273M	274M	275 1/2 M	276M	277M
Length, metres	10	15	20	25	30	50
Weight each, ozs.	17	19	21	25	31	38
Price, each	\$6.70	\$8.35	\$9.85	\$12.60	\$14.20	\$23.50

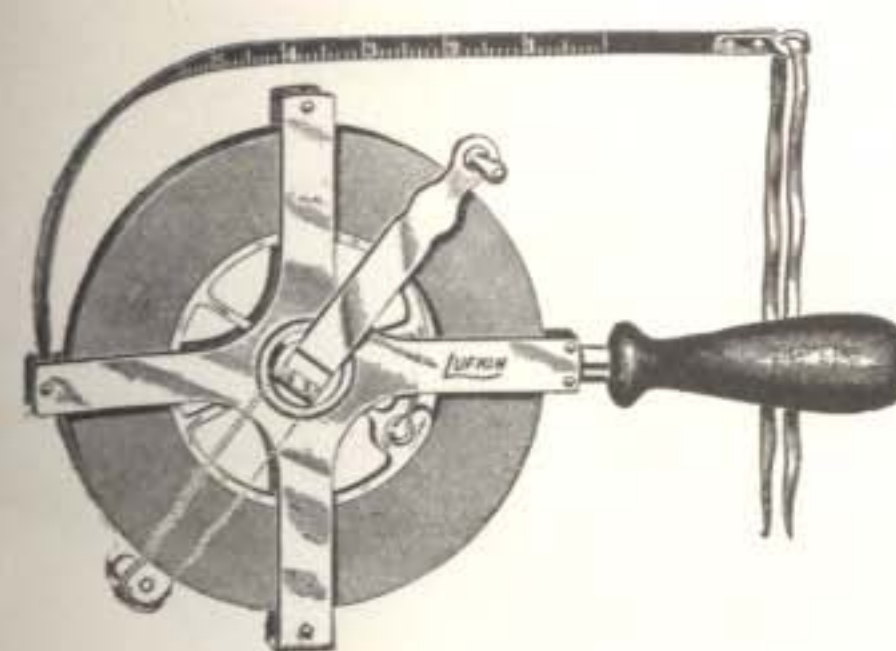
No.	Marked metric and English One side metric (first decimetre in mm., balance of length in cm.) One side English (feet, inches and 8ths of inches)						
	271ME	273ME	274ME	275 1/2 ME	276ME	277ME	278ME
Length, metres	10	15	20	22	25	30	50
Length, feet	33	50	66	75	82	100	164
Weight each, ozs.	17	19	21	23	25	31	38
Price, each	\$7.35	\$9.35	\$11.25	\$13.45	\$14.60	\$16.30	\$26.50

(ME tapes are assembled in frame with metric on front, English on back)  
(EM tapes are assembled in frame with English on front, metric on back)

Packing: One in a box

NOTE—Above tapes 100 feet long and over are put up on four-arm frames, tapes under 100 feet on two-arm frames.

For above tapes on lock handle frames, see page 25  
For above tapes in leather cases, see page 20.



### "WESTERN" TAPE

*Instantaneous* Readings "Nubian" Finish

AN EXTRA HEAVY ENGINEERING TAPE, GRADUATED ENTIRE LENGTH TO 10THS AND 100THS OF FEET

This is a heavy duty tape for engineering and construction work, where extra durability and accuracy are desired.

The LINE is 60% heavier than our standard weight Engineers Pattern Tapes; is graduated to feet, 10ths and 100ths of feet entire length and guaranteed accurate. Each end is fitted with heavy nickel plated brass clip (eye), and has blank space. Line is easily removed from frame. Pair of leather thongs furnished with each tape.

The FRAME is substantial, four-arm pattern, of metal, nickel plated and has polished hardwood handle. It has LOCK WINDING HANDLE, which, turned over, engages the frame and holds the tape at any desired point. The long winding handle and knob and 4-inch drum shell give good grip, leverage and speed in winding.

#### WITH HEAVY ONE-QUARTER INCH STEEL TAPE

Marked Feet, 10ths, and 100ths of Feet, One Side Only

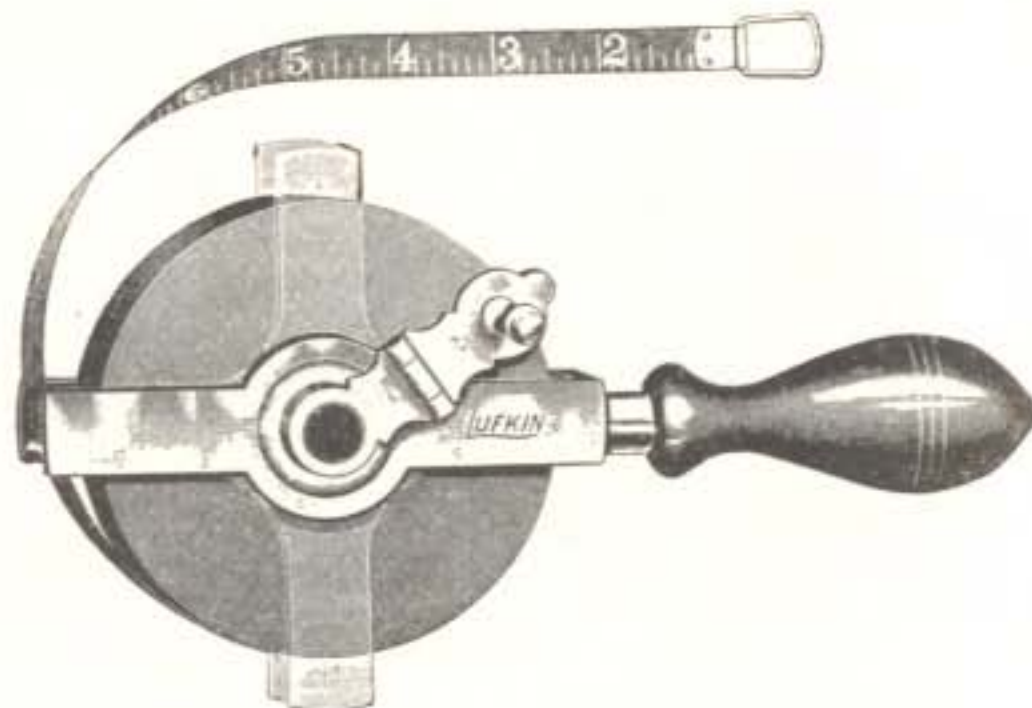
No. 1276D Heavy. Tape complete. With Lock Handle Frame.  
Length, 100 feet. Weight, each, 3 1/2 lbs. Each..\$20.00

No. 01276D Heavy. Line only. Without Frame, with Thongs.  
Length, 100 feet. Weight, each, 1 1/2 lbs. Each..\$13.60

Packing: One in a box.

Note—Above tapes can be furnished graduated feet, inches and 8ths, at same prices. Specify as "No. 1276 Heavy".





### FRAME STEEL TAPES With Folding Winding Handle

*Instantaneous* Readings. "Nubian" Finish.

FOR GENERAL MEASURING.

FRAME TAPES ARE KEPT IN CONDITION WITH THE MINIMUM OF ATTENTION.

This is a standard width and weight steel tape, such as the "Challenge"  $\frac{3}{8}$  inch, but on metal frame. It is a favorite in the oil fields and many places in general work. Frames take care of reasonable amount of dirt accumulation and afford the line a chance to dry. They also give extra winding leverage and a firm hold.

Line of highest grade tape steel, distinctly marked. Substantial metal frame heavily nickel plated and with polished hardwood handle. Measurements guaranteed accurate.

#### WITH THREE-EIGHTHS INCH TAPES

Marked feet, inches and 8ths of inches, one side only								
No.	280	281	283	284	285	286	287	288
Length, feet	25	33	50	66	75	100	150	200
Weight each, ozs.	15	17	18	21	23	27	35	41
Price, each	\$4.75	\$5.60	\$7.15	\$8.20	\$9.85	\$12.25	\$20.00	\$25.00

Marked feet, 10ths and 100ths of feet, one side only								
No.	280D	281D	283D	284D	285D	286D	287D	288D
Length, feet	25	33	50	66	75	100	150	200
Weight each, ozs.	15	17	18	21	23	27	35	41
Price, each	\$4.75	\$5.60	\$7.15	\$8.20	\$9.85	\$12.25	\$20.00	\$25.00

Marked metric only, one side only (First decimetre in mm., balance of length in cm.)						
No.	281M	283M	284M	285 $\frac{1}{2}$ M	286M	287M
Length, metres	10	15	20	25	30	50
Weight each, ozs.	17	18	21	24	27	38
Price, each	\$5.60	\$7.15	\$8.20	\$10.50	\$12.25	\$21.50

Marked metric and English One side metric (first decimetre in mm., balance of length in cm.) One side English (feet, inches and 8ths of inches)							
No.	281ME	283ME	284ME	285 $\frac{1}{2}$ ME	286ME	287ME	288ME
No.	281EM	283EM	284EM	285EM	286EM		
Length, metres	10	15	20	22	25	30	50
Length, feet	33	50	66	75	82	100	164
Weight each, ozs.	17	18	21	23	24	27	38
Price, each	\$6.30	\$8.20	\$9.60	\$11.40	\$12.50	\$14.40	\$24.60

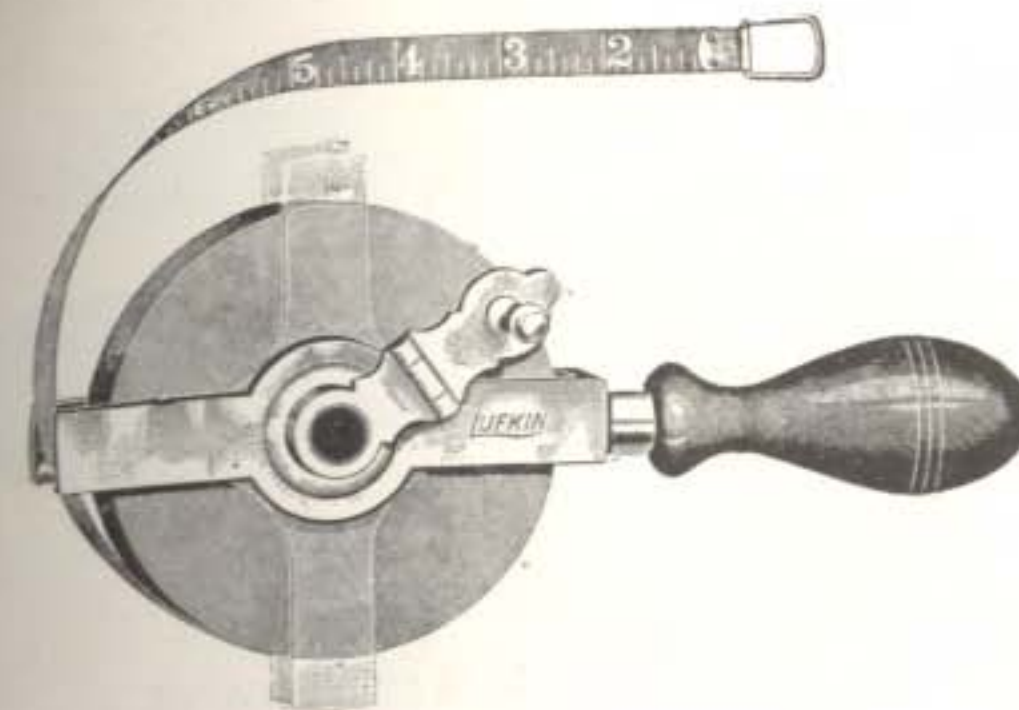
(ME tapes are assembled in frame with metric on front, English on back)  
(EM tapes are assembled in frame with English on front, metric on back)

Packing: One in a box

NOTE—Above tapes over 100 feet long are on four-arm frames, shorter lengths on two-arm frames.

For above tapes fitted with plumb bob for oil gauging, see page 27.  
For above tapes on lock handle frames, see page 25.

**STAINLESS STEEL**—At an extra price we can furnish the above tapes in Stainless Steel.



### FRAME STEEL TAPES (EXTRA WIDE) With Folding Winding Handle

*Instantaneous* Readings. "Nubian" Finish.

THE EXTRA WIDTH GIVES GREATER DURABILITY.  
FRAME CONSTRUCTION WILL NOT READILY CLOG WITH DIRT.

A popular tape for heavy general measuring work. It affords good winding leverage and firm grip. Frame tapes not only take care of reasonable accumulation of dirt, etc., and give it a change to dry out, but can be reeled up and put directly into oil.

Line of highest grade tape steel, distinctly marked. The metal frame is substantial, heavily nickel plated, and fitted with polished hardwood handle. Measurements guaranteed accurate.

#### WITH ONE-HALF INCH TAPES

Marked feet, inches and 8ths of inches, one side only								
No.	290	291	293	294	295	296	297	298
Length, feet	25	33	50	66	75	100	150	200
Weight each, ozs.	17	19	22	25	27	31	42	51
Price, each	\$5.60	\$6.70	\$8.35	\$9.85	\$11.90	\$14.20	\$21.50	\$27.80

Marked feet, 10ths and 100ths of feet, one side only								
No.	290D	291D	293D	294D	295D	296D	297D	298D
Length, feet	25	33	50	66	75	100	150	200
Weight each, ozs.	17	19	22	25	27	31	42	51
Price, each	\$5.60	\$6.70	\$8.35	\$9.85	\$11.90	\$14.20	\$21.50	\$27.80

Marked metric only, one side only (First decimetre in mm., balance of length in cm.)						
No.	291M	293M	294M	295 $\frac{1}{2}$ M	296M	297M
Length, metres	10	15	20	25	30	50
Weight each, ozs.	19	22	25	29	31	45
Price, each	\$6.70	\$8.35	\$9.85	\$12.60	\$14.20	\$23.50

Marked metric and English One side metric (first decimetre in mm., balance of length in cm.) One side English (feet, inches and 8ths of inches)							
No.	291ME	293ME	294ME	295 $\frac{1}{2}$ ME	296ME	297ME	298ME
No.	291EM	293EM	294EM	295EM	296EM		
Length, metres	10	15	20	22	25	30	50
Length, feet	33	50	66	75	82	100	164
Weight each, ozs.	19	22	25	27	29	31	45
Price, each	\$7.35	\$9.35	\$11.25	\$13.50	\$14.60	\$16.30	\$26.50

(ME tapes are assembled in frame with metric on front, English on back)  
(EM tapes are assembled in frame with English on front, metric on back)

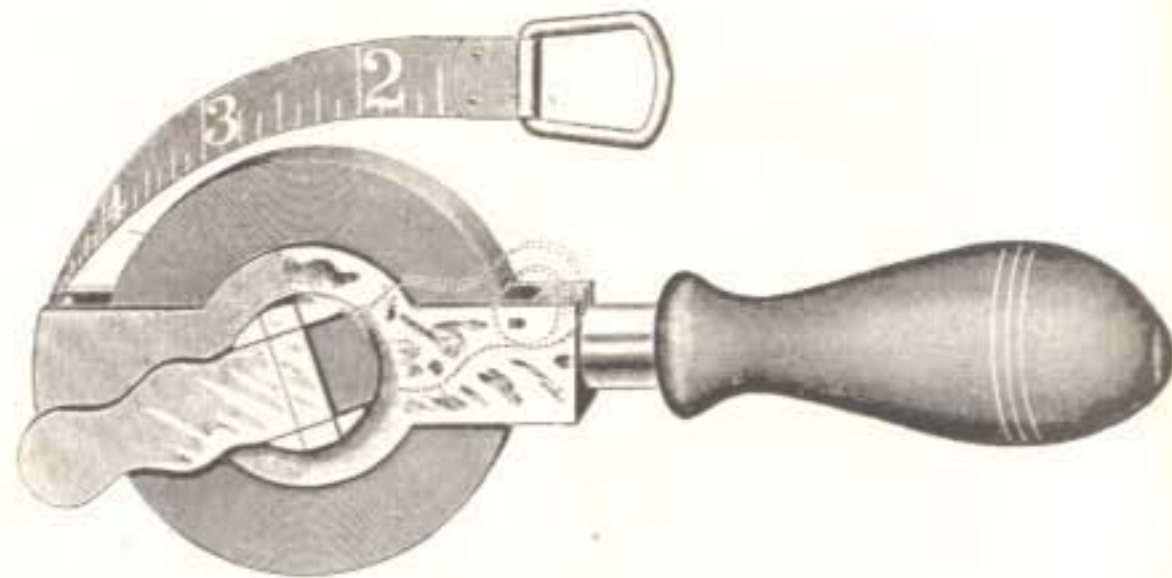
Packing: One in a box

NOTE—Above tapes over 100 feet long are on four-arm frames, shorter lengths on two-arm frames.

For above tapes fitted with plumb bob for oil gauging, see page 27.  
For above tapes on lock handle frames, see page 25.

**STAINLESS STEEL**—At an extra price we can furnish the above tapes in Stainless Steel.





LOCK HANDLE FRAME STEEL TAPES

*Instantaneous* Readings. "Nubian" Finish.

THE ADVANTAGES OF A FRAME TAPE COMBINED WITH THAT  
OF THE LOCK HANDLE

These tapes and frames are, except in the winding apparatus, same as engineers and standard pattern frame tapes previously listed. The one-piece winding handle can be turned completely over, thus engaging the frame and holding or locking the tape at any desired point. This handle with its larger knob and greater length affords good grip and extra leverage.

Line of highest grade tape steel, distinctly marked. Substantial metal frame heavily nickel plated, and with polished hardwood handle. Measurements guaranteed accurate

WITH STANDARD, ONE-QUARTER INCH ENGINEERS  
PATTERN TAPES

(With Detachable Rings)  
Marked one side only

Feet, inches and 8ths	No....	1271	1273	1274	1275	1276
Feet, 10ths and 100ths	No....	1271D	1273D	1274D	1275D	1276D
Length, feet		33	50	66	75	100
Weight each, ozs.		18	20	22	24	32
Price, each		\$6.70	\$8.35	\$9.85	\$11.90	\$14.20

WITH THREE-EIGHTHS INCH TAPES

Marked one side only

Feet, inches and 8ths	No....	1281	1283	1284	1285	1286
Feet, 10ths and 100ths	No....	1281D	1283D	1284D	1285D	1286D
Length, feet		33	50	66	75	100
Weight each, ozs.		18	20	22	24	32
Price, each		\$5.60	\$7.15	\$8.20	\$9.85	\$12.25

WITH ONE-HALF INCH TAPES

Marked one side only

Feet, inches and 8ths	No....	1291	1293	1294	1295	1296
Feet, 10ths and 100ths	No....	1291D	1293D	1294D	1295D	1296D
Length, feet		33	50	66	75	100
Weight each, ozs.		20	23	26	28	36
Price, each		\$6.70	\$8.35	\$9.85	\$11.90	\$14.20

Packing: All packed one in a box

NOTE—All above tapes are furnished with two-arm frame, except Nos. 1276 and 1276D, which have four-arm frame.

Lock handle tapes marked metric and English take same price as 271ME series, page 22; 281ME series, page 23; and 291ME series, page 24, respectively; marked metric only, price same as marked feet and inches.

For lock handle tapes with plumb bob for oil gauging see page 28.

STAINLESS STEEL—At an extra price we can furnish the  $\frac{3}{8}$ " and  $\frac{1}{2}$ " tapes in Stainless Steel.



"ATLAS" OIL GAUGERS HEAVY STEEL TAPES

With Plumb Bob—With Lock Handle

*Instantaneous* Readings. "Nubian" Finish.

EXTRA HEAVY LOCK HANDLE FRAME TAPE WITH No. 590,  
20 OZ. PLUMB BOB

DESIGNED EXCLUSIVELY FOR TANK GAUGING

This tape is well balanced, and the most practical and durable one made for tank gauging.

One-half inch wide steel line, 50 per cent heavier than standard  $\frac{1}{2}$  inch measuring tapes, and distinctly marked. Measurements guaranteed accurate.

Sturdy metal case-hardened frame, built to withstand severe usage, with polished hardwood handle and with solid brass bob.

It has lock handle, which, turned over, engages the frame and holds or locks the tape at any point. Long winding handle and knob, and extra size drum shell give good grip, leverage, and speed in winding.

The solid brass bob is round, with tapered point, is  $6\frac{3}{4}$  inches long and 1 inch in diameter. Weighing 20 ozs., it will penetrate the heavier oils. It is included in measurement of tape and can be detached.

WITH HEAVY, ONE-HALF INCH TAPES

STANDARD PATTERN

Marked feet, inches and 8ths of inches, one side only

No. 1291S	With 590 Plumb Bob,	
	Length 33 feet.	Weight each, $2\frac{3}{4}$ lbs. Each.....\$13.20
No. 1293S	With 590 Plumb Bob,	
	Length 50 feet.	Weight each, $3\frac{1}{4}$ lbs. Each..... 15.10

Marked metric and English

One side metric (first decimetre in mm., balance of length in cm.)

One side English (feet, inches and 8ths of inches)

No. 1291S-ME	With 590 Plumb Bob,	
	Length 10 metres (33 ft.).	Weight each, $2\frac{3}{4}$ lbs. Each.....\$13.85
No. 1293S-ME	With 590 Plumb Bob,	
	Length 15 metres (50 ft.).	Weight each, $3\frac{1}{4}$ lbs. Each..... 16.10

MEXICAN PATTERN

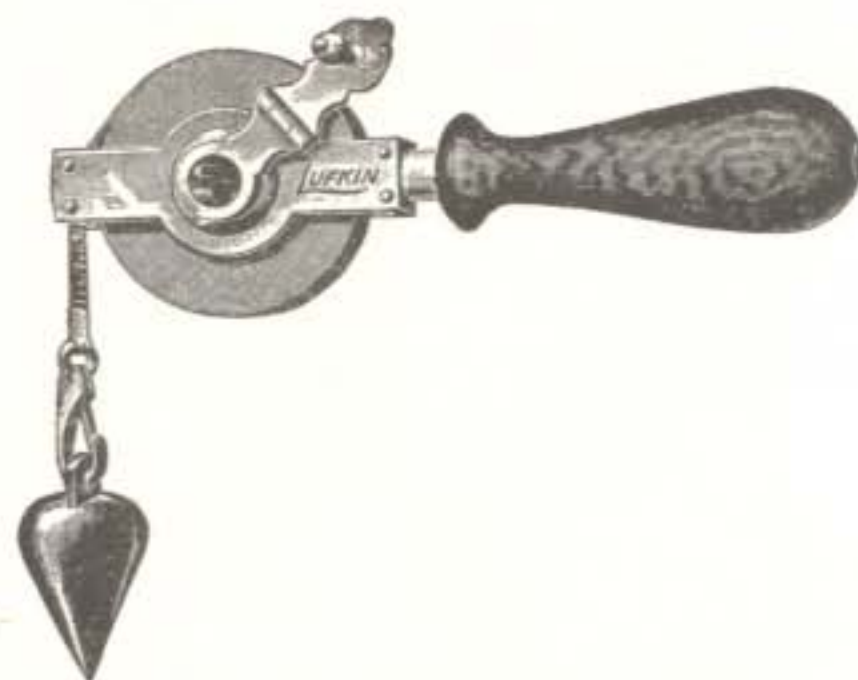
Same as above ME tapes, except metric side graduated down to millimetres entire length, and English side to feet, inches and 16ths. Not "Instantaneous" Readings.

No. 1291S-ME	MEXICAN PATTERN with 590 Plumb Bob,	
	Length 10 metres (33 ft.).	Weight each, $2\frac{3}{4}$ lbs. Each.....\$14.70
No. 1293S-ME	MEXICAN PATTERN with 590 Plumb Bob,	
	Length 15 metres (50 ft.).	Weight each, $3\frac{1}{4}$ lbs. Each..... 17.50

Packing: All packed one in a box

NOTE—"Standard Pattern" is furnished unless "Mexican Pattern" is specified.  
For gauging tapes with lighter weight bobs, see pages 27 and 28.  
"Atlas" tapes marked metric only, price same as marked feet and inches.





**OIL GAUGERS STEEL TAPES**  
With Plumb Bob—With Folding Handle  
*Instantaneous* Readings. "Nubian" Finish.  
POPULAR WITH GAUGERS OF THE LIGHTER CRUDE OILS,  
GASOLINE, ETC.

These standard weight steel tapes on frames, with the light (6 oz.) bob, are also widely used throughout the oil industry.

Line of highest grade tape steel, distinctly marked. Measurements guaranteed accurate. Substantial metal frame heavily nickel plated, and with polished hardwood handle.

Tape fitted with No. 588, 6 oz. solid brass, cone-shaped bob, of 1 1/4 inch diameter. Length of bob, 2 3/8 inches, is included in measurement of tape, and bob is detachable.

ALWAYS SPECIFY "WITH 588 BOB"  
IF WANTED WITHOUT BOB, SPECIFY "FOR 588"

**WITH THREE-EIGHTHS INCH TAPES**

Marked feet, inches and 8ths of inches, one side only

No. 280 With 588 Plumb Bob.	Length 25 ft.	Weight each, 1 3/8 lbs.	Each.....	\$6.85
No. 281 With 588 Plumb Bob.	Length 33 ft.	Weight each, 1 1/2 lbs.	Each.....	7.70
No. 283 With 588 Plumb Bob.	Length 50 ft.	Weight each, 1 3/8 lbs.	Each.....	9.25

**Marked metric and English**

One side metric (first decimetre in mm., balance of length in cm.)  
One side English (feet, inches and 8ths of inches)

No. 281ME With 588 Plumb Bob.	Length 10 metres (33 ft.).	Weight each, 1 1/2 lbs.	Each.....	\$ 8.40
No. 283ME With 588 Plumb Bob.	Length 15 metres (50 ft.).	Weight each, 1 3/8 lbs.	Each.....	10.30

**WITH ONE-HALF INCH TAPES**

Marked feet, inches and 8ths of inches, one side only

No. 290 With 588 Plumb Bob.	Length 25 ft.	Weight each, 1 1/2 lbs.	Each.....	\$ 7.70
No. 291 With 588 Plumb Bob.	Length 33 ft.	Weight each, 1 3/8 lbs.	Each.....	8.80
No. 293 With 588 Plumb Bob.	Length 50 ft.	Weight each, 1 7/8 lbs.	Each.....	10.45

**Marked metric and English**

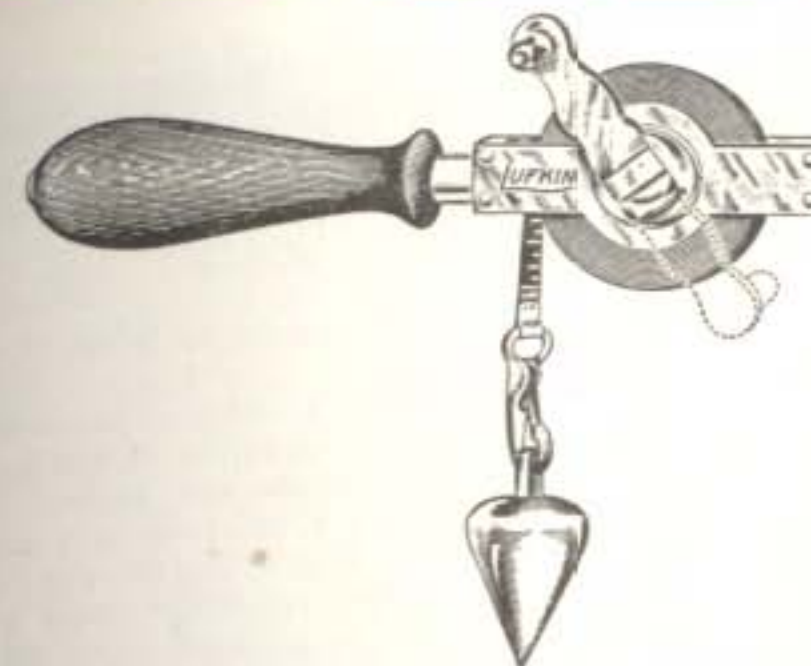
One side metric (first decimetre in mm., balance of length in cm.)  
One side English (feet, inches and 8ths of inches)

No. 291ME With 588 Plumb Bob.	Length 10 metres (33 ft.).	Weight each, 1 3/8 lbs.	Each.....	\$ 9.45
No. 293ME With 588 Plumb Bob.	Length 15 metres (50 ft.).	Weight each, 1 7/8 lbs.	Each.....	11.45

Packing: All packed one in a box

NOTE—For other bobs, see page 30. While above tapes can be furnished with the heavy, No. 590, bob, we recommend for that the heavier tape, the "Atlas", page 26. Any above tapes can be furnished in "Mexican Pattern", i. e., marked mm throughout, and 16ths, for extra charge.

For above tapes on lock handle frames, see page 28.  
For tapes marked metric only, price same as marked feet and inches.



**OIL GAUGERS STEEL TAPES**  
With Plumb Bob—With Lock Handle  
*Instantaneous* Readings. "Nubian" Finish.  
THE LOCK HANDLE IS CONVENIENT WHEN SOUNDING  
FOR THE BOTTOM OF THE TANK

Standard weight steel tapes with No. 588 Plumb Bob and with lock handle frame. Many gaugers will use only the lock handle pattern.

Line of highest grade tape steel, distinctly marked. Measurements guaranteed accurate. Substantial nickel plated metal frame with polished hardwood handle. Lock handle holds the tape at any point and gives good grip and leverage.

Fitted with No. 588, 6 oz. solid brass plumb bob of 1 1/4 inch diameter, 2 3/8 inches long. Bob is included in measurement of tape and is detachable.

ALWAYS SPECIFY "WITH 588 BOB"  
IF WANTED WITHOUT BOB, SPECIFY "FOR 588"

**WITH THREE-EIGHTHS INCH TAPES**

Marked feet, inches and 8ths of inches, one side only

No. 1280 With 588 Plumb Bob.	Length 25 ft.	Weight each, 1 3/8 lbs.	Each.....	\$6.85
No. 1281 With 588 Plumb Bob.	Length 33 ft.	Weight each, 1 1/2 lbs.	Each.....	7.70
No. 1283 With 588 Plumb Bob.	Length 50 ft.	Weight each, 1 3/8 lbs.	Each.....	9.25

**Marked metric and English**

One side metric (first decimetre in mm., balance of length in cm.)  
One side English (feet, inches and 8ths of inches)

No. 1281ME With 588 Plumb Bob.	Length 10 metres (33 ft.).	Weight each, 1 1/2 lbs.	Each.....	\$ 8.40
No. 1283ME With 588 Plumb Bob.	Length 15 metres (50 ft.).	Weight each, 1 3/8 lbs.	Each.....	10.30

**WITH ONE-HALF INCH TAPES**

Marked feet, inches and 8ths of inches, one side only

No. 1290 With 588 Plumb Bob.	Length 25 ft.	Weight each, 1 1/2 lbs.	Each.....	\$ 7.70
No. 1291 With 588 Plumb Bob.	Length 33 ft.	Weight each, 1 3/8 lbs.	Each.....	8.80
No. 1293 With 588 Plumb Bob.	Length 50 ft.	Weight each, 1 7/8 lbs.	Each.....	10.45

**Marked metric and English**

One side metric (first decimetre in mm., balance of length in cm.)  
One side English (feet, inches and 8ths of inches)

No. 1291ME With 588 Plumb Bob.	Length 10 metres (33 ft.).	Weight each, 1 3/8 lbs.	Each.....	\$ 9.45
No. 1293ME With 588 Plumb Bob.	Length 15 metres (50 ft.).	Weight each, 1 7/8 lbs.	Each.....	11.45

Packing: All packed one in a box

NOTE—For other bobs, see page 30. While above tapes can be furnished with the heavy, No. 590, bob, we recommend for that the heavier tape, the "Atlas", page 26. Any above tapes can be furnished in "Mexican Pattern", i. e., marked mm throughout, and 16ths, for extra charge.

For tapes marked metric only, price same as marked feet and inches





### TEMPERATURE SCALE

For the most exact results the temperature in which a measuring tape is actually used must be taken into account.

Temperature scale on a steel tape is a series of graduations at the last end corresponding to the expansion and contraction of the tape over a range of temperatures which are indicated opposite the various lines. (Above illustration shows such scale (half size) on a 100 foot tape graduated to feet, 10ths and 100ths). This scale takes the place of the terminal mark, that point falling on the line in the scale representing the temperature prevailing.

We are prepared to put this scale on all steel tapes 1/4 inch and over in width, on the basis of the Fahrenheit thermometer for tapes in English markings, and the centigrade thermometer for those in metric.

Extra for Temperature Scale.....\$1.30 per tape

### PHOSPHOR BRONZE TAPES

#### Nickel Plated

These are rust proof. They are particularly adapted for use around salt water, acids and gases, and where a tape is continuously exposed. While of hard bronze, they are not spring tempered as are steel tapes.

We can supply Phosphor Bronze Tapes in 3/8 inch and 1/2 inch widths put up in any of our standard leather cases or metal frames. Prices quoted on application.

### STEEL TAPE LINES WITHOUT CASES OR FRAMES

#### With Regular Graduations

Specify as "Tapes only" and by prefixing zero to stock number of complete tape, as "No. 0263 Challenge tape only".

#### Three-Eighths Inch Wide

For No. 200 Series "Reliable", No. 260 Series "Challenge", "Rival", and No. 280 and No. 1281 Series Frame Tapes.

Length, feet	25	33	50	66	75	100	150	200
Length, metres	5	10	15	20	25	30	50	60
Marked one side, each	\$3.00	3.60	3.90	4.50	5.65	6.00	7.80	13.50
Marked both sides, each	\$3.60	4.40	4.80	6.00	7.60	8.30	10.80	18.00

#### One-Half Inch Wide

For No. 300 Series "Reliable", No. 360 Series "Challenge", and No. 290 and No. 1291 Series Frame Tapes.

Length, feet	25	33	50	66	75	100	150	200
Length, metres	5	10	15	20	25	30	50	60
Marked one side, each	\$3.90	4.50	4.80	5.65	7.15	8.30	10.50	16.50
Marked both sides, each	4.50	5.30	5.90	7.20	9.00	10.50	13.50	21.00

#### Light Weight, One-Quarter Inch Wide

For "Reliable Jr.", "Challenge Jr.", and "Rival Jr." Tapes.

Length, feet	25	33	50	66	75	100
Length, metres	5	10	15	20	25	30
Marked one side, each	\$2.85	\$3.40	\$3.70	\$4.30	\$5.40	\$5.70
Marked both sides, each	3.40	4.20	4.60	5.70	7.20	7.90

#### Heavy, One-Quarter Inch Wide (with Detachable Rings)

For "Wolverine", and Nos. 231, 271, and 1271 Series Engineers Pattern Tapes.

Length, feet	33	50	66	75	100	150	200
Length, metres	10	15	20	25	30	50	60
Marked one side, each	\$5.40	6.80	8.40	10.20	11.00	18.60	20.30
Marked both sides, each	6.60	8.40	10.70	12.70	13.80	23.70	26.00

NOTE—Plumb Bob Tapes only, i. e., tapes cut for bob and fitted with snap, take above prices plus 10c each (except the "Atlas").

#### "Atlas" One-Half Inch Wide

##### Standard Pattern with Snap

Length, feet	33	50
Length, metres	10	15
Marked one side, each	\$5.60	\$6.50
Marked both sides, each	6.70	8.00

NOTE—For Chain Tapes only, see Chain Tape pages.

## TAPE ACCESSORIES



No. 588



No. 589



No. 590

### PLUMB BOBS FOR STEEL TAPES

(FOR TAPES COMPLETE WITH PLUMB BOBS, SEE PAGES 26, 27 AND 28)

These plumb bobs attached to steel tapes are used in tank gauging throughout the oil industry. No. 588 is of weight suitable for gauging the lighter crude oils, gasoline, etc. No. 590 will penetrate the heavier oils. These two bobs are of solid brass. No. 589 is enameled, and being same length as No. 588, is interchangeable with it.

No. 588	Wt. each, 6 ozs.	Lgth, 2 3/8 in.	Diam. 1 1/4 in.	Each \$2.10
No. 589	Wt. each, 14 ozs.	Lgth, 2 3/8 in.	Diam. 2 3/8 in.	Each 2.90
No. 590	Wt. each, 20 ozs.	Lgth, 6 3/4 in.	Diam. 1 in.	Each 2.65

Packing: One in a box.

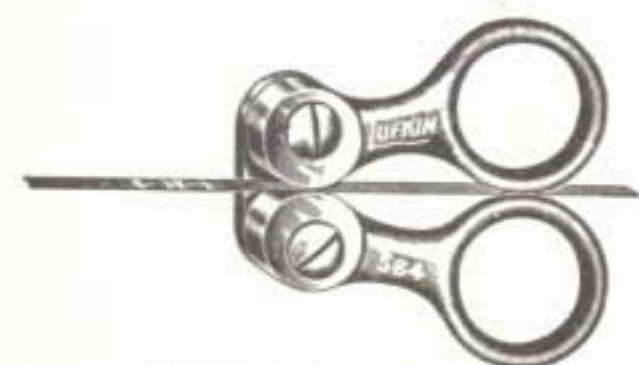


### TAPE HOOKS

In many places enable one man to take long or short measurements unassisted. Easily slipped on our steel tapes with standard end ring. When attached to such tapes measuring from end of ring zero falls at inside of hook.

No.	For	Wt. Per Doz.	Price, Each
551	1/4 in. tapes	8 ozs.	\$0.60
552	3/8 in. tapes	11 ozs.	.60
552 1/2	1/2 in. tapes	22 ozs.	.75

Packing: One dozen in a box



### CLAMP HANDLE

For gripping a steel tape at any point along its length so tension can readily be applied and held. Made of brass, nickel plated. Applied and removed by simply operating the handle. Properly used, will not damage a tape in any way.

No. 584 Wt. each, 4 ozs. Each. \$2.65



### TENSION HANDLE

For applying and determining the exact tension applied to any tape. Used on steel tapes in precise work to insure uniformity of results. Made of brass, nickel plated. Capacity 30 lbs., indicated by half pounds.

No. 586 Weight each, 4 ozs. Each.....\$5.25

NOTE—For Surveyor's Arrows, see page 31.





No. 591



Nos. 592-595

### SPRING STEEL ARROWS

THESE SURVEYOR'S ARROWS ARE OF OIL TEMPERED STEEL

No. 591 3/16 inch, square; 14 inches long. Nickel plated. With red flag. This arrow, being square, measurements to or from it can be most accurately taken. Its size and shape are such that with it a hole can be reamed in hard soil or ice and an especially firm setting secured. The red linen flag is securely sewed to the ring.

Weight per set, 2 lbs. Price, per set of 11.....\$5.25

No. 592 3/16 inch, round; 10 inches long. Nickel plated. With ring enameled bright vermillion.

Weight per set, 1 1/4 lbs. Price, per set of 11.....\$2.25

No. 593 3/16 inch, round; 14 inches long. Nickel plated. With ring enameled bright vermillion.

Weight per set, 1 3/4 lbs. Price, per set of 11.....\$2.60

No. 594 9/64 inch, round; 10 inches long. Plain. With ring enameled bright vermillion.

Weight per set, 3/4 lbs. Price, per set of 11.....\$1.40

No. 595 9/64 inch, round; 14 inches long. Plain. With ring enameled bright vermillion.

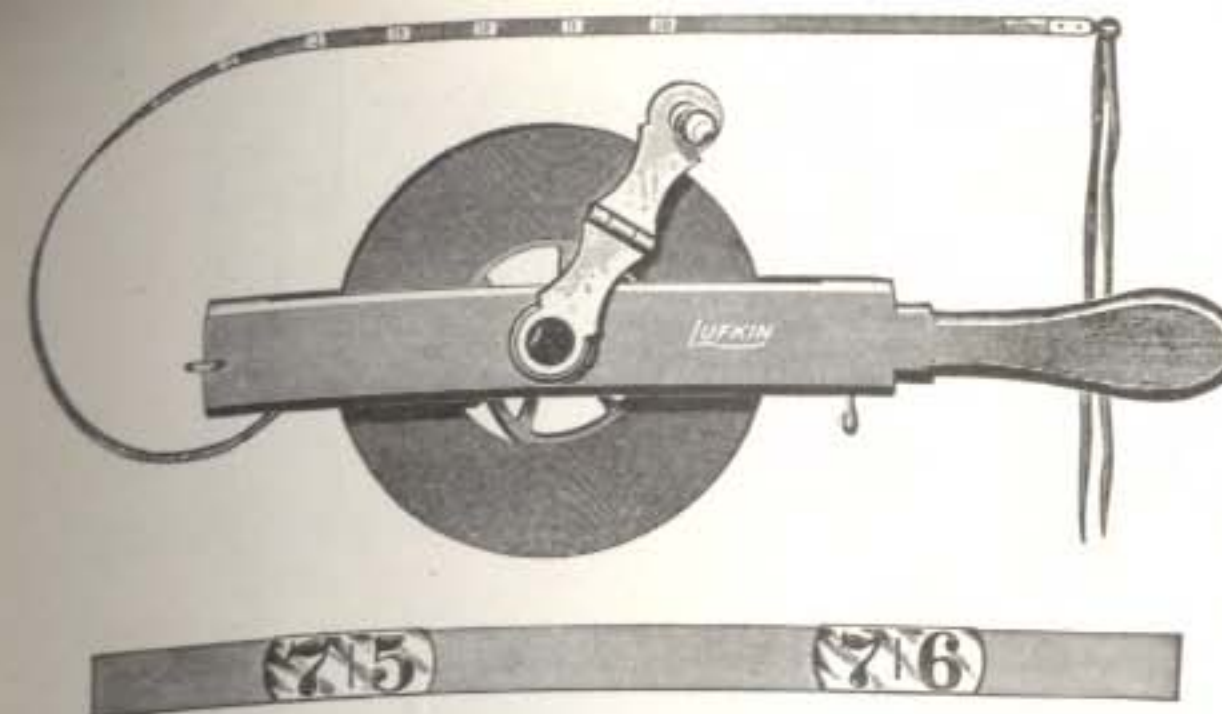
Weight, per set, 1 lb. Price, per set of 11.....\$1.50

Packing: One set of 11 Arrows in a box

For carrying Arrows we can furnish the following:

No. 596 Steel Carrying Ring. Price, each.....\$0.35

No. 597 Leather Quiver with belt loop for carrying 11 arrows. Price, each.....\$4.20



### SURVEYORS CHAIN TAPES

Etched Graduations.

"Nubian" Finish.

A CHAIN TAPE FOR HEAVY SURVEY WORK, YET ONE THAT AFFORDS ALSO THE CLOSEST DEGREE OF ACCURACY

A quarter-inch extra heavy steel tape, marked one side only. Markings are etched into raised bright portions of the tape, therefore are most legible and permanent. A pair of rawhide thongs is furnished with each tape (detachable rings instead if specified). Put up on well finished hardwood reel, with long folding winding handle and large drum. Trimmings nickel plated. Line detachable from reel. Measurements guaranteed accurate.

#### Regular Markings

Tapes in feet—marked feet only every foot, with end feet in 100ths.

Tapes in links—marked links and poles, with end links in 10ths.

Tapes in metres—marked first and last decimetre in mm., balance of first and last metre in cm., balance of length in decimetres.

#### WITH EXTRA HEAVY, ONE-QUARTER INCH TAPES

Tapes Complete,  
With Reel and Thongs

Tapes Without Reel,  
With Thongs

No.	Length	Wt. Each	Each	No.	Length	Wt. Each	Each
5100	100 ft.	2 1/4 lbs.	\$ 9.00	05100	100 ft.	1 1/2 lbs.	\$ 6.00
5150	150 ft.	3 1/2 lbs.	12.00	05150	150 ft.	2 1/2 lbs.	8.40
5200	200 ft.	4 lbs.	14.10	05200	200 ft.	3 lbs.	10.50
5300	300 ft.	5 1/2 lbs.	21.40	05300	300 ft.	4 1/4 lbs.	16.00
5066	100 link	2 lbs.	7.80	05066	100 link	1 1/4 lbs.	4.80
5132	200 link	3 lbs.	12.00	05132	200 link	2 lbs.	8.40
5082M	25 metre	2 1/4 lbs.	8.70	05082M	25 metre	1 1/2 lbs.	5.70
5100M	30 metre	2 1/2 lbs.	10.00	05100M	30 metre	1 3/4 lbs.	7.00
5164M	50 metre	3 1/2 lbs.	15.00	05164M	50 metre	2 3/4 lbs.	11.50
5328M	100 metre	5 3/4 lbs.	27.00	05328M	100 metre	4 3/4 lbs.	21.00

#### Reels Only

For 100 ft., 100 link, 25 and 30 metre tapes, each.....\$3.50

For 150 and 200 ft., 200 link, and 50 metre tapes, each..... 4.20

For 300 ft., and 100 metre tapes, each..... 6.30

Packing: One in a box

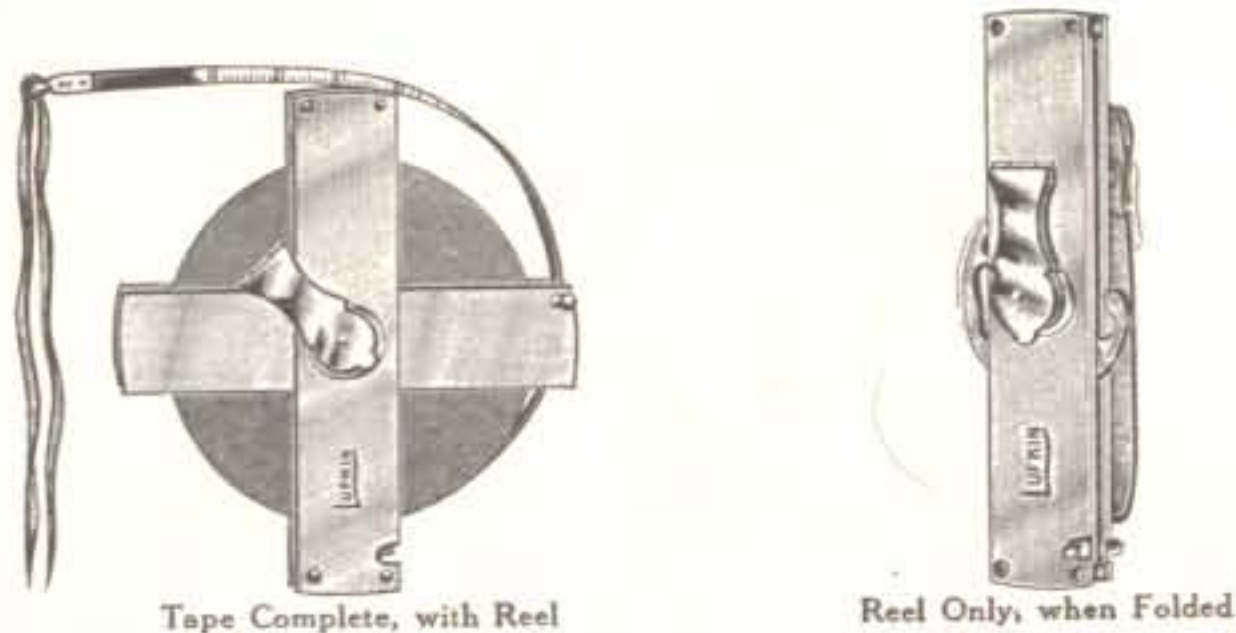
NOTE—Half gage mark put on any above tapes when specified. No extra charge. This is a mark 2' 4 1/4" from zero, representing one-half standard gage of railroad track.

Tapes with end feet marked inches and 8ths, no extra charge.

Tapes with extra foot first end to 100ths numbered from right to left, no extra charge.

— NEW PRICES —





Tape Complete, with Reel

Reel Only, when Folded



**SURVEYORS CHAIN TAPES**

Etched Graduations. "Nubian" Finish.

AN ACCURATE, DURABLE CHAIN TAPE  
WITH FOLDING CROSS-ARM ALL-METAL REEL

Steel line same as No. 5100 series, page 32, i. e., 1/4 inch extra heavy, with markings etched into raised bright portions, making them most legible and permanent. Tape marked one side only. A pair of rawhide thongs is furnished with each tape (detachable rings instead if specified). Put up on substantial cross-arm all-metal reel in dull nickel plated finish. Reel has leather strap handle, long folding winding handle and large drum. Cross arms fold together as illustrated above. This type of reel is especially desirable for the longer tapes. Trimmings nickel plated. Line detachable from reel. Measurements guaranteed accurate.

**Regular Markings**

Tapes in feet—marked feet only every foot, with end feet in 100ths.  
Tapes in links—marked links and poles, with end links in 10ths.  
Tapes in metres—marked first and last decimetre in mm., balance of first and last metre in cm., balance of length in decimetres.

**WITH EXTRA HEAVY, ONE-QUARTER INCH TAPES**

**Tapes Complete,  
With Reel and Thongs**

**Tapes Without Reel,  
With Thongs**

No.	Length	Wt.	Each	Each	No.	Length	Wt.	Each	Each
6100	100 ft.	2 3/4	lbs.	\$12.00	06100	100 ft.	1 1/2	lbs.	\$ 6.00
6150	150 ft.	3 1/2	lbs.	14.40	06150	150 ft.	2 1/2	lbs.	8.40
6200	200 ft.	4 1/4	lbs.	17.50	06200	200 ft.	3	lbs.	10.50
6300	300 ft.	5 3/4	lbs.	24.00	06300	300 ft.	4 1/4	lbs.	16.00
6500	500 ft.	8 1/2	lbs.	36.00	06500	500 ft.	7	lbs.	27.00
6066	100 link	2 1/2	lbs.	10.80	06066	100 link	1 1/4	lbs.	4.80
6132	200 link	3 1/4	lbs.	14.40	06132	200 link	2	lbs.	8.40
6082M	25 metre	2 3/4	lbs.	11.70	06082M	25 metre	1 1/2	lbs.	5.70
6100M	30 metre	2 3/4	lbs.	12.90	06100M	30 metre	1 3/4	lbs.	7.00
6164M	50 metre	4	lbs.	18.25	06164M	50 metre	2 3/4	lbs.	11.50
6328M	100 metre	6	lbs.	28.50	06328M	100 metre	4 3/4	lbs.	21.00

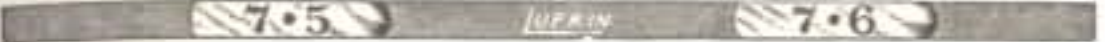
**Reels Only**

For 100 ft., 100 link, 25 and 30 metre tapes, each... \$ 7.00  
For 150 and 200 ft., 200 link, and 50 metre tapes, each... 8.00  
For 300 ft. and 100 metre tapes, each... 9.00  
For 500 ft. tapes, each... 12.00

Packing: One in a box

NOTE—Half gage mark put on any above tapes when specified. No extra charge. This is a mark 2' 4 1/4" from zero, representing one-half standard gage of railroad track.

Tapes with end feet marked inches and 8ths, no extra charge.  
Tapes with extra foot first end to 100ths numbered from right to left, no extra charge.



**SURVEYORS CHAIN TAPES (EXTRA NARROW)**

Etched Graduations. "Nubian" Finish.

THIS EXTRA NARROW HEAVY TAPE HANDLES WELL AMONG  
OBSTRUCTIONS AND ON ROUGH GROUND

One-eighth inch wide, extra heavy steel tape marked one side only. Markings are etched into raised bright portions of the tape, therefore are extra legible and permanent. Pair of rawhide thongs is furnished with each tape (detachable rings instead if specified). Durable sheet steel open reel in dull nickel plated finish, and mounted in hardwood frame, with strap handle. Long folding winding handle. Line detachable from reel. Measurements guaranteed accurate.

**Regular Markings**

Tapes in feet—marked feet only every foot, with end feet in 100ths.  
Tapes in links—marked links and poles, with end links in 10ths.  
Tapes in metres—marked first and last decimetre in mm., balance of first and last metre in cm., balance of length in decimetres.

**WITH EXTRA HEAVY, ONE-EIGHTH INCH TAPES**

**Tapes Complete,  
With Reel and Thongs**

**Tapes Without Reel,  
With Thongs**

No.	Length	Wt.	Each	Each	No.	Length	Wt.	Each	Each
4100	100 ft.	3 1/4	lbs.	\$15.00	04100	100 ft.	1 1/2	lbs.	\$ 6.00
4150	150 ft.	3 1/2	lbs.	17.40	04150	150 ft.	1 3/4	lbs.	8.40
4200	200 ft.	4	lbs.	19.50	04200	200 ft.	2 1/4	lbs.	10.50
4300	300 ft.	5 1/4	lbs.	26.50	04300	300 ft.	3	lbs.	16.00
4500	500 ft.	6 3/4	lbs.	37.50	04500	500 ft.	4 1/4	lbs.	27.00
4066	100 link	3	lbs.	13.80	04066	100 link	1 1/4	lbs.	4.80
4132	200 link	3 1/2	lbs.	17.40	04132	200 link	1 3/4	lbs.	8.40
4082M	25 metre	3	lbs.	14.70	04082M	25 metre	1 1/4	lbs.	5.70
4100M	30 metre	3	lbs.	16.00	04100M	30 metre	1 1/2	lbs.	7.00
4164M	50 metre	3 3/4	lbs.	20.40	04164M	50 metre	2	lbs.	11.50
4328M	100 metre	5 1/2	lbs.	31.50	04328M	100 metre	3 1/4	lbs.	21.00

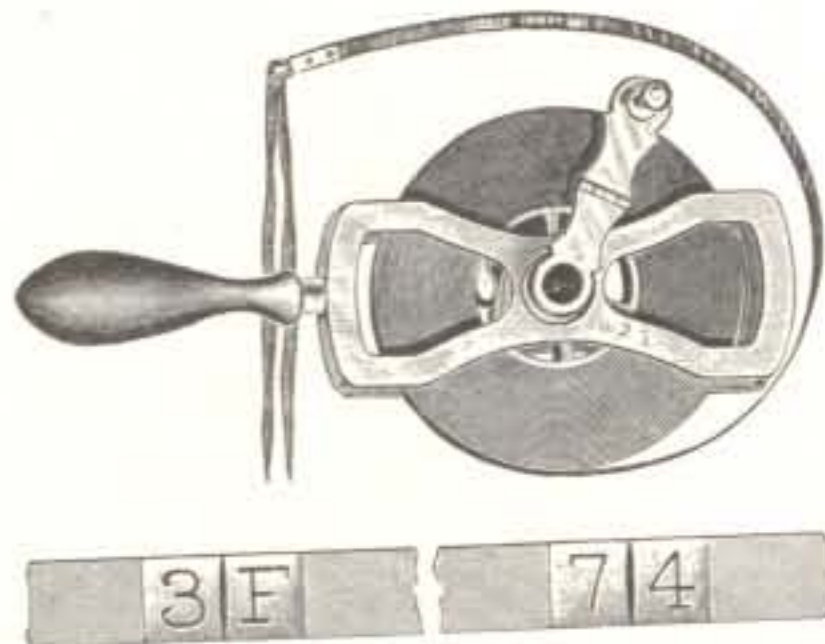
**Reels Only**

For 100, 150 and 200 ft., 100 and 200 link, and 25, 30 and 50 metre tapes. Each... \$10.50  
For 300 and 500 ft., and 100 metre tapes. Each... 12.50

Packing: One in a box

NOTE—Tapes with end feet marked inches and 8ths, no extra charge.  
Tapes with extra foot first end to 100ths numbered from right to left, no extra charge.





### "MICHIGAN" SURVEYORS CHAIN TAPES

Graduated on Babbitt Metal

A CHAIN TAPE THAT WILL STAND UP TO RAILROAD AND OTHER ROUGH WORK

This line is of heavy and extra tough steel, coated with white metal to resist rust. It is practically indestructible. Graduations are stamped into babbitt metal. The line is marked one side only and a pair of rawhide thongs is furnished with each tape (detachable rings instead if specified).

Has sturdy metal reel of improved pattern, heavily nickel plated, with polished hardwood handle and long folding winding handle. Line is detachable from reel.

#### Regular Markings

Tapes in feet—marked feet only every foot, end feet in 10ths.

Tapes in links—marked links and poles, with end links in 10ths.

Tapes in metres—marked first and last metre in decimetres, balance of length in metres.

#### Tapes Complete, With Reel and Thongs

Widths				Widths			
$\frac{5}{16}$ Inch No.	$\frac{3}{16}$ Inch No.	Lgth.	Wt. Ea. Lbs. Approx.	$\frac{5}{16}$ Inch No.	$\frac{3}{16}$ Inch No.	Lgth.	Wt. Ea. Lbs. Approx.
3100	& 2100	100 ft.	3 $\frac{1}{4}$	03100	& 02100	100 ft.	2
3150	& 2150	150 ft.	5	03150	& 02150	150 ft.	3 $\frac{1}{4}$
3200	& 2200	200 ft.	6	03200	& 02200	200 ft.	4 $\frac{1}{4}$
3300	& 2300	300 ft.	8	03300	& 02300	300 ft.	5 $\frac{3}{4}$
3500	& 2500	500 ft.	11 $\frac{1}{2}$	03500	& 02500	500 ft.	10 $\frac{1}{4}$
3066	& 2066	100 link	2 $\frac{3}{4}$	03066	& 02066	100 link	1 $\frac{3}{4}$
3132	& 2132	200 link	4 $\frac{1}{2}$	03132	& 02132	200 link	3 $\frac{1}{4}$
3082M	& 2082M	25 metre	2 $\frac{3}{4}$	03082M	& 02082M	25 metre	1 $\frac{3}{4}$
3100M	& 2100M	30 metre	3	03100M	& 02100M	30 metre	2
3164M	& 2164M	50 metre	5	03164M	& 02164M	50 metre	3
3328M	& 2328M	100 metre	8 $\frac{1}{2}$	03328M	& 02328M	100 metre	6 $\frac{1}{4}$

#### Reels Only

For 100 ft., 100 link, 25 and 30 metre tapes, each	\$3.50
For 150 and 200 ft., 200 link and 50 metre tapes, each	5.25
For 300 ft. and 100 metre tapes, each	7.00
For 500 ft. tapes, each	8.50

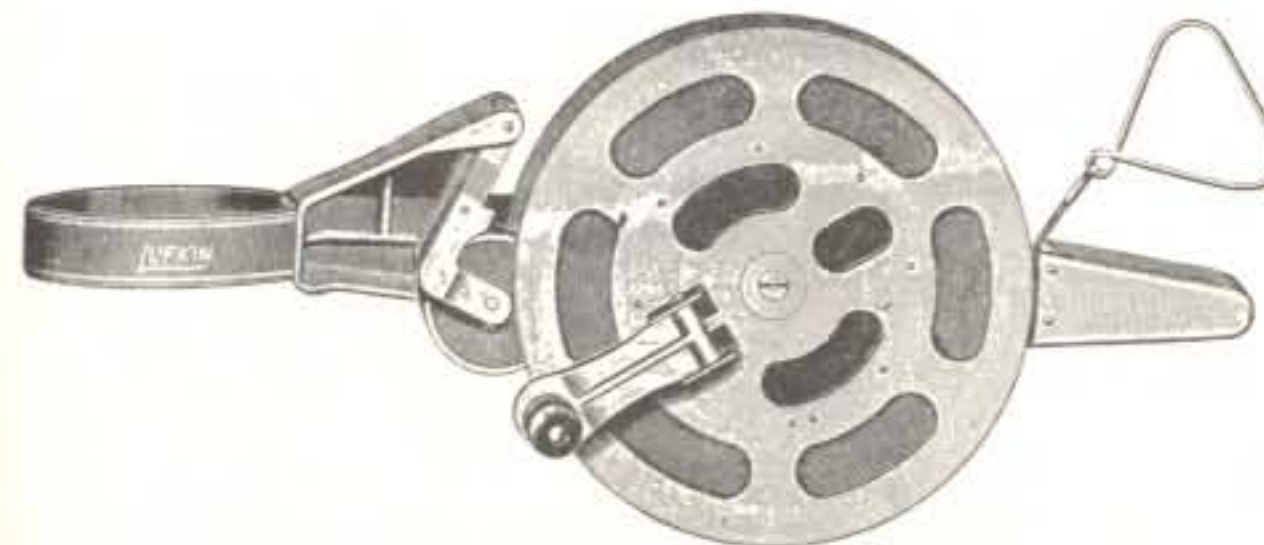
Packing: One in a box

NOTE—Reels for above tapes over 100 feet long are four-arm pattern.

Half gage mark put on any above tapes when specified. No extra charge. This is a mark 2' 4  $\frac{1}{4}$ " from zero, representing one-half standard gage of railroad track.

Tapes with extra foot first end to 10ths, numbered from right to left, no extra charge.  
Tapes with measurements beginning at end (outer end of clip), no extra.  
Babbitt Metal Chain Tapes can be supplied in 50 foot length.

— NEW PRICES —



### THE "CRIPPLE CREEK" REEL

REEL AND FITTINGS ESPECIALLY DESIGNED FOR HANDLING THE LONGER CHAIN TAPES

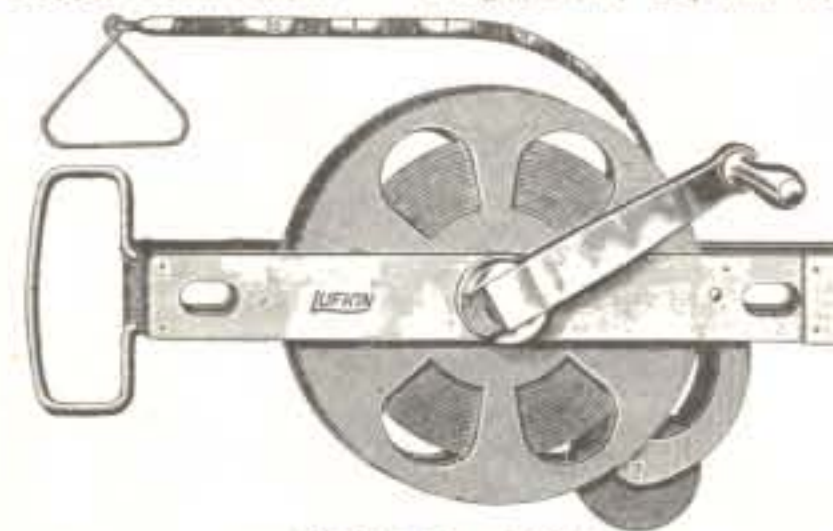
This is an open disk reel, 8 inches in diameter, of steel, nickel plated. It is mounted on an aluminum frame 15 inches long.

The winding handle gives over 4 inches leverage and has extra large extension hand grip. The construction makes reeling up easy and rapid. A spring tension roller of hardwood rides on the tape, causing it to wind evenly and tightly. Frame has leather loop for carrying reel suspended. While durable and designed for heavy tapes, the "Cripple Creek" is of medium weight.

Made in one size only. It will accommodate  $\frac{1}{8}$  inch wide etched Chain Tapes up to 1,000 feet long,  $\frac{1}{4}$  inch up to 500, and babbitt metal tapes up to 300 feet.

For the "Cripple Creek" reel we can supply a staff. This is of hardwood, 40 inches long, having at one end aluminum socket head and set screw for mounting the reel, at the other a steel point for firmly setting in the ground.

"Cripple Creek" Reel only, complete. Weight each, 4  $\frac{1}{2}$  lbs. Each.....\$42.00  
Staff only for "Cripple Creek" Reel. Weight each, 2  $\frac{1}{4}$  lbs. Each..... 8.00



### REEL No. 1914

AN ALL-STEEL LOCK HANDLE REEL FOR CHAIN TAPES

The winding reel is of 7 inch diameter and frame in which it is mounted is 14 inches long overall. The winding handle gives 5 inches leverage, and locks into either end of the frame, thus holding the tape at any point. Hardwood spring tension roller engages the tape, causing it to wind evenly and tightly. This reel is in dull nickel plated finish. It is of medium weight and will withstand severe use.

No. 1914 reel can be used with any of our chains, pages 32, 33, 34 and 35, and is especially recommended for the longer lengths and the babbitt tapes. Made in three capacities, varying only in width.

In Ordering Always State Length, Width and Style of the Tape to be Used

No. 1914	Reel, for 100 foot tapes.	Weight each, 3 $\frac{3}{4}$ lbs.	Each...	\$16.30
No. 1914	Reel, for 200 to 300 foot tapes.	Weight each, 4 lbs.	Each....	19.00
No. 1914	Reel, for 500 foot tapes.	Weight each, 4 $\frac{1}{2}$ lbs.	Each.....	21.50



### SHOULDERS FOR CHAIN TAPES

Some surveyors use in chaining a tape equipped with shoulders. These shoulders assist in locating the zero and last graduation. They are securely riveted to the tape and can be supplied on any of our chain tapes  $\frac{3}{16}$  inch or over in width.

Extra per pair.....\$0.85





**"ARTISAN" STEEL TAPES**

*Instantaneous* Readings. "Nubian" Finish.

A STANDARD WIDTH AND WEIGHT, MEDIUM LENGTH TAPE  
AT MODERATE PRICE

The "Artisan" line affords the mechanic, at moderate cost, tapes 8 to 20 feet long with line and case heavy enough to stand hard service.

An accurate steel tape in nickel plated steel case with knurled edge, affording firm grip. Flush folding handle opened by push button.

**WITH THREE-EIGHTHS INCH TAPES**

Marked feet, inches and 16ths, one side only

No. ....	108	112	115	120
Length .....	8 ft.	12 ft.	15 ft.	20 ft.
Weight per doz., lbs. ....	3 1/4	3 3/4	4	4 1/2
Price, per doz. ....	\$24.00	\$28.80	\$33.60	\$38.40

Marked metric and English

One side feet, inches and 16ths; other side millimetres throughout

No. ....	112EM	115EM
Length .....	12 ft. (3 metres)	15 ft. (5 metres)
Weight per doz., lbs. ....	3 3/4	4
Price, per doz. ....	\$34.20	\$40.20

**With Diameter Measurements**

Enable one by applying tape to any circumference to arrive at its diameter down to 64ths of an inch.

Marked consecutive inches to 16ths one side; diameter measurements on back

No. ....	108P	112P	115P	120P	*115PM
Length .....	96 inches	144 inches	180 inches	240 inches	5 metres
Weight per doz., lbs. ....	3 1/4	3 3/4	4	4 1/2	4
Price, per doz. ....	\$28.80	\$34.20	\$40.20	\$48.00	\$40.20

(\*No. 115PM marked mm one side, diameter measure in metric other side)

Packing: 1/2 dozen in a box

NOTE—For "Artisan" Millmens Tapes with hook on end for measuring steel sheets, tubes, etc., see page 38.

For "Artisan" Tree Tapes for foresters, see page 19.



**MILLMENS STEEL TAPE WITH HOOK**

"Artisan" Pattern

USED ON METAL SHEETS, TUBING, ETC., AT MILLS AND WAREHOUSES.  
ENABLES ONE MAN TO TAKE MEASUREMENTS.

This is the millmens tape which, because of its durability, we especially recommend. A 3/8 inch wide standard weight steel tape, with flat steel hook riveted to first end. Zero falls at inside of hook. The line is marked one side only consecutive inches to 16ths, i. e., inches numbered from 1 to 144, "Nubian" Finish. Case of steel, nickel plated, and with knurled edge, affording firm grip. Flush folding handle opened by push button.

No. 112CH Length, 144 inches (12 ft.). Weight per doz., 4 lbs. Per doz. ....\$32.40

Packing: One-half dozen in a box

Above tape line only, with hook, without case:

No. 0112CH Per doz. ....\$18.00



**MILLMENS STEEL TAPE WITH HOOK**

Spring-wind Pattern

This tape differs from the one above principally in that it is spring-wind pattern and has narrower medium weight line.

The line is 5/16 inch wide. It is marked one side only consecutive inches to 16ths (inches numbered 1 to 144), "Nubian" Finish. Flat steel hook is riveted to first end and zero falls at inside of hook. Case is of nickel-silver, spring-wind, with center stop.

No. 1512CH Length, 144 inches (12 ft.). Weight per doz., 3 lbs. Per doz. ....\$36.00

Packing: One-half dozen in a box

Above tape line only, with hook, without case:

No. 01512CH Per doz. ....\$19.80

NOTE—Millmens tapes marked feet, inches and 16ths, price same as in consecutive inches. Specify as "112H" and "1512H", respectively.





POCKET TAPES ARE MORE UNIVERSALLY USED THAN ANY OTHER  
CLASS OF MEASURING TAPES

They find ready sale not only at hardware and tool stores, but also at engineering, technical and professional supply houses, as well as stationery and drug stores, novelty shops, etc. Our pocket tapes are of the most popular, durable types. All have metal cases, and are of sizes most convenient to carry.

POCKET STEEL TAPES

"Nubian" Finish

ROUND-EDGE, NICKEL PLATED CASES, SPRING-WIND, CENTER STOP

This is the popular line of high grade Pocket Steel Tapes

WITH ONE-QUARTER INCH STEEL TAPES

Marked inches to 16ths, one side only

No. ....	143	145	146	148*
Length .....	36 inch	60 inch	72 inch	96 inch
Weight per doz., lbs. ....	1	1 1/4	1 1/4	1 1/2
Price, per doz. ....	\$9.00	\$11.40	\$12.00	\$18.00

(\*When marked feet, inches and 16ths, known as No. 148F, price same as No. 148)

Marked inches to 16ths one side; feet, 10ths and 100ths of feet other side

No. ....	143D	145D	146D	148D
Length .....	36 inch	60 inch	72 inch	96 inch
Weight per doz., lbs. ....	1	1 1/4	1 1/4	1 1/2
Price, per doz. ....	\$9.60	\$12.60	\$15.00	\$21.00

Marked inches to 16ths one side; millimetres other side

No. ....	143EM	145EM	146EM	148EM
Length ....	36 in. (1 metre)	60 in. (1 1/2 metre)	72 in. (2 metre)	96 in. (2 1/2 metre)
Wt. doz., lbs. ....	1	1 1/4	1 1/4	1 1/2
Price, per doz. ....	\$9.60	\$12.60	\$15.00	\$21.00

Packing: One-half dozen in a box

NOTE—For Pocket Linen and Cotton Tapes, see pages 56 and 57



POCKET STEEL TAPES

"Nubian" Finish

SQUARE-EDGE, NICKEL-SILVER CASES, SPRING-WIND, CENTER STOP

Our finest line of pocket tapes, cases being of nickel-silver. Lengths up to 12 feet, the longest practical in spring-wind construction.

WITH ONE-QUARTER INCH STEEL TAPES

Marked inches to 16ths, one side only

No. ....	153	155	156	158
Length .....	36 inch	60 inch	72 inch	96 inch
Weight per doz., lbs. ....	3/4	1 1/4	1 1/4	1 1/2
Price, per doz. ....	\$10.20	\$13.20	\$14.40	\$21.00

Marked inches to 16ths one side; millimetres other side

No. ....	153EM	155EM	156EM
Length .....	36 inch (1 metre)	60 inch (1 1/2 metre)	72 inch (2 metre)
Weight per doz., lbs. ....	3/4	1 1/4	1 1/4
Price, per doz. ....	\$10.80	\$14.40	\$17.40

WITH FIVE-SIXTEENTHS INCH STEEL TAPES

Marked feet, inches and 16ths, one side only

No. ....	1510	1512
Length .....	10 feet	12 feet
Weight per doz., lbs. ....	2 1/2	2 3/4
Price, per doz. ....	\$30.00	\$32.40

Marked feet, inches and 16ths one side; feet, 10ths and 100ths of feet other side

No. ....	1510D	1512D
Length .....	10 feet	12 feet
Price, per doz. ....	\$33.60	\$37.20

Marked feet, inches and 16ths one side; millimetres other side

No. ....	1510EM	1512EM
Length .....	10 feet (3 metres)	12 feet (3 1/2 metres)
Price, per doz. ....	\$33.60	\$37.20

With Diameter Measurement

Inches to 16ths one side; other side diameter measurement, enabling one by applying tape to circumference to determine directly the diameter down to 1/64th inch.

No. 1512P Length, 144 inches (12 ft.). Weight per doz., 2 3/4 lbs. Price, per doz. \$37.20

Packing: All packed 1/2 dozen in a box

NOTE—For Millmens Tape with hook, No. 1512CH, see page 38.





## "MARVEL" POCKET STEEL TAPES

"Nubian" Finish

SQUARE-EDGE, NICKEL PLATED CASES, SPRING-WIND, CENTER STOP

A good, serviceable steel pocket tape, although lower in price than those shown on preceding pages.

### WITH ONE-QUARTER INCH STEEL TAPES

Marked inches to 16ths, one side only			
No.	3143*	3145	3146
Length	36 inch	60 inch	72 inch
Weight per doz., lbs.	3/4	1	1
Price, per doz.	\$6.00	\$9.00	\$10.20

Marked inches to 16ths one side, millimetres other side			
No.	3143EM*	3145EM	3146EM
Length	36 inch (1 metre)	60 inch (1 1/2 metre)	72 inch (2 metre)
Weight per doz., lbs.	3/4	1	1
Price, per doz.	\$7.20	\$10.20	\$12.00
Packing: 1/2 doz. in a box			



\*The big sellers in this line, Nos. 3143 and 3143EM, are regularly put up in an attractive display box containing one dozen tapes. This has proven the most effective method of selling pocket tapes in quantities. Each of these boxes is packed within an outer one for protection. One gross tapes (12 boxes) per carton.

(These items can also be furnished in ordinary rather than display boxes, i. e., 1/2 dozen to a box, as listed above. Specify if so wanted.)

No. 3143	36 inch.	In display box.	Weight per gross, 9 lbs.	Price, per gro.	\$72.00
No. 3143EM	36 inch.	(1 metre).	In display box.	Weight per gross, 9 lbs.	
Price, per gross					86.40

NOTE—For "Marvel" Pocket Linen Tapes, see page 56.



## POCKET STEEL TAPES WITH ARCHITECTS SCALES

FOR QUICKLY MEASURING SCALE DRAWINGS OR BLUE PRINTS OF BUILDINGS, PLANS, ETC.

Tapes of best quality steel, 1/4 inch wide, in "Nubian" Finish. The cases are nickel plated and polished. They are round-edge pattern, spring-wind with center stop.

Marked in 1/8 inch architect's scale, 1 to 480, one side; inches to 16ths other side  
No. 391 60-inch. Weight per doz., 1 1/4 lbs. Price, per doz. ....\$12.60

Marked in 1/4 inch architect's scale, 1 to 240, one side; inches to 16ths other side  
No. 392 60-inch. Weight per doz., 1 1/4 lbs. Price, per doz. ....\$12.60

Marked in 3/8 inch architect's scale one side; 1/2 inch architect's scale other side  
No. 393 60-inch. Weight per doz., 1 1/4 lbs. Price, per doz. ....\$12.60



## POCKET STEEL TAPE WITH ARCHITECTS AND ENGINEERS SCALES

A handy combination for architects, draftsmen and engineers. A 3/8 inch wide, two metre (78-3/4 inch) steel tape in "Nubian" Finish. Put up in square-edge nickel-silver case, spring-wind with center stop.

One side of tape marked full length upper edge to millimetres, lower edge inches to 16ths; other side laid off in 12-inch sections, marked both edges, and carrying 1/8, 3/8, 1/4, 1/2, 3/4, 1, 1 1/2 and 3-inch architect's scales with subdivisions, and engineer's scales of 10, 20, 30 and 40 parts to the inch.

No. 398 2 metres (78 3/4 inches). Weight per doz., 2 1/4 lbs. Price, per doz. ....\$37.80

### METRIC CONVERSION STEEL TAPE

For determining with ease and certainty the metric equivalents of English weights and measures, and vice versa. On this tape the English and metric weights and measures are placed in their corresponding relations so one can be converted into the other directly. Especially valuable to exporters, importers, shippers, and others.

A 5/16 inch wide, 2 metre (78-3/4 inch) steel tape in "Nubian" Finish. Case of nickel-silver, square-edge, spring-wind with center stop. Line marked one side upper edge millimetres, lower edge inches to 16ths; other side marked upper edge to represent pounds and ounces, lower edge kilograms also properly subdivided.

No. 396 2 metres (78 3/4 inches). Weight per doz., 2 lbs. Price, per doz. ....\$31.20

Packing: All packed 1/2 doz. in a box



## POINT OF BEGINNING OF MEASUREMENT ON STEEL TAPES



Showing tape measuring from end of ring (outer end)



Showing tape with blank space first end

## OUR STANDARD PRACTICE ON STEEL TAPES IS AS FOLLOWS:

All catalogued long steel tapes marked one side only measure from end of ring, except:

- (1) Engineers Pattern Tapes (which measure from end of tape).
- (2) Chain Tapes (which have blank space first end).
- (3) Plumb Bob Tapes (which measure from lower end of bob).

All catalogued long steel tapes marked both sides have blank space first end, except:

- (1) Standard pattern tapes marked links on back (which measure from end of ring).
- (2) Engineers Pattern Tapes (which measure from end of tape).
- (3) Plumb Bob Tapes (which measure from lower end of bob).

All catalogued Pocket Steel Tapes and "Artisan" Tapes, marked one or both sides, have blank space first end, except:

- (1) Millmens Tapes (which measure from inside of hook).

NOTE—While the above is our standard practice, any of our steel tapes (except pocket tapes) will, without extra charge, be furnished in either style.

## SPECIAL GRADUATIONS ON STEEL TAPES

We are prepared to put the following special graduations on steel tapes, aside from the regular graduations listed throughout Section One of this Catalog. (Tapes in special graduations do not have *Instantaneous* Readings.)

Prices for these special markings are quoted on request.

### ONE-QUARTER INCH STEEL TAPES:

Feet and inches only, inches not subdivided.  
Feet, inches and quarters.  
Feet, inches and 32nds.  
Feet, inches and 8ths, left hand (figures running right to left).  
Feet, 10ths and 100ths of feet, left hand (figures running right to left).  
Feet, 10ths and 100ths of feet, upper edge (regular is lower edge).  
Consecutive inches to 16ths (up to 300 inches, 25 feet).  
Links and poles (also links to 10ths and to 100ths throughout).  
Diameter measurements.  
Slope correction measurements ( $\frac{1}{4}$  inch etched Chain Tapes).  
Feet, 10ths and 100ths of feet (special on Chain Tapes).  
Type measurements (pocket tapes).  
Vara measurements.  
Nya and Gamla (Swedish) measurements.  
Norsk (Norwegian) measurement.

### THREE-EIGHTHS INCH STEEL TAPES:

Feet and inches only, inches not subdivided.  
Feet, inches and quarters.  
Feet, inches and 10ths of inches.  
Feet, inches and 16ths (see foot notes).  
Feet, inches and 32nds.  
Feet, inches and 8ths, left hand (figures running right to left).  
Feet, 10ths and 100ths of feet, left hand (figures running right to left).  
Consecutive inches to 16ths (up to 600 inches, 50 feet).  
Yards and fractions of yards to  $\frac{1}{32}$  yard (up to 20 yards).  
Yards and quarter yards only (up to 20 yards).  
Links and poles (also links to 100ths throughout).  
Millimetres throughout entire length.  
Burgos (Spanish Vara) measurement.  
Other Vara measurements.  
Nya and Gamla (Swedish) measurements.  
Norsk (Norwegian) measurement.  
Vershok and Sagene (Russian) measurements.

### ONE-HALF INCH STEEL TAPES:

Feet and inches only, inches not subdivided.  
Feet, inches and 10ths of inches.  
Feet, inches and 12ths of inches.  
Feet, inches and 16ths (see foot notes).  
Feet, inches and 8ths, left hand (figures running right to left).  
Feet, 10ths and 100ths of feet, left hand (figures running right to left).  
Consecutive inches to 8ths (up to 600 inches, 50 feet).  
Links and poles.  
Millimetres throughout entire length.  
Burgos (Spanish Vara) measurement.  
Other Vara measurements.  
Nya and Gamla (Swedish) measurements.  
Norsk (Norwegian) measurement.  
Vershok and Sagene (Russian) measurements.

ROSE TOOLS, INC.



Section Two  
WOVEN MEASURING TAPES

OUR line of Woven Tapes is diversified, ranging from the highest grade Metallic to the common Ass Skin Tape. These are to be seen in daily use everywhere.

Our Woven Tapes are of selected yarns, woven to width in our own factories, finished and coated to best resist stretching and shrinking under actual conditions of use. They are accurate within reasonable limits. However, the accuracy of such tapes cannot be guaranteed and, because of the very nature of the material, no fabric line should be depended upon for very close work. It is well to occasionally check up such tapes with a steel line, and for precise work a steel tape should always be used. However, for many kinds of work woven tapes are most practical and give satisfactory results, particularly the better grades.

One of the features of our Metallic Tapes is the patent threader, a device making the removal of an old and attaching of a new line most simple.

All cases are of good construction; those of leather are metal lined.



METALLIC TAPES  
Folding Handle

THE WIDELY USED, HIGHEST GRADE WOVEN TAPE

The Metallic is recommended for use where it is not practical to employ a steel tape and where the closest degree of accuracy is not required. It is the best woven line. This tape we weave, coat and mark by the most approved methods known to insure satisfactory service.

The line is 3/8 inch wide, of linen with metallic warp. It has leather reinforcement first end. It is clearly marked and has prominent figures. The case is of genuine russet leather, hand-stitched, with metal liner and substantial folding handle. Trimmings nickel plated. Patent threader shown above makes removal of an old and attaching of a new line most simple.

WITH FIVE-EIGHTHS INCH METALLIC TAPES

		Marked one side only					
Feet and inches.....	No.	500	501	503	504	505	506
Feet and 10ths.....	No.	500D	501D	503D	504D	505D	506D
Length, feet.....		25	33	50	66	75	100
Weight each, ozs.....		9	11	13	18	21	24
Price, each.....		\$3.10	\$3.60	\$4.50	\$5.10	\$5.60	\$7.00

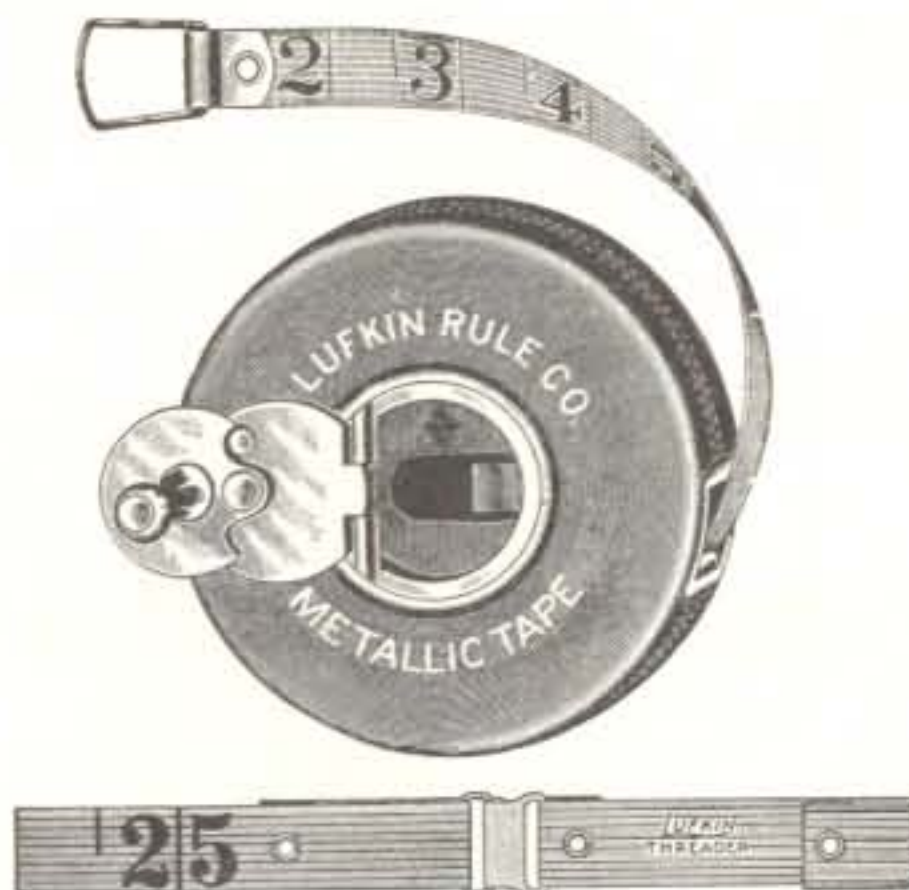
		Marked metric one side only (metres to centimetres throughout)					
No.....		500 1/2 M	501M	503M	504M	505 1/2 M	506M
Length, metres.....		5	10	15	20	25	30
Weight each, ozs.....		9	11	13	18	21	24
Price, each.....		\$2.90	\$3.60	\$4.50	\$5.10	\$6.20	\$7.00

		Marked metric and English					
		One side metric (metres to centimetres throughout)					
		One side English (feet and inches)					
No.....		500 1/2 ME	501ME	503ME	504ME	505 1/2 ME	506ME
Length, metres.....		5	10	15	20	25	30
Length, feet.....		15	33	50	66	82	100
Weight each, ozs.....		9	11	13	18	21	24
Price, each.....		\$3.20	\$3.80	\$4.70	\$5.40	\$6.50	\$7.60

		Marked links on back					
		(The use of tapes marked links on back has been practically discontinued in the United States)					
Feet and inches one side, links on back....	No.	500L	501L	503L	504L	505L	506L
Feet and 10ths one side, links on back....	No.	500DL	501DL	503DL	504DL	505DL	506DL
Length, feet.....		25	33	50	66	75	100
Weight each, ozs.....		9	11	13	18	21	24
Price, each.....		\$3.25	\$3.80	\$4.70	\$5.40	\$6.00	\$7.60

Packing: One in a box  
NOTE—For Metallic Tapes without cases, see page 48





## METALLIC TAPES

### Double-Folding Flush Handle

#### OUR BEST WOVEN TAPE, IN FLUSH HANDLE CASE

Recommended for use where impractical to employ a steel tape and where the closest degree of accuracy is not required. It is the best woven line. This tape we weave, coat and mark by the most approved methods known to insure satisfactory service.

The  $\frac{3}{8}$  inch wide line is of linen, with metallic warp. It has leather reinforcement first end, is clearly marked and has prominent figures.

Case of genuine russet leather, hand-stitched, with metal liner. The winding handle is of superior construction, double-folding flush pattern opened by push pin. Nickel plated trimmings. Patent threader shown above makes removal of an old and attaching of a new line most simple.

#### WITH FIVE-EIGHTHS INCH METALLIC TAPES

Marked one side only						
Feet and inches.....	No.	600	601	603	604	605
Feet and 10ths.....	No.	600D	601D	603D	604D	605D
Length, feet.....		25	33	50	66	75
Weight each, ozs.....		10	11	15	18	21
Price, each.....		\$3.80	\$4.35	\$5.25	\$5.80	\$6.35

Marked metric one side only (metres to centimetres throughout)						
No.....		600 $\frac{1}{2}$ M	601M	603M	604M	605 $\frac{1}{2}$ M
Length, metres.....		5	10	15	20	25
Weight each, ozs.....		9	11	15	18	22
Price, each.....		\$3.60	\$4.35	\$5.25	\$5.80	\$6.90

Marked metric and English						
One side metric (metres to centimetres throughout)						
One side English (feet and inches)						
No.....		600 $\frac{1}{2}$ ME	601ME	603ME	604ME	605 $\frac{1}{2}$ ME
Length, metres.....		5	10	15	20	25
Length, feet.....		15	33	50	66	82
Weight each, ozs.....		9	11	15	18	22
Price, each.....		\$3.90	\$4.50	\$5.45	\$6.15	\$7.25

Marked links on back						
(The use of tapes marked links on back has been practically discontinued in the United States)						
Feet and inches one side, links on back.....	No.	600L	601L	603L	604L	605L
Feet and 10ths one side, links on back.....	No.	600DL	601DL	603DL	604DL	605DL
Length, feet.....		25	33	50	66	75
Weight each, ozs.....		10	11	15	18	21
Price, each.....		\$4.00	\$4.50	\$5.45	\$6.15	\$6.70

Packing: One in a box

NOTE—For Metallic Tapes without cases, see page 48



## JUNIOR METALLIC TAPES

### Folding Handle

SMALLEST, MOST CONVENIENT TO CARRY, OF OUR LONG WOVEN TAPES.  
POPULAR FOR LIGHT WORK

The Junior is a narrower ( $\frac{3}{8}$  inch) Metallic line compactly put up. It is about one-half the size and weight of our  $\frac{3}{8}$  inch tapes.

The line is of linen with metallic warp and is clearly marked. Case is of genuine russet leather with metal liner. It has folding flush handle opened by push pin on opposite side. Nickel plated trimmings. Patent threader shown above makes removal of an old and attaching of a new line most simple. This tape is not made over 66 feet long.

#### WITH THREE-EIGHTHS INCH JUNIOR METALLIC TAPES

Marked one side only				
Feet, inches and 8ths of inches.....	No.	660	661	663
Feet, 10ths and 100ths of feet.....	No.	660D	661D	663D
Length, feet.....		25	33	50
Weight each, ozs.....		6	6	8
Price, each.....		\$3.25	\$3.60	\$4.10

Marked metric and English				
One side metric (metres to centimetres throughout)				
One side English (feet, inches and 8ths)				
No.....		660 $\frac{1}{2}$ ME	661ME	663ME
Length, metres.....		5	10	15
Length, feet.....		15	33	50
Price, each.....		\$3.20	\$3.80	\$4.30

Packing: One in a box

## METALLIC AND JUNIOR METALLIC TAPES WITHOUT CASES

### METALLIC ( $\frac{3}{8}$ INCH WIDE) TAPES ONLY

For No. 500 and No. 600 Series Tapes

Marked one side only							
Ft. & in.....	No.	0500	0501	0503	0504	0505	0506
Ft. & 10ths.....	No.	0500D	0501D	0503D	0504D	0505D	0506D
Metric.....	No.	0500 $\frac{1}{2}$ M	0501M	0503M	0504M	0505 $\frac{1}{2}$ M	0506M
Length, feet.....		25	33	50	66	75	100
Length, metres.....		5	10	15	20	25	30
Price, each.....		\$1.00	\$1.45	\$1.80	\$2.50	\$2.90	\$3.25

Marked both sides							
Metric and English							
No.....		0500 $\frac{1}{2}$ ME	0501ME	0503ME	0504ME	0505 $\frac{1}{2}$ ME	0506ME
Feet and inches, links on back							
No.....		0500L	0501L	0503L	0504L	0505L	0506L
Feet and 10ths, links on back							
No.....		0500DL	0501DL	0503DL	0504DL	0505DL	0506DL
Lgth. ft. 15		25	33	50	66	75	82
Lgth. met. 5		10	15	20	25	30	30
Price, ea.....		\$1.20	\$1.65	\$2.00	\$2.70	\$3.25	\$3.60

### JUNIOR METALLIC ( $\frac{3}{8}$ INCH WIDE) TAPES ONLY

Marked one side only				
Feet and inches.....	No.	0660	0661	0663
Feet and 10ths.....	No.	0660D	0661D	0663D
Length, feet.....		25	33	50
Price, each.....		\$1.35	\$1.65	\$2.25
Marked both sides				
Metric and English.....	No.	0660 $\frac{1}{2}$ ME	0661ME	0663ME
Length, metres.....		5	10	15
Price, each.....		\$1.10	\$1.85	\$2.45





### "STERLING" LINEN TAPES

A STRICTLY HIGH GRADE TAPE ESPECIALLY POPULAR WITH TELEPHONE AND TELEGRAPH COMPANIES., ETC., FOR ORDINARY WORK

This line, in general appearance similar to the Metallic, is without the metallic warp. While no woven tape should be depended upon for the closest degree of accuracy, the "Sterling" is well made from the best of materials and is serviceable.

Five-eighths inch wide linen tape with leather reinforcement first end. Markings are clear and figures prominent. Case of genuine russet leather, metal lined, with folding flush handle and nickel plated trimmings.

#### WITH FIVE-EIGHTHS INCH LINEN TAPES

		Marked one side only					
Feet and inches.....	No.	400	401	403	404	405	406
Feet and 10ths.....	No.	400D	401D	403D	404D	405D	406D
Length, feet.....		25	33	50	66	75	100
Weight each, ozs.....		8	11	12	17	19	24
Price, each.....		\$3.00	\$3.35	\$4.00	\$4.70	\$5.10	\$6.00

		Marked metric one side only (metres to centimetres throughout)					
No.....		400 1/2 M	401M	403M	404M	405 1/2 M	406M
Length, metres.....		5	10	15	20	25	30
Weight each, ozs.....		8	11	12	17	19	24
Price, each.....		\$2.80	\$3.35	\$4.00	\$4.70	\$5.40	\$6.00

		Marked metric and English One side metric (metres to centimetres throughout) One side English (feet and inches)					
No.....		400 1/2 ME	401ME	403ME	404ME	405 1/2 ME	406ME
Length, metres.....		5	10	15	20	25	30
Length, feet.....		15	33	50	66	82	100
Weight each, ozs.....		8	11	12	17	19	24
Price, each.....		\$3.10	\$3.60	\$4.20	\$5.10	\$5.90	\$6.65

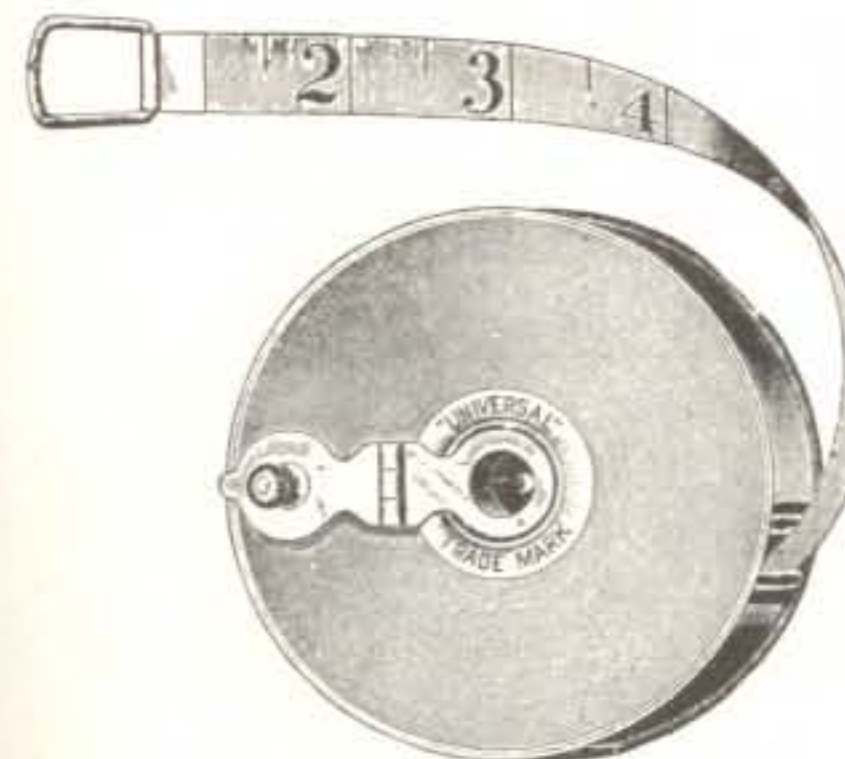
Packing: One in a box

### "STERLING" TAPES WITHOUT CASES

		Marked one side only					
Ft. & in.....	No.	0400	0401	0403	0404	0405	0406
Ft. & 10ths.....	No.	0400D	0401D	0403D	0404D	0405D	0406D
Metric.....	No.	0400 1/2 M	0401M	0403M	0404M	0405 1/2 M	0406M
Length, feet.....		25	33	50	66	75	100
Length, metres.....		5	10	15	20	25	30
Price, each.....		\$0.95	\$1.40	\$1.75	\$2.40	\$3.00	\$3.50

		Marked both sides					
Metric and English.....	No.	0400 1/2 ME	0401ME	0403ME	0404ME	0405 1/2 ME	0406ME
Length, metres.....		5	10	15	20	25	30
Length, feet.....		15	33	50	66	82	100
Price, each.....		\$1.10	\$1.95	\$2.60	\$3.15	\$3.90	\$4.75

Packing: One in a box



ON THIS AND REMAINING PAGES OF THIS SECTION OF CATALOG ARE SHOWN THE LOW PRICED AND POPULAR WOVEN TAPES, OUR "UNIVERSAL" BRAND. WHILE GOOD TAPES OF THEIR KIND, THESE SHOULD NOT BE CONFUSED WITH OUR METALLIC AND "STERLING" LINES, SHOWN ON PRECEDING PAGES. WE CALL SPECIAL ATTENTION TO THE FACT THAT OUR "UNIVERSAL" TAPES ARE PACKED IN INDIVIDUAL BOXES, PROTECTING AND KEEPING THEM IN BEST CONDITION.

### ASS SKIN TAPES

LOWEST IN PRICE OF OUR LONG WOVEN TAPES.  
DESIGNED FOR ORDINARY WORK.

This popular priced tape would be convenient in every home, and particularly on the farm, where long measurements are often to be taken.

Half inch wide cotton line, clearly marked and well coated. Sheet steel case, brass bound, with sides cream enameled. Brass folding handle and trimmings.

#### WITH ONE-HALF INCH COTTON TAPES

		Marked feet and inches, one side only					
No.....		710	711	713	714	715	716
Length, feet.....		25	33	50	66	75	100
Weight per doz., lbs.....		2 3/4	3 1/4	4	5 1/4	5 3/4	7
Price, per doz.....		\$6.60	\$7.20	\$9.00	\$10.80	\$13.20	\$16.20

		Marked metric and English One side metric (metres to centimetres throughout) One side English (feet and inches)					
No.....		711ME	713ME	714ME	715 1/2 ME	716ME	
Length, metres.....		10	15	20	25	30	
Length, feet.....		33	50	66	82	100	
Weight per doz., lbs.....		3 1/4	4	5 1/4	6	7	
Price, per doz.....		\$9.60	\$12.60	\$15.00	\$20.40	\$22.80	

Packing: One in a box, 1/2 doz. in a carton





### "UNIVERSAL" TAPES

Medium Grade

EXTRA GRADE COTTON LINE IN ENAMELED METAL CASE

Line clearly marked and well coated. Sheet steel case, brass bound, with sides maroon enameled. Brass folding handle and trimmings.

WITH ONE-HALF INCH EXTRA GRADE COTTON TAPES

Marked feet and inches, one side only

No.	720	721	723	724	725	726
Length, feet	25	33	50	66	75	100
Weight per doz., lbs.	2 3/4	3 1/4	4	5 1/4	5 3/4	7
Price, per doz.	\$8.40	\$9.00	\$11.40	\$13.20	\$15.60	\$19.20

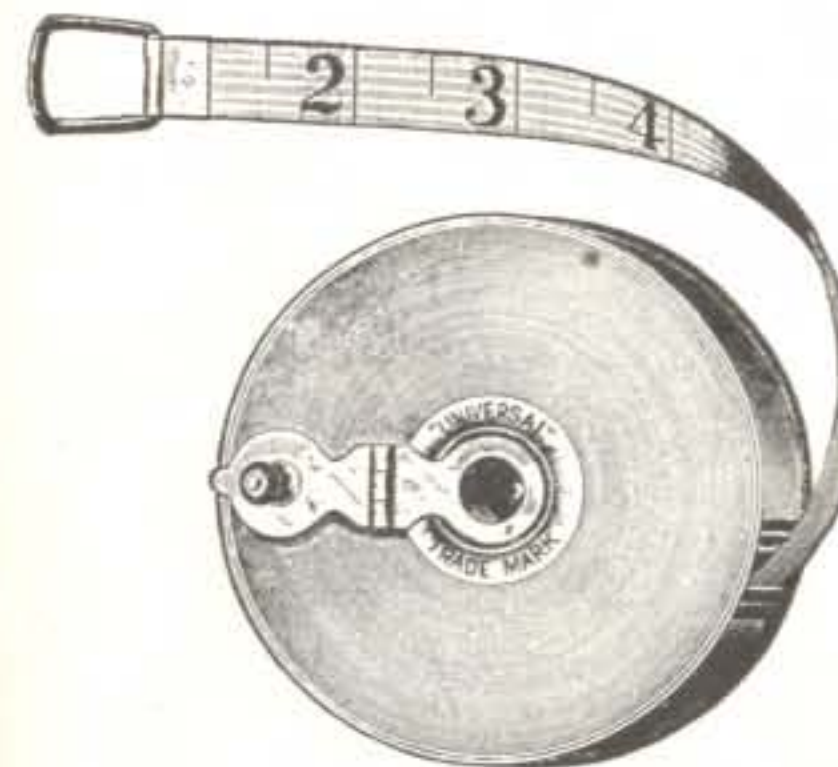
Marked metric and English

One side metric (metres to centimetres throughout)  
One side English (feet and inches)

No.	721ME	723ME	724ME	725 1/2 ME	726ME
Length, metres	10	15	20	25	30
Length, feet	33	50	66	82	100
Weight per doz., lbs.	3 1/4	4	5 1/4	6	7
Price, per doz.	\$11.40	\$14.40	\$17.40	\$22.80	\$25.80

Packing: One in a box, 1/2 doz. in a carton

NOTE—For this line in pressed leather case, see page 53



### "UNIVERSAL" TAPES

Extra Grade

WIDELY KNOWN AS THE "RAILROAD TAPE", SEE PARTICULARLY No. 733R. AN INEXPENSIVE, YET STRONG TAPE, AFFORDING A VERY FAIR DEGREE OF ACCURACY FOR A WOVEN LINE

This tape we recommend for any rough measuring. Wherever tried out it is rapidly replacing cheap cotton tapes.

The line is extra durable, being corded with pure, unbleached linen. It is 1/2 inch wide and well coated. Sheet steel case, brass bound, with sides maroon enameled. Brass folding handle and trimmings.

The Reinforced Tape, No. 733R, Is An Especially Good Value. It Is Standard Equipment of Most Railroads for Common Maintenance Work. It Has First Three Feet of Tape Double and Stitched. This Prolongs the Life of the Tape, the First End Receiving By Far the Most Wear.

WITH ONE-HALF INCH LINEN CORDED TAPES

Marked feet and inches, one side only

No.	730	731	733	733R	734	735	736
				(reinforced)			
Length, feet	25	33	50	50	66	75	100
Weight per doz., lbs.	2 3/4	3 1/2	4 1/4	4 1/2	5 1/2	6	7
Price, per doz.	\$9.00	\$10.20	\$14.40	\$16.80	\$16.20	\$18.00	\$22.20

Marked metric and English

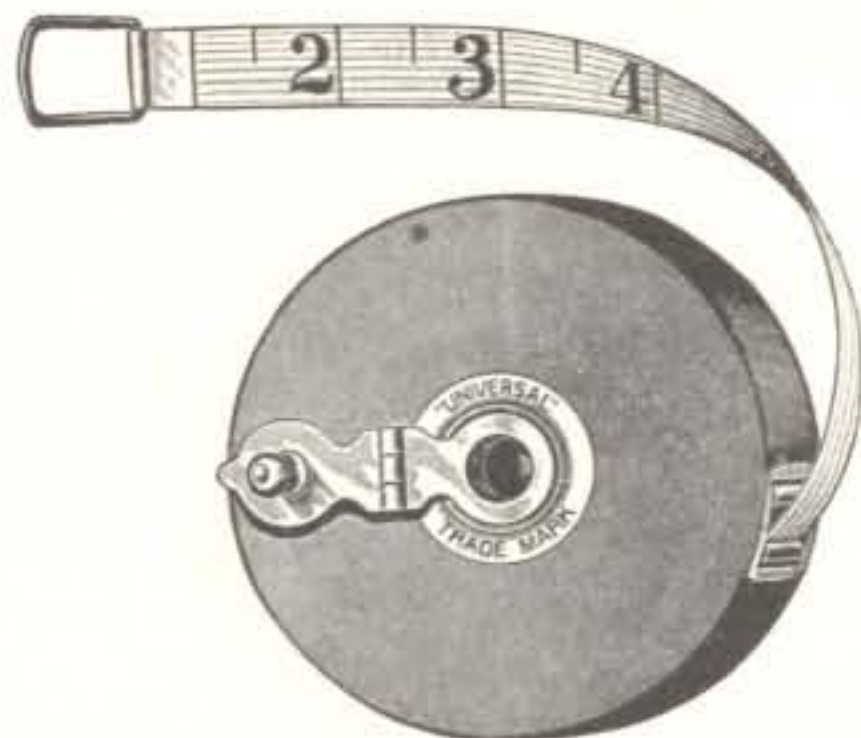
One side metric (metres to centimetres throughout)  
One side English (feet and inches)

No.	731ME	733ME	733R-ME	734ME	735 1/2 ME	736ME
			(reinforced)			
Length, metres	10	15	15	20	25	30
Length, feet	33	50	50	66	82	100
Weight per doz., lbs.	3 1/2	4 1/4	4 1/2	5 1/2	6 1/4	7
Price, per doz.	\$12.00	\$17.40	\$19.80	\$20.40	\$25.20	\$28.80

Packing: One in a box, 1/2 dozen in a carton

NOTE—For this line in pressed leather case, see page 53.  
For 3/8 inch and 1/2 inch linen corded lines in genuine leather cases, see pages 54 and 55.





### "UNIVERSAL" TAPES Extra Grade

PREFERRED BY SOME TO A METAL CASE, YET LOWER IN PRICE THAN THE  
GENUINE LEATHER

This is our linen corded line like the No. 730 and 930 series but put up in  
case of medium grade.

A strong tape with very fair degree of accuracy for a woven line. Half  
inch wide, corded with pure unbleached linen, and well coated. Pressed  
leather case of russet color. Heavy brass folding handle, brass trimmings.

#### WITH ONE-HALF INCH LINEN CORDED TAPES

No.	Marked feet and inches, one side only					
	1030	1031	1033	1034	1035	1036
Length, feet	25	33	50	66	75	100
Weight per doz., lbs.	3 3/4	4	4 3/4	6	6 1/2	7 3/4
Price, per doz.	\$16.80	\$18.00	\$25.80	\$30.60	\$33.00	\$38.40

No.	Marked metric and English				
	1031ME	1033ME	1034ME	1035 1/2 ME	1036ME
Length, metres	10	15	20	25	30
Length, feet	33	50	66	82	100
Weight per doz., lbs.	4	4 3/4	6	6 3/4	7 3/4
Price, per doz.	\$20.40	\$28.80	\$34.80	\$41.40	\$45.00

### "UNIVERSAL" TAPES Medium Grade

EXTRA GRADE COTTON LINE IN PRESSED LEATHER CASE

Line clearly marked and well coated. Put up in pressed leather case of  
russet color. Heavy brass folding handle, brass trimmings.

#### WITH ONE-HALF INCH EXTRA GRADE COTTON TAPES

No.	Marked feet and inches, one side only				
	1020	1021	1023	1024	1025
Length, feet	25	33	50	66	75
Weight per doz., lbs.	3 1/2	3 3/4	4 1/2	6	6 1/4
Price, per doz.	\$12.60	\$14.40	\$20.40	\$22.80	\$25.80

No.	Marked metric and English				
	1021ME	1023ME	1024ME	1025 1/2 ME	1026ME
Length, metres	10	15	20	25	30
Length, feet	33	50	66	82	100
Weight per doz., lbs.	3 3/4	4 1/2	6	6 1/2	7 1/2
Price, per doz.	\$16.20	\$24.00	\$27.60	\$33.60	\$38.40

Packing: All above, one in a box, 1/2 doz. in a carton

NOTE—For 1030 series line in leather case, see page 54; and in enameled metal case, see page 52  
For 1020 series tapes in enameled metal case, see page 51



### "UNIVERSAL" TAPES Extra Grade

Linen corded line in leather case

FOR THOSE WHO WISH A GOOD YET MEDIUM PRICED TAPE

This is our lowest priced woven tape in genuine leather case.

The line is durable, being corded with pure, unbleached linen. It is 1/2  
inch wide and well coated. It has a very fair degree of accuracy for a woven  
line. Case is of genuine russet leather, hand-stitched and with metal liner.  
Heavy brass folding handle, brass trimmings.

#### WITH ONE-HALF INCH LINEN CORDED TAPES

No.	Marked feet and inches, one side only					
	930	931	933	934	935	936
Length, feet	25	33	50	66	75	100
Weight per doz., lbs.	4 3/4	5 1/2	6 1/2	7 3/4	8	11
Price, per doz.	\$24.60	\$27.00	\$31.80	\$33.60	\$36.00	\$40.80

No.	Marked metric and English				
	931ME	933ME	934ME	935 1/2 ME	936ME
Length, metres	10	15	20	25	30
Length, feet	33	50	66	82	100
Weight per doz., lbs.	5 1/2	6 1/2	7 3/4	8 1/4	11
Price, per doz.	\$29.40	\$34.80	\$38.40	\$43.80	\$47.40

Packing: One in a box, 1/2 doz. in a carton

NOTE—For this tape 3/4 inch wide, see page 55.  
For this tape in metal case, see page 52.  
For this tape in pressed leather case, see page 53.





**"UNIVERSAL" TAPES**  
Extra Grade  
Linen corded line in leather case

THE WIDTH AND WEAVE GIVE THIS TAPE EXTRA DURABILITY

Exactly same as No. 930 series, page 54, but with tape  $\frac{3}{8}$  inch wide, affording greater durability and more prominent figures.

This line is corded with pure, unbleached linen and is well coated. It has great tensile strength and holds its length well. Case of genuine russet leather, hand-stitched, and with metal liner. Heavy brass folding handle, brass trimmings.

**WITH FIVE-EIGHTHS INCH LINEN CORDED TAPES**

Marked feet and inches, one side only						
No. ....	940	941	943	944	945	946
Length, feet .....	25	33	50	66	75	100
Weight per doz., lbs. ....	5 $\frac{1}{4}$	6	6 $\frac{3}{4}$	9	9 $\frac{1}{4}$	11
Price, per doz. ....	\$27.00	\$29.40	\$36.00	\$38.40	\$40.80	\$45.00

Marked metric and English					
One side metric (metres to centimetres throughout)					
One side English (feet and inches)					
No. ....	941ME	943ME	944ME	945 $\frac{1}{2}$ ME	946ME
Length, metres .....	10	15	20	25	30
Length, feet .....	33	50	66	82	100
Weight per doz., lbs. ....	6	6 $\frac{3}{4}$	9	9 $\frac{1}{2}$	11
Price, per doz. ....	\$31.80	\$39.60	\$42.60	\$48.00	\$51.60

Packing: One in a box,  $\frac{1}{2}$  doz. in a carton

NOTE—For this tape in  $\frac{1}{8}$  inch width, see page 54.



**POCKET LINEN TAPES**

ROUND-EDGE, NICKEL PLATED CASES, SPRING-WIND, CENTER STOP

These are our best woven pocket tapes. They are, in a fabric line, the equivalent of the No. 143 Pocket Steel Tapes, page 39. The lines are enameled linen, woven to width in our own factories.

Pocket Linen Tapes, appealing also to the ladies, are sold through many channels.

**WITH ONE-QUARTER INCH LINEN TAPES**

Marked inches to 8ths, one side only			
No. ....	173	175	176
Length .....	36 inch	60 inch	72 inch
Weight per doz., lbs. ....	$\frac{3}{4}$	1	1 $\frac{1}{4}$
Price, per doz. ....	\$6.60	\$7.80	\$9.00

Marked inches to 8ths one side; millimetres other side			
No. ....	173EM	175EM	176EM
Length .....	36 inch (1 metre)	60 inch (1 $\frac{1}{2}$ metre)	72 inch (2 metre)
Weight per doz., lbs. ....	$\frac{3}{4}$	1	1 $\frac{1}{4}$
Price, per doz. ....	\$7.20	\$8.40	\$9.60

**WITH FIVE-SIXTEENTHS INCH LINEN TAPES**

Marked inches to 8ths, one side only			
No. 188	Length, 96 inches.	Weight per doz., 2 lbs.	Price, per doz. .... \$15.00

Marked feet, inches and 8ths, one side only			
No. 188F	Length, 8 ft.	Weight per doz., 2 lbs.	Price, per doz. .... \$15.00

NOTE—For Pocket Steel Tapes, see pages 39, 40 and 41.



**"MARVEL" POCKET LINEN TAPES**

SQUARE-EDGE, NICKEL PLATED CASES, SPRING-WIND, CENTER STOP

Our popular priced linen pocket tapes, a companion line to the "Marvel" Pocket Steel Tapes, page 41. These tapes also sell in quantities through the department stores, novelty shops and bazaars, as well as the hardware trade.

One-quarter inch wide enameled linen tapes (woven to width).

The "Marvel" is a good medium grade tape.

**WITH ONE-QUARTER INCH LINEN TAPES**

Marked inches to 8ths, one side only			
No. ....	3173	3175	3176
Length .....	36 inch	60 inch	72 inch
Weight per doz., lbs. ....	$\frac{3}{4}$	1	1
Price, per doz. ....	\$3.60	\$5.40	\$6.00

Marked inches to 8ths one side; millimetres other side			
No. ....	3173EM	3175EM	3176EM
Length .....	36 inch (1 metre)	60 inch (1 $\frac{1}{2}$ metre)	72 inch (2 metre)
Weight per doz., lbs. ....	$\frac{3}{4}$	1	1
Price, per doz. ....	\$4.80	\$6.00	\$6.60

Packing: All above  $\frac{1}{2}$  doz. in a box.

NOTE—For "Marvel" Pocket Steel Tapes, see page 41.





**"UNIVERSAL" POCKET TAPES**

SQUARE-EDGE, NICKEL PLATED CASES, SPRING-WIND, CENTER STOP

These tapes, while selling at a popular price, are attractive and serviceable. Sixty-inch, painted cotton lines, 1/4 inch wide, woven to width so they will not fray out.

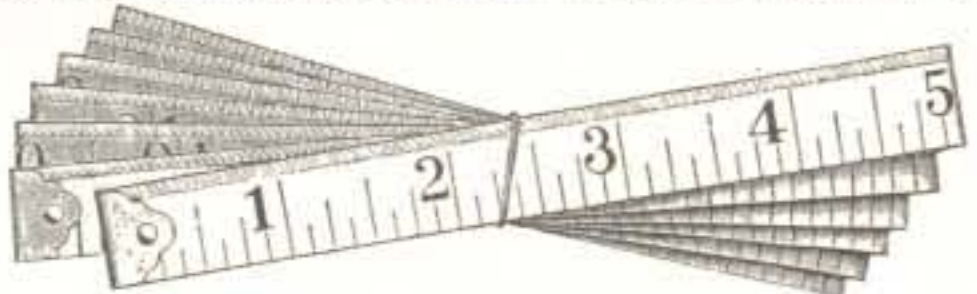
Packed in very attractive colored display boxes of one dozen. This box sits inclined, showing the goods to best advantage on counter, in show case, or window

These tapes sell in quantities at dry goods, department and general stores, novelty shops and bazaars, as well as through the hardware trade

Marked inches to 8ths, one side only  
No. 165 Length, 60 inches. Weight per gross, 9 lbs. Price, per gross... \$24.00

Marked inches to 8ths one side; millimetres other side  
No. 165EM Length, 60 in. (1 1/2 metres). Weight per gross, 9 lbs.  
Price, per gross .....\$30.00

Packing: One doz. per box, 12 boxes (1 gross tapes) in a carton



**TAILORS AND DRESSMAKERS TAPES**

Made of double-thickness sateen, lock-stitched edge. Metal-tipped ends. Tapes carefully folded, stapled and boxed.

7/16 INCH WIDE. 60 INCHES LONG.			
Marked Inches and 8ths Both Sides	Marked Inches and 8ths One Side; 1/2 Centimetres Other Side, (First dm in mm).		Price, Per Gross
No. 471	No. 471EM	Common grade,	\$ 7.00
No. 472	No. 472EM	Medium grade,	8.50
No. 473	No. 473EM	Best grade,	12.00
Average weight per gross, 4 lbs.			

9/16 INCH WIDE. 60 INCHES LONG.			
Marked Inches and 8ths Both Sides	Marked Inches and 8ths One Side; 1/2 Centimetres Other Side, (First dm in mm).		Price, Per Gross
No. 491	No. 491EM	Common grade,	\$ 8.00
No. 492	No. 492EM	Medium grade,	10.00
No. 493	No. 493EM	Best grade,	14.00
Average weight per gross, 4 1/2 lbs.			

Tape with Rigid Ends (Patented)

Will appeal particularly to tailors and dressmakers as it has a flexible steel insert, 6 inches long, at each end, firmly held in place. With this tape it is unnecessary to grasp the extreme end in measuring, as ends are somewhat rigid. They are, however, sufficiently flexible not to interfere with taking any circular measurement.

No. 1492 60 inch. Medium grade. 9/16 inch wide. Weight per gross, 5 3/4 lbs. Price, per gross.....\$16.00

Packing: All Tailors Tapes, 1 dozen in a box, one gross in a carton

**SPECIAL GRADUATIONS ON WOVEN TAPES**

We are prepared to put the following special graduations on woven tapes, aside from the regular or common graduations listed throughout Section Two of this catalog Prices quoted on application.

**3/8 INCH METALLIC AND "STERLING" LINEN TAPES:**

- Feet only, not subdivided.
- Burgos (Spanish Vara) measurement.
- Palmos (Catalan) measurement.
- Argentine Vara measurement.
- Nya and Gamla (Swedish) measurements.
- Norsk (Norwegian) measurement.

**1/2 INCH LINEN CORDED TAPES:**

- Gamla (Swedish) measurement.
- Norsk (Norwegian) measurement.

**1/4 INCH POCKET LINEN TAPES:**

- Gamla (Swedish) measurement.
- Norsk (Norwegian) measurement.

**POINT OF BEGINNING OF MEASUREMENTS ON WOVEN TAPES**

**OUR STANDARD PRACTICE ON WOVEN TAPES IS AS FOLLOWS:**

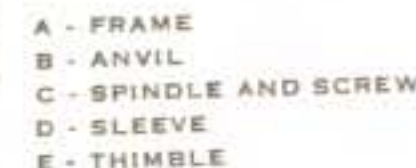
All catalogued long woven tapes, single or double graduation, measure from outer end of ring.

All woven pocket tapes have blank space first end.

NOTE—Metallic and "Sterling" Linen tapes will, without extra charge, be furnished with short blank space first end when so specified.



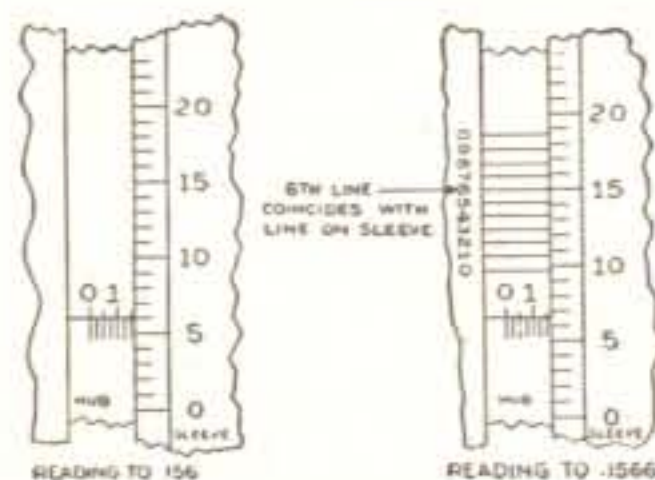
Lufkin Mechanical Tools have many improved and exclusive features that will make them the most popular with mechanics and dealers.



The "Rapid Reading" feature consists of numbering each thousandth graduation on the sleeve instead of every five thousandths. In this way much confusion and many possibilities of error in reading the Micrometer are eliminated. By merely adding the number of thousandths, as shown by the figures on the sleeve, to the last twenty-five thousandths line on the hub, a rapid and accurate reading is obtained.



## DIRECTIONS FOR READING MICROMETER CALIPERS WITH TEN-THOUSANDTHS GRADUATIONS



Measurements to ten-thousandths of an inch are obtained by the use of a vernier, or a series of divisions placed on the hub of our Micrometer. It will be noted that these divisions on the hub are ten in number, occupying the same space as nine divisions on the sleeve, and numbered 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 0.

When the Micrometer is opened for taking a measurement to thousandths, the sleeve is turned to the left and the reading taken on the hub by lines .025, .050, .075, .100. The thousandths between these points are read off from the zero line on the sleeve. Thus if the graduation line on the hub shows .025 and on the sleeve .015, the reading would be the sum of the two, or .040.

To read a Micrometer graduated to ten-thousandths, first note the reading on the hub, then the thousandths reading on the sleeve, which gives the total reading in thousandths, then add the reading of the coinciding line on the vernier. Should the reading on the vernier be the second line, which is numbered 1, add one ten-thousandth; should it be the line numbered 2, add two ten-thousandths, etc.

### Example

The above illustration shows a Micrometer reading .1566 inch, arrived at as follows: First read the thousandths as usual; this gives .156 inch. The number of the vernier line on the hub coinciding with a line on the sleeve is 6, indicating six ten-thousandths or .0006 inch. Adding this to .156 gives .1566 inch, which is the total reading or measurement.

## DIRECTIONS FOR ADJUSTING MICROMETER CALIPERS

(This instruction accompanies each tool).



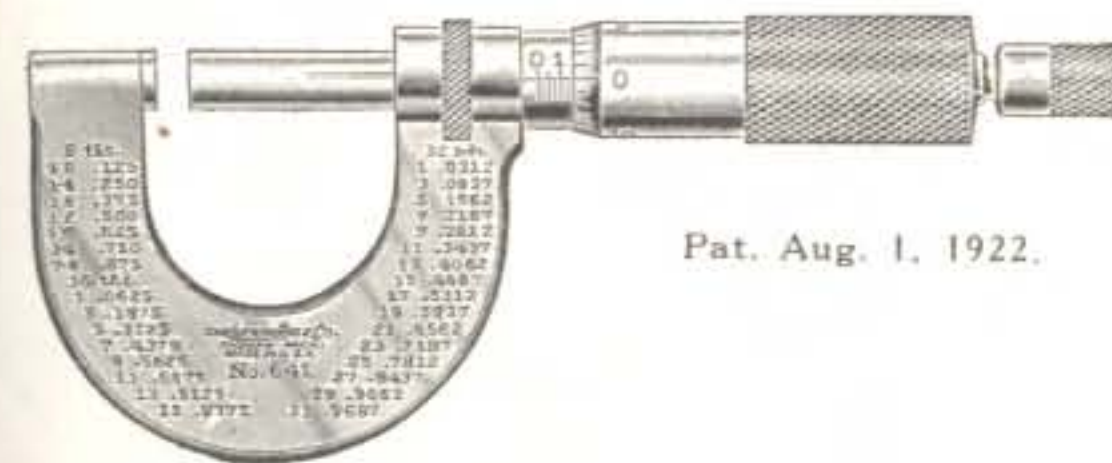
**To Adjust for Wear on the Faces of Anvil and Spindle:** Clean the faces of anvil and spindle and bring them together. Slip the frictional wrench over sleeve "D", then hold the Micrometer and wrench in the position here illustrated. This brings the reading lines directly in view, so adjusting can be done in either direction without removing the wrench. Then grip the wrench firmly and rotate graduated sleeve "D" until zero line of this sleeve coincides with reading line on the hub. (Sleeve "D" is threadedly engaged in thimble "E").

**To Adjust Tension and Take Up Wear on Screw of Spindle:** For this purpose the spanner end of wrench fits the nut on end of hub of frame.

**To Adjust Tension between Sleeve "D" and Thimble "E":** Screw sleeve "D" out of thimble "E". It will then

be noted that sleeve "D" is slotted at three points. By spreading these slots slightly, any tension desired between the two parts can be obtained.

These methods of adjustment prevent the mutilation of the Micrometer and prolong its life.



Pat. Aug. 1, 1922.

## ONE INCH MICROMETER CALIPERS

With Full Finished Frame

Rapid Reading (See page 60)

Number		Weight Each	Price Each
For measuring by thousandths. Range, 0 to 1 inch.			
611	Plain—without lock nut or ratchet stop.....	8 ozs.	\$ 8.50
621	With lock nut, without ratchet stop.....	8 ozs.	9.50
631	With ratchet stop, without lock nut.....	8 ozs.	9.00
641	With lock nut and ratchet stop.....	8 ozs.	10.00

For measuring by ten-thousandths.  
Range, 0 to 1 inch.

611V	Plain—without lock nut or ratchet stop.....	8 ozs.	10.25
621V	With lock nut, without ratchet stop.....	8 ozs.	11.25
631V	With ratchet stop, without lock nut.....	8 ozs.	10.75
641V	With lock nut and ratchet stop.....	8 ozs.	11.75

## METRIC MICROMETER CALIPERS—25 MM.

For measuring by hundredths of a millimetre.  
Range, 0 to 25 mm.

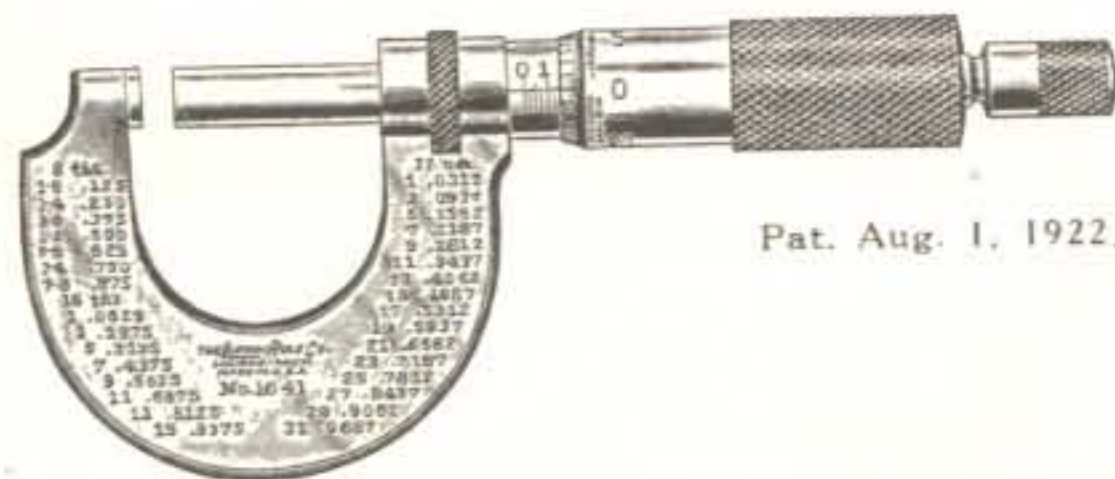
611M	Plain—without lock nut or ratchet stop.....	8 ozs.	8.50
621M	With lock nut, without ratchet stop.....	8 ozs.	9.50
631M	With ratchet stop, without lock nut.....	8 ozs.	9.00
641M	With lock nut and ratchet stop.....	8 ozs.	10.00

Regular packing: One only in hinged wooden box with clasp.

Leather case can be supplied with any above Micrometers, extra.....\$1.25

NOTE—For general description of Micrometer Calipers, see pages 60 and 61.





Pat. Aug. 1, 1922.

## ONE INCH MICROMETER CALIPERS

With Full Finished, Cut Away Frame.

Rapid Reading (See page 60)

The frames of all Micrometers listed on this page are cut away. This makes them suitable for taking many measurements where micrometers without this feature could not be used. On these the combined depth of anvil and frame is approximately 11/32 inch (9 mm).

ONE INCH MICROMETER CALIPERS			
Number		Weight Each	Price Each
For measuring by thousandths.			
Range, 0 to 1 inch.			
1611	Plain—without lock nut or ratchet stop.....	8 ozs.	\$ 8.50
1621	With lock nut, without ratchet stop.....	8 ozs.	9.50
1631	With ratchet stop, without lock nut.....	8 ozs.	9.00
1641	With lock nut and ratchet stop.....	8 ozs.	10.00

For measuring by ten-thousandths.  
Range, 0 to 1 inch.

1611V	Plain—without lock nut or ratchet stop.....	8 ozs.	\$10.25
1621V	With lock nut, without ratchet stop.....	8 ozs.	11.25
1631V	With ratchet stop, without lock nut.....	8 ozs.	10.75
1641V	With lock nut and ratchet stop.....	8 ozs.	11.75

## METRIC MICROMETER CALIPERS—25 MM

For measuring by hundredths of a millimetre.

Range, 0 to 25 mm.

1611M	Plain—without lock nut or ratchet stop.....	8 ozs.	\$ 8.50
1621M	With lock nut, without ratchet stop.....	8 ozs.	9.50
1631M	With ratchet stop, without lock nut.....	8 ozs.	9.00
1641M	With lock nut and ratchet stop.....	8 ozs.	10.00

Regular packing: One only in hinged wooden box with clasp.

Leather case can be supplied with any above Micrometers, extra \$ 1.25

NOTE—For general description of Micrometer Calipers, see pages 60 and 61.



Pat. Aug. 1, 1922.

## TWO INCH MICROMETER CALIPERS

With Full Finished, Cut Away Frame

Rapid Reading (See page 60)

The frames of all Micrometers listed on this page are cut away. This makes them suitable for taking measurements where Micrometers without this feature could not be used. On these the combined depth of anvil and frame is approximately 11/32 inch (9 mm).

TWO INCH MICROMETER CALIPERS			
Number	For measuring by thousandths. Range, 1 to 2 inches.	Weight Each	Price Each
1612	Plain—without lock nut or ratchet stop. With one inch test gage.....	10 ozs.	\$ 9.50
1622	With lock nut, without ratchet stop. With one inch test gage.....	10 ozs.	10.50
1632	With ratchet stop, without lock nut. With one inch test gage.....	10 ozs.	10.00
1642	With lock nut and ratchet stop. With one inch test gage.....	10 ozs.	11.00

For measuring by ten-thousandths.  
Range, 1 to 2 inches.

1612V	Plain—without lock nut or ratchet stop. With one inch test gage.....	10 ozs.	11.25
1622V	With lock nut, without ratchet stop. With one inch test gage.....	10 ozs.	12.25
1632V	With ratchet stop, without lock nut. With one inch test gage.....	10 ozs.	11.75
1642V	With lock nut and ratchet stop. With one inch test gage.....	10 ozs.	12.75

## METRIC MICROMETER CALIPERS—50 MM

For measuring by hundredths of a millimetre.  
Range, 25 to 50 mm.

1612M	Plain—without lock nut or ratchet stop. With 25 mm test gage.....	10 ozs.	9.50
1622M	With lock nut, without ratchet stop. With 25 mm test gage.....	10 ozs.	10.50
1632M	With ratchet stop, without lock nut. With 25 mm test gage.....	10 ozs.	10.00
1642M	With lock nut and ratchet stop. With 25 mm test gage.....	10 ozs.	11.00

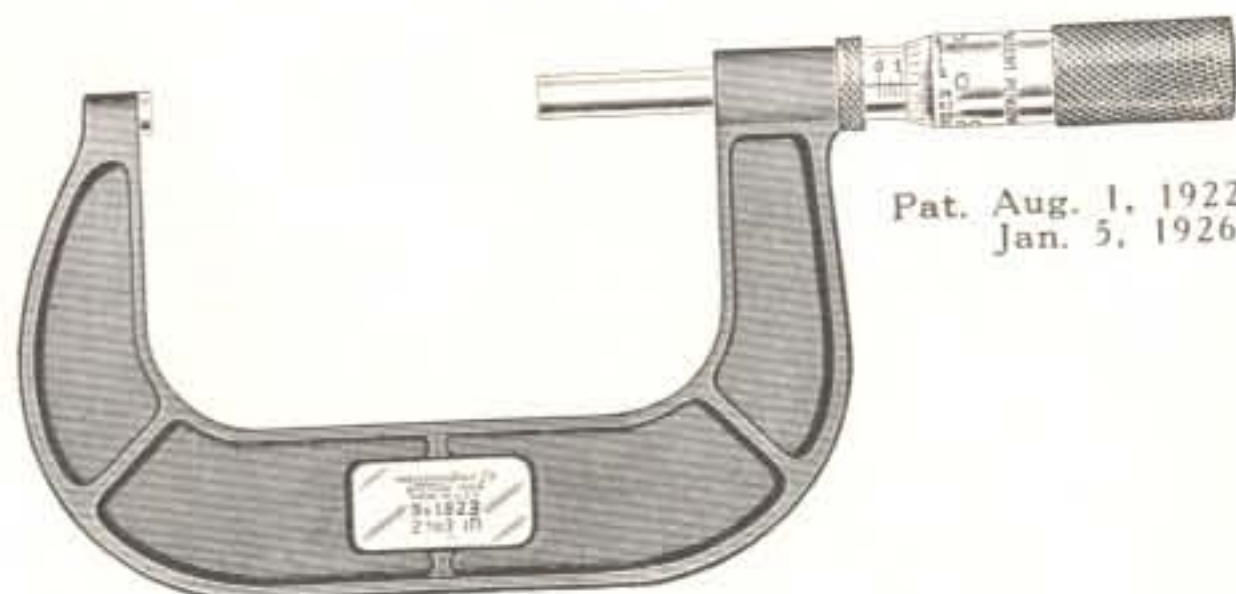
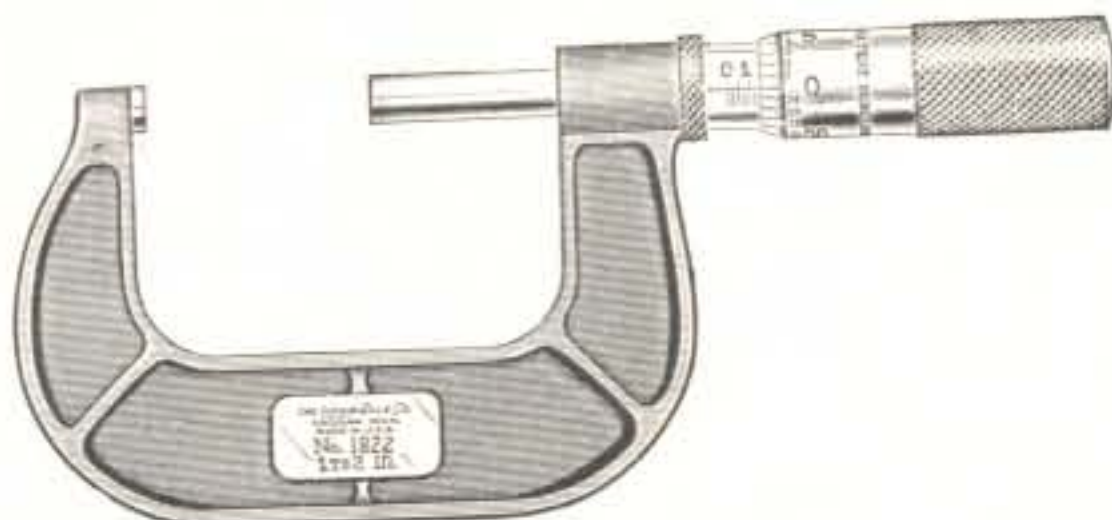
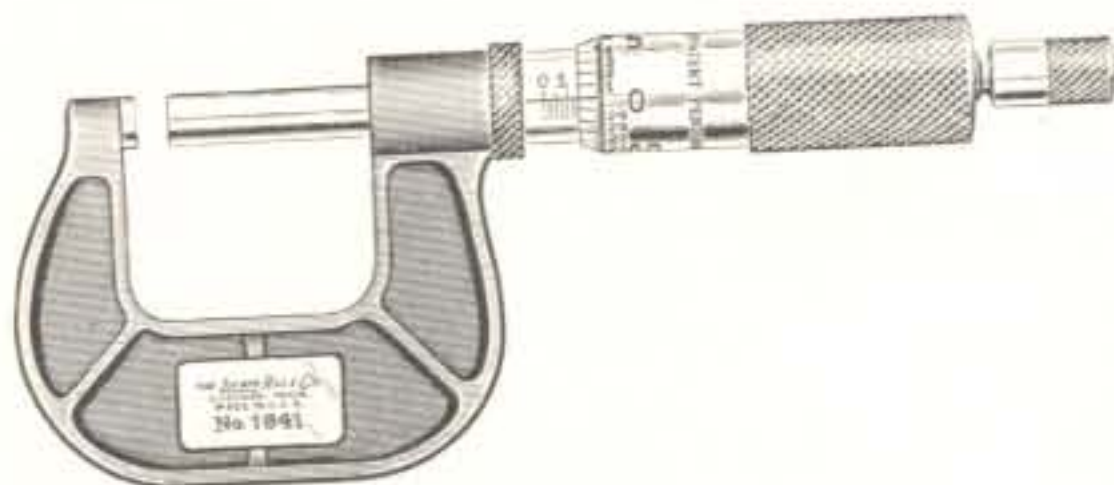
Regular packing: One only in hinged wooden box with clasp.

NOTE—For general description of Micrometer Calipers, see pages 60 and 61.



## MICROMETER CALIPERS

One Inch      Two Inch      Three Inch  
With Olive Green Enameled Frame



Pat. Aug. 1, 1922.  
Jan. 5, 1926.

For Prices, see Page 65-A

MICROMETER CALIPERS  
One Inch      Two Inch      Three Inch  
With Green Enameled Frame  
For Measuring by thousandths,  
Range, 0 to 1 inch

Number		Weight Each	Price Each
1811	Plain—without lock nut or ratchet stop	8 ozs.	\$6.25
1821	With lock nut, without ratchet stop	8 ozs.	6.75
1831	With ratchet stop, without lock nut	8 ozs.	6.75
1841	With lock nut and ratchet stop	8 ozs.	7.25

For Measuring by ten-thousandths,  
Range, 0 to 1 inch

1811V	Plain—without lock nut or ratchet stop	8 ozs.	\$7.75
1821V	With lock nut, without ratchet stop	8 ozs.	8.25
1831V	With ratchet stop, without lock nut	8 ozs.	8.25
1841V	With lock nut and ratchet stop	8 ozs.	8.75

For Measuring by thousandths,  
Range, 1 to 2 inches

1812	Plain—without lock nut or ratchet stop	10 ozs.	\$7.00
1822	With lock nut, without ratchet stop	10 ozs.	7.50
1832	With ratchet stop, without lock nut	10 ozs.	7.50
1842	With lock nut and ratchet stop	10 ozs.	8.00

For Measuring by ten-thousandths,  
Range, 1 to 2 inches

1812V	Plain—without lock nut or ratchet stop	10 ozs.	\$8.50
1822V	With lock nut, without ratchet stop	10 ozs.	9.00
1832V	With ratchet stop, without lock nut	10 ozs.	9.00
1842V	With lock nut and ratchet stop	10 ozs.	9.50

Extra for 1 inch test gage for any of above 2 inch  
Micrometers

1.00

For Measuring by thousandths,  
Range, 2 to 3 inches

1813	Plain—without lock nut or ratchet stop	12 ozs.	\$7.75
1823	With lock nut, without ratchet stop	12 ozs.	8.25
1833	With ratchet stop, without lock nut	12 ozs.	8.25
1843	With lock nut and ratchet stop	12 ozs.	8.75

For Measuring by ten-thousandths,  
Range, 2 to 3 inches

1813V	Plain—without lock nut or ratchet stop	12 ozs.	\$9.25
1823V	With lock nut, without ratchet stop	12 ozs.	9.75
1833V	With ratchet stop, without lock nut	12 ozs.	9.75
1843V	With lock nut and ratchet stop	12 ozs.	10.25

Extra for 2 inch test gage for any of above 3 inch  
Micrometers

1.25

2 and 3 inch Micrometers sent without test gage  
unless otherwise ordered.

Any of above Micrometer Calipers can be furnished  
with Metric Measurements at no extra charge.  
Specify as No. 1811M, 1812M, etc.

Regular packing: One only in hinged wooden box with clasp.

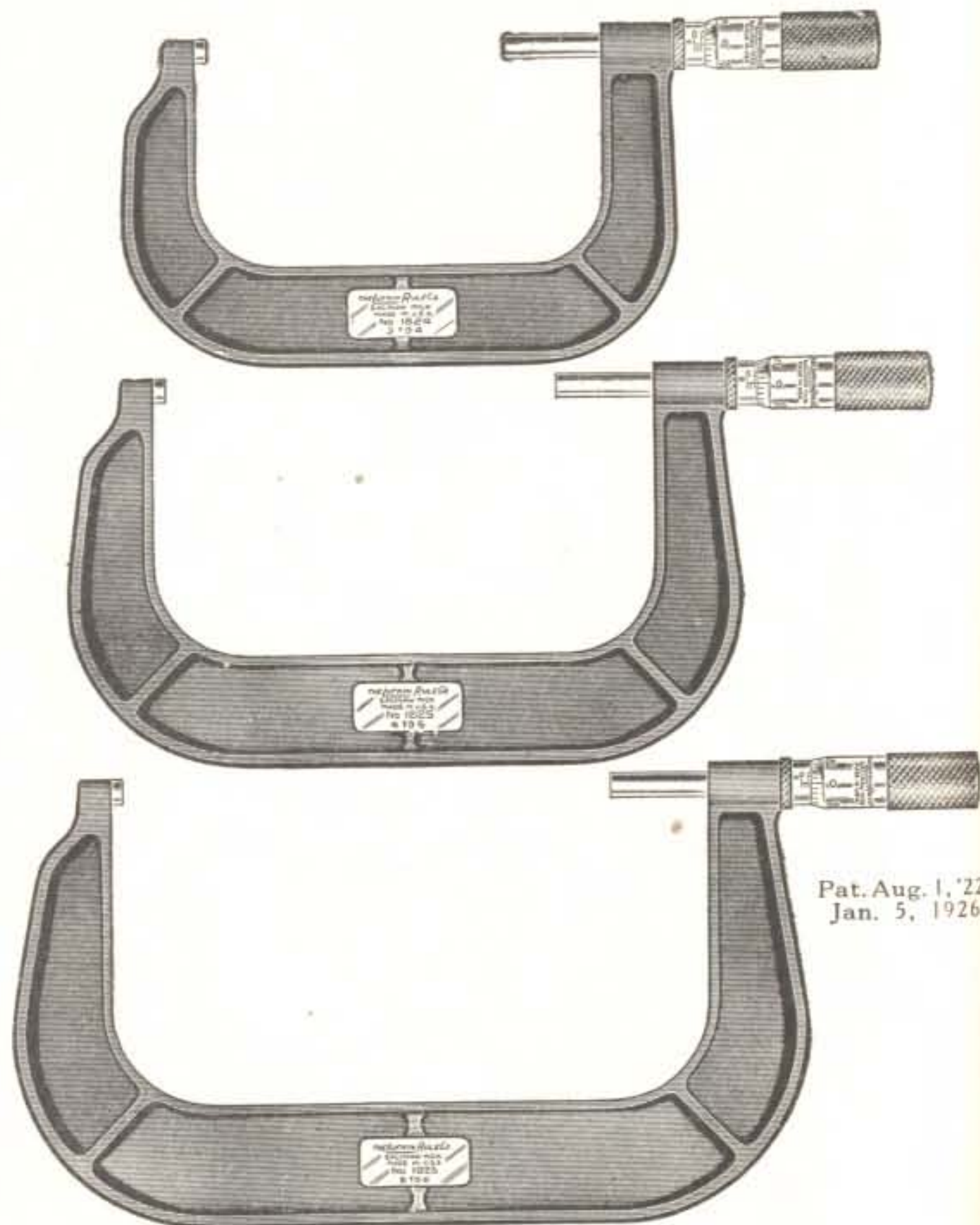
NOTE:—For general description of Micrometer Calipers, see pages 60 and 61.



## MICROMETER CALIPERS

Four Inch Five Inch Six Inch

With Olive Green Enameled Frame



Pat. Aug. 1, '22  
Jan. 5, 1926.

For prices, see page 65-C

ROSE TOOLS, INC.

## MICROMETER CALIPERS

Four Inch Five Inch Six Inch

With Olive Green Enameled Frame

Number		Weight Each	Price Each
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For Measuring by thousandths,  
Range, 3 to 4 inches

1814	Plain—without lock nut or ratchet stop .....	18 ozs.	\$8.50
1824	With lock nut, without ratchet stop .....	18 ozs.	9.00
1834	With ratchet stop, without lock nut .....	18 ozs.	9.00
1844	With lock nut and ratchet stop .....	18 ozs.	9.50
	Extra for 3 inch test gage .....		1.50

Range, 4 to 5 inches

1815	Plain—without lock nut or ratchet stop .....	22 ozs.	\$9.25
1825	With lock nut, without ratchet stop .....	22 ozs.	9.75
1835	With ratchet stop, without lock nut .....	22 ozs.	9.75
1845	With lock nut and ratchet stop .....	22 ozs.	10.25
	Extra for 4 inch test gage .....		1.75

Range, 5 to 6 inches

1816	Plain—without lock nut or ratchet stop .....	26 ozs.	\$10.00
1826	With lock nut, without ratchet stop .....	26 ozs.	10.50
1836	With ratchet stop, without lock nut .....	26 ozs.	10.50
1846	With lock nut and ratchet stop .....	26 ozs.	11.00
	Extra for 5 inch test gage .....		2.00

## METRIC MICROMETER CALIPERS

For measuring by hundredths of a millimetre

Range, 75 to 100 mm.

1814M	Plain—without lock nut or ratchet stop .....	18 ozs.	\$8.50
1824M	With lock nut, without ratchet stop .....	18 ozs.	9.00
1834M	With ratchet stop, without lock nut .....	18 ozs.	9.00
1844M	With lock nut and ratchet stop .....	18 ozs.	9.50
	Extra for 75 mm test gage .....		1.50

Range, 100 to 125 mm.

1815M	Plain—without lock nut or ratchet stop .....	22 ozs.	\$9.25
1825M	With lock nut, without ratchet stop .....	22 ozs.	9.75
1835M	With ratchet stop, without lock nut .....	22 ozs.	9.75
1845M	With lock nut and ratchet stop .....	22 ozs.	10.25
	Extra for 100 mm test gage .....		1.75

Range, 125 to 150 mm.

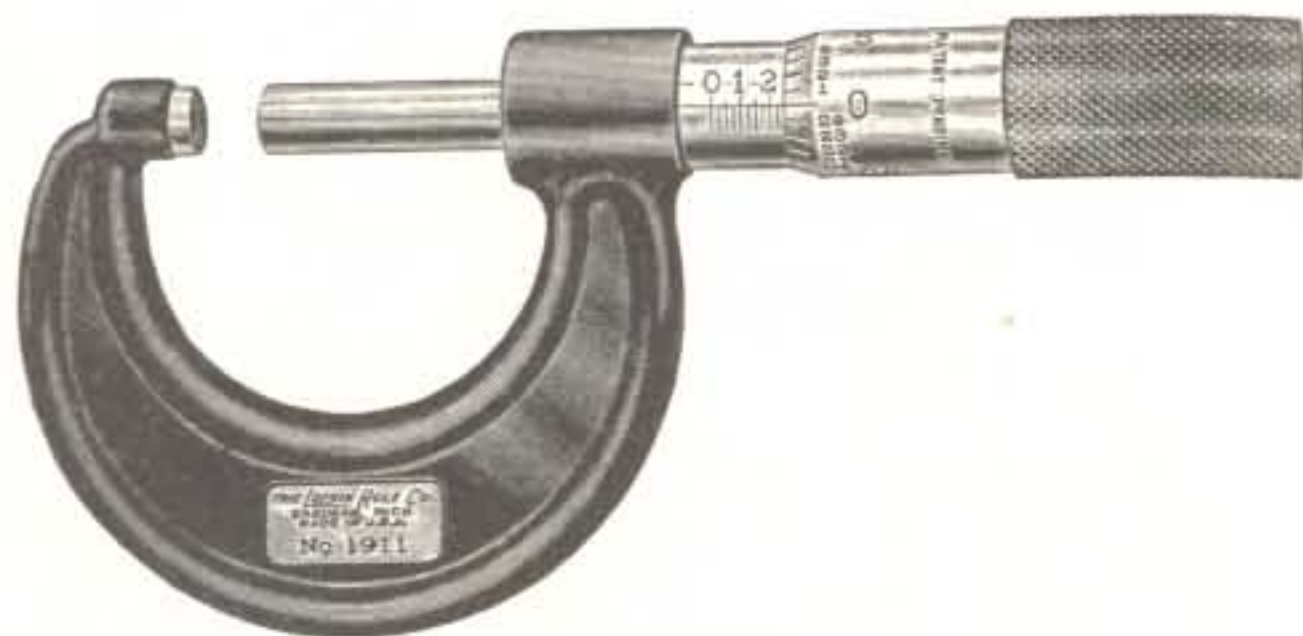
1816M	Plain—without lock nut or ratchet stop .....	26 ozs.	\$10.00
1826M	With lock nut, without ratchet stop .....	26 ozs.	10.50
1836M	With ratchet stop, without lock nut .....	26 ozs.	10.50
1846M	With lock nut and ratchet stop .....	26 ozs.	11.00
	Extra for 125 mm test gage .....		2.00

All above Micrometers sent without test gage unless otherwise ordered.

Regular packing: One only in hinged wooden box with clasp.

NOTE:—For general description of Micrometer Calipers, see pages 60 and 61.





## ONE INCH MICROMETER CALIPERS

With Green Enameled Frame

Rapid Reading (See page 60)

This micrometer is especially designed for production work, having a sturdy ribbed frame, to withstand the harder usage, without unusual weight. It has the same smooth action and high degree of accuracy, as well as the improved adjustment features of all Lufkin micrometers.

For measuring by thousandths.  
Range, 0 to 1 inch

1911	Plain, without locknut or ratchet stop	6 ozs.	\$6.25
1921	With locknut, without ratchet stop	6 ozs.	6.75
1931	With ratchet stop, without locknut	6 ozs.	6.75
1941	With locknut and ratchet stop	6 ozs.	7.25

For measuring by thousandths.  
Range, 1 to 2 inches

1912	Plain, without locknut or ratchet stop	8 ozs.	\$7.00
1922	With locknut, without ratchet stop	8 ozs.	7.50
1932	With ratchet stop, without locknut	8 ozs.	7.50
1942	With locknut and ratchet stop	8 ozs.	8.00
	Extra for 1 inch test gage		1.00

For measuring by thousandths.  
Range, 2 to 3 inches

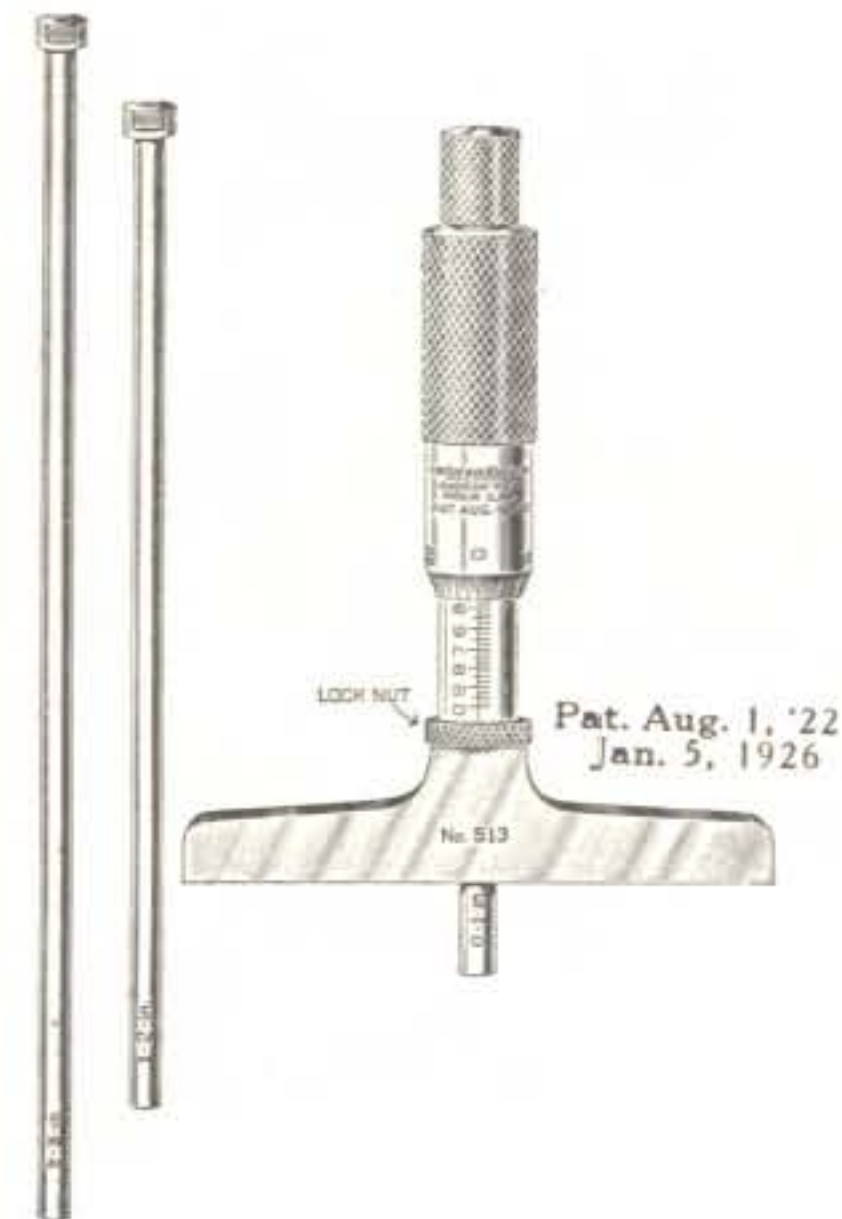
1913	Plain, without locknut or ratchet stop	12 ozs.	\$7.75
1923	With locknut, without ratchet stop	12 ozs.	8.25
1933	With ratchet stop, without locknut	12 ozs.	8.25
1943	With locknut and ratchet stop	12 ozs.	8.75
	Extra for 2 inch test gage		1.25

All above Micrometers sent without test gage unless otherwise ordered.

NOTE—When Micrometers are wanted reading in ten-thousandths of an inch, add suffix "V" as 1911V. Extra for ten-thousandths, \$1.75 each.

For general description of Micrometer Calipers, see pages 60 and 61.

Packing: One in a box.



## MICROMETER DEPTH GAGE

Rapid Reading (See page 60)

1" Movement

A gage designed for use in measuring the depth of holes, slots, etc., with micrometer accuracy. Each gage is provided with three measuring rods which permit measurements from zero to three inches by thousandths. The rods are inserted through a hole in the screw and are securely fastened by means of a knurled cap.

To compensate for wear our Micrometer Depth Gage is adjusted by the same methods as our standard Micrometer; by slipping the frictional wrench over the graduated sleeve and rotating same in either direction in the thimble until zero line coincides with reading line on the hub. Each rod is equipped with an adjusting nut to maintain their individual lengths and the end of each rod is hardened and lapped.

Each gage is equipped with a patent lock nut which permits the reading to be maintained. This is a feature found in no other Micrometer Depth Gage.

Number		Weight Each	Price Each
513	Micrometer Depth Gage—3" Base 0 to 3 inches	12 ozs.	\$10.50
515	Micrometer Depth Gage—5" Base 0 to 3 inches	18 ozs.	13.50
513M	Metric Micrometer Depth Gage 0 to 75 MM	12 ozs.	10.50

Regular Packing: One only in hinged wooden box with clasp.

NOTE—For general description of Micrometer Calipers, see pages 60 and 61.





Pat Aug. 1, 1922—July 11, 1922—Jan. 25, 1927



## INSIDE MICROMETER CALIPERS

Our Inside Micrometer, consisting of the Micrometer Head and Tubular Extension rods, has many new features and improvements over any other now made.

The Micrometer Head is so designed that it will measure from  $1\frac{1}{2}$  inches, a feature which, in Inside Micrometers, is found only in those of our manufacture. It permits measurements to be taken in the smaller diameters, slots, etc.

The extension tubes or rods are of steel tubing, making a most rigid and durable tool, yet of light weight. Each rod is marked with its length and is attached to the Micrometer Head by removing the hardened end or anvil with the frictional wrench. The rods can be added to either or both ends of the Micrometer Head as illustrated above, which allows one to keep the head in the center of the tool, preserving the balance. This is a very important feature.

A handle is furnished with the Inside Micrometer sets No. 680A and 680B. This handle is designed so that it can be attached to any part of the Micrometer Head or extension rods. Thus perfect balance and feel are maintained which are essential to accuracy.

To compensate for wear the Micrometer Head is adjusted by the same methods as our standard Micrometer; by slipping the frictional wrench over the graduated sleeve and rotating same in either direction in the thimble until zero line coincides with reading on the hub. The tension on the screw of the spindle is adjusted by the spanner end of the wrench. All extension rods are equipped with a hardened anvil and a means of adjustment for maintaining their individual lengths.

Micrometer sets No. 680A and 680B have a  $\frac{1}{2}$  inch movement of the screw while sets No. 681C, 681D and 681K have a one inch movement. Set No. 6801D has both the  $\frac{1}{2}$  inch movement and one inch movement heads, being a combination of Micrometer Sets No. 680A and 681D.

Each Micrometer Set is packed in a nicely finished wooden box as illustrated above.

NOTE—Extra extension rods to increase the range of a set can be supplied at reasonable prices.

## INSIDE MICROMETER CALIPERS

For Measuring By Thousandths of An Inch

Number		Weight Each	Price Each
680A	Inside Micrometer Range, $1\frac{1}{2}$ to 8 inches with 5 measuring rods.....	8½ ozs.	\$12.00
680B	Inside Micrometer Range, $1\frac{1}{2}$ to 12 inches with 8 measuring rods.....	12 ozs.	15.00
681C	Inside Micrometer Range, 4 to 24 inches with 7 measuring rods.....	27 ozs.	18.00
681D	Inside Micrometer Range, 4 to 32 inches with 8 measuring rods.....	39 ozs.	20.00
681K	Inside Micrometer Range, 4 to 40 inches with 10 measuring rods.....	48 ozs.	24.00
6801D	Inside Micrometer Set Range, $1\frac{1}{2}$ to 32 inches with $\frac{1}{2}$ " and 1" movement Micrometer Heads and 10 measuring rods.....	56 ozs.	30.00

## METRIC INSIDE MICROMETER CALIPERS

For Measuring by Hundredths of a Millimetre

680M-A	Inside Micrometer Range, 40 to 200 mm with 6 measuring rods.....	8½ ozs.	\$12.00
680M-B	Inside Micrometer Range, 40 to 300 mm with 8 measuring rods.....	12 ozs.	15.00
681M-C	Inside Micrometer Range, 100 to 600 mm with 7 measuring rods.....	27 ozs.	18.00
681M-D	Inside Micrometer Range, 100 to 800 mm with 8 measuring rods.....	39 ozs.	20.00
681M-K	Inside Micrometer Range, 100 to 1000 mm with 10 measuring rods.....	48 ozs.	24.00

Regular Packing: One only in hinged wooden box with clasp.

NOTE—For general description of Inside Micrometer Calipers, see page 68.



## UNIVERSAL SURFACE GAGE

### Hardened Base

This SURFACE GAGE embodies all the latest improvements in construction and design.

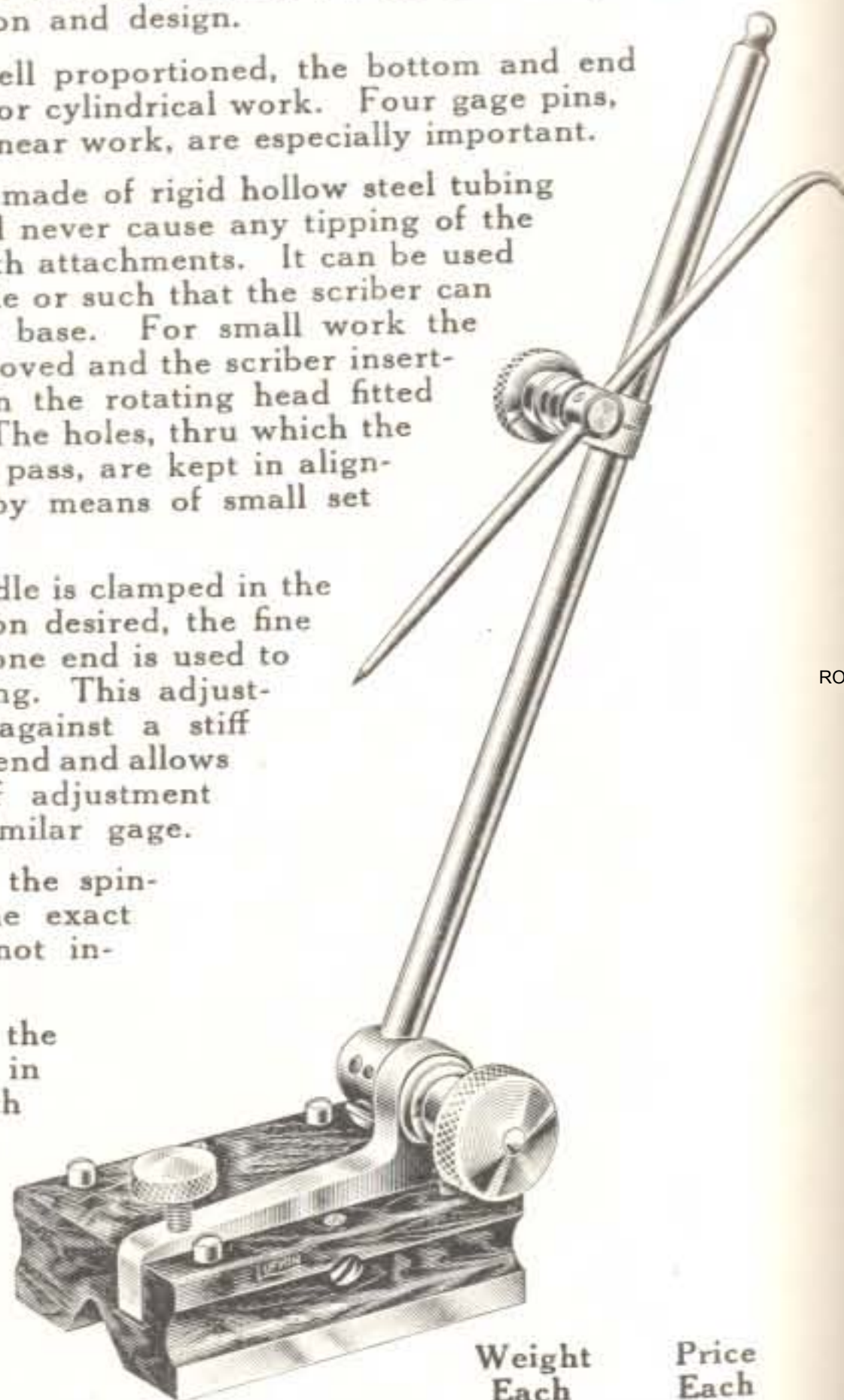
The base is well proportioned, the bottom and end being grooved out for cylindrical work. Four gage pins, used as guides on linear work, are especially important.

The spindle is made of rigid hollow steel tubing and being light, will never cause any tipping of the base, when used with attachments. It can be used upright, at any angle or such that the scriber can be used below the base. For small work the spindle may be removed and the scriber inserted thru the hole in the rotating head fitted for that purpose. The holes, thru which the spindle and scriber pass, are kept in alignment at all times by means of small set screws.

After the spindle is clamped in the approximate position desired, the fine adjustment nut at one end is used to get the exact setting. This adjustment nut works against a stiff spring at the other end and allows a larger range of adjustment than any other similar gage.

The length of the spindle as listed is the exact length and does not include the base.

The base of the gage is finished in mottled blue with all measuring faces ground and polished.



No.		Weight Each	Price Each
520A	3 1/4" base, 9" spindle	2 3/4 lbs.	\$5.50
520B	3 1/4" base, 9" and 12" spindles	3 lbs.	6.00
520C	3 1/4" base, 12" spindle	2 3/4 lbs.	5.75

Packing: One in a box.

## COMBINATION SQUARES — BEVEL PROTRACTORS COMBINATION SETS

(Pages 72 to 83 inclusive)

### General Description

These are tools with so many and such varied uses as to be almost indispensable to all mechanics in metal working, machinists, pattern makers, and others. They consist of a steel rule (or blade), on which slide the square head (or stock), the center head and the protractor head, singly or in sets.

"Junior" Squares are an entirely new line but meet a need that has long existed. Being small and light weight, they will appeal particularly to tool and die makers.

Our Squares have many improved features. Accuracy and provisions to insure continued accuracy in use are the first consideration in their design and manufacture.

The blades are machine divided, markings being most legible. Enamelled parts of the heads are in a handsome olive drab. All heads can be accurately, quickly and securely set at any point along the blade, or blade entirely removed for use as a separate rule. The square head has square and mitre faces, and on all sizes, except the 4-inch standard and the 6-inch "Junior" Square, is equipped with level glass and steel scriber. There is good clearance around all set nuts, and over the level glasses.

Lufkin Squares handle nicely, and present a well balanced, fine appearance. All parts are interchangeable.

Below are mentioned but a few of their many uses.

### COMBINATION SQUARES

These consist of blade with square head, or with square and center heads. They serve as both try and mitre squares, and, the blade being adjustable in length by moving the head, they take the place of a whole set of common squares. They are very handy for accurately transferring measurements and for laying out work. Square face of head set flush with end of blade converts the tool into a height gage for ordinary uses, and setting it at desired distance from end of blade makes it a marking gage; so adjusted it will also serve as a depth gage for measuring and squaring in mortises, etc. The scriber is always conveniently at hand. The stock can be used as a simple level, and, with the blade, for squaring and leveling surfaces one with another.

With the center head, centers of all cylindrical work can be determined. The arms of Lufkin center heads are ground to equal length and have ends uniformly machined, greatly increasing the range of the tool by giving accurate results on work of large as of small diameter.

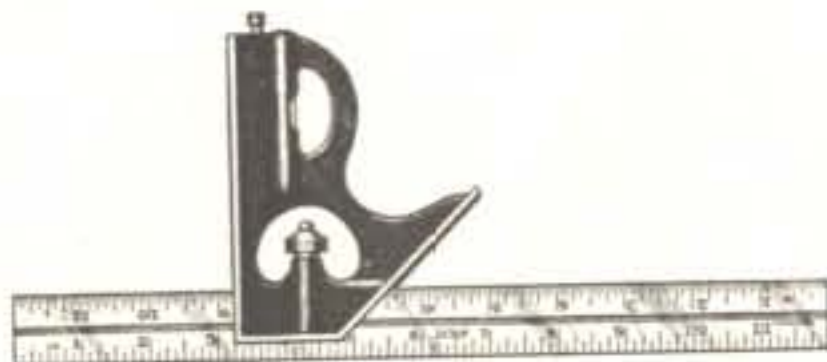
### BEVEL PROTRACTORS

These are the graduated blade fitted with protractor head, single or double type, otherwise known as plain and reversible, i. e., with shoulder extending from one side only or both sides of blade. Our protractor heads are so constructed that the double can be readily converted into the single type, the one tool thus serving all purposes of both styles. The revolving turret is accurately marked with degrees from 0 to 90 right and left. Having two thumb screws, it can be securely set at any angle. All our protractor heads are equipped with level glass.

### COMBINATION SETS

Graduated blade with square, center and protractor heads, a tool serving all the purposes of the Combination Square and Bevel Protractor. These Combination Sets have more applications in use than any other tool made for mechanics.





COMBINATION SQUARES  
Tempered Blade

Number

WITH No. 4 GRADUATION

25	Blade With Square Head.					
	Blade marked 8ths, 16ths, 32nds, 64ths inch.					
	Length . . . . .	4 inch	6 inch	9 inch	12 inch	18 inch 24 inch
	Wt. each . . . . .	4 oz.	6 oz.	10 oz.	17 oz.	22 oz. 26 oz.
	Price, each . . .	\$1.50	\$1.80	\$2.40	\$3.00	\$3.90 \$4.80

(Can be furnished in No. 7 graduation, 16ths, 32nds, 64ths, 100ths.)

GRADUATED METRIC ONLY

25M	Blade With Square Head.					
	Blade marked, three edges in millimetres, one edge in half-millimetres.					
	Length . . . . .	10 cm	15 cm	20 cm	30 cm	50 cm 60 cm
	Wt. each . . . . .	4 oz.	6 oz.	10 oz.	17 oz.	22 oz. 26 oz.
	Price, each . . .	\$1.50	\$1.80	\$2.40	\$3.00	\$3.90 \$4.80

GRADUATED METRIC AND ENGLISH

25ME	Blade With Square Head.					
	Blade marked, one side half-millimetres and 32nds inch; other side millimetres and 64ths inch.					
	Length . . . . .	10 cm	15 cm	20 cm	30 cm	50 cm 60 cm
	Wt. each . . . . .	4 oz.	6 oz.	10 oz.	17 oz.	22 oz. 26 oz.
	Price, each . . .	\$1.50	\$1.80	\$2.40	\$3.00	\$3.90 \$4.80

Packing: One in a box.

NOTE—For general description of Combination Squares, see page 71.



COMBINATION SQUARES WITH CENTER HEAD  
Tempered Blade

Number

WITH No. 4 GRADUATION

25C	Blade With Square and Center Heads.					
	Blade marked 8ths, 16ths, 32nds, 64ths inch.					
	Length . . . . .	4 inch	6 inch	9 inch	12 inch	18 inch 24 inch
	Wt. each . . . . .	5 oz.	8 oz.	13 oz.	21 oz.	26 oz. 30 oz.
	Price, each . . .	\$2.10	\$2.40	\$3.00	\$3.60	\$4.50 \$5.40

(Can be furnished in No. 7 graduation, 16ths, 32nds, 64ths, 100ths.)

GRADUATED METRIC ONLY

25C-M	Blade With Square and Center Heads.					
	Blade marked, three edges in millimetres, one edge in half-millimetres.					
	Length . . . . .	10 cm	15 cm	20 cm	30 cm	50 cm 60 cm
	Wt. each . . . . .	5 oz.	8 oz.	13 oz.	21 oz.	26 oz. 30 oz.
	Price, each . . .	\$2.10	\$2.40	\$3.00	\$3.60	\$4.50 \$5.40

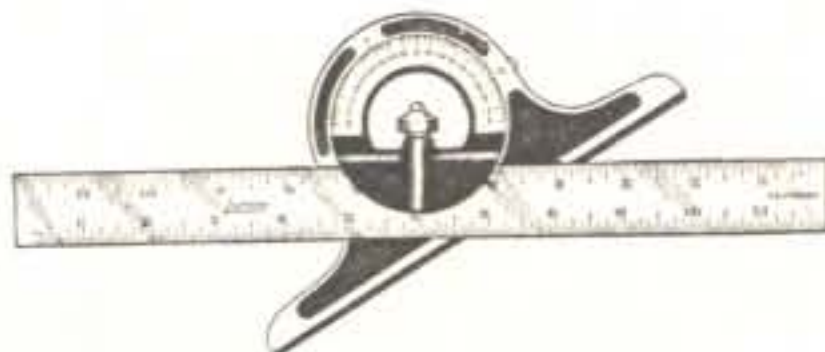
GRADUATED METRIC AND ENGLISH

25C-ME	Blade With Square and Center Heads.					
	Blade marked, one side half-millimetres and 32nds inch; other side millimetres and 64ths inch.					
	Length . . . . .	10 cm	15 cm	20 cm	30 cm	50 cm 60 cm
	Wt. each . . . . .	5 oz.	8 oz.	13 oz.	21 oz.	26 oz. 30 oz.
	Price, each . . .	\$2.10	\$2.40	\$3.00	\$3.60	\$4.50 \$5.40

Packing: One in a box.

NOTE—For general description of Combination Squares, see page 71.





## BEVEL PROTRACTORS

Tempered Blade  
All heads with level

Number

WITH No. 4 GRADUATION

5

### Blade With Protractor Head.

Blade marked 8ths, 16ths, 32nds, 64ths inch.

Length .....	9 inch	12 inch	18 inch	24 inch
Wt. each .....	15 oz.	18 oz.	23 oz.	27 oz.
Price, each .....	\$4.50	\$5.10	\$6.00	\$6.90

(Can be furnished in No. 7 graduation, 16ths, 32nds, 64ths, 100ths.)

GRADUATED METRIC ONLY

5M

### Blade With Protractor Head.

Blade marked, three edges in millimetres, one edge in half-millimetres.

Length .....	20 cm	30 cm	50 cm	60 cm
Wt. each .....	15 oz.	18 oz.	23 oz.	27 oz.
Price, each .....	\$4.50	\$5.10	\$6.00	\$6.90

GRADUATED METRIC AND ENGLISH

5ME

### Blade With Protractor Head.

Blade marked, one side half-millimetres and 32nds inch; other side millimetres and 64ths inch.

Length .....	20 cm	30 cm	50 cm	60 cm
Wt. each .....	15 oz.	18 oz.	23 oz.	27 oz.
Price, each .....	\$4.50	\$5.10	\$6.00	\$6.90

Packing: One in a box.

NOTE—For general description of Bevel Protractors, see page 71.



## BEVEL PROTRACTORS

With Reversible Head  
Tempered Blade  
All heads with level

Number

WITH No. 4 GRADUATION

6

### Blade With Reversible Protractor Head.

Blade marked 8ths, 16ths, 32nds, 64ths inch.

Length .....	9 inch	12 inch	18 inch	24 inch
Wt. each .....	18 oz.	21 oz.	26 oz.	30 oz.
Price, each .....	\$5.40	\$5.70	\$6.90	\$7.50

(Can be furnished in No. 7 graduation, 16ths, 32nds, 64ths, 100ths.)

GRADUATED METRIC ONLY

6M

### Blade With Reversible Protractor Head.

Blade marked, three edges in millimetres, one edge in half-millimetres.

Length .....	20 cm	30 cm	50 cm	60 cm
Wt. each .....	18 oz.	21 oz.	26 oz.	30 oz.
Price, each .....	\$5.40	\$5.70	\$6.90	\$7.50

GRADUATED METRIC AND ENGLISH

6ME

### Blade With Reversible Protractor Head.

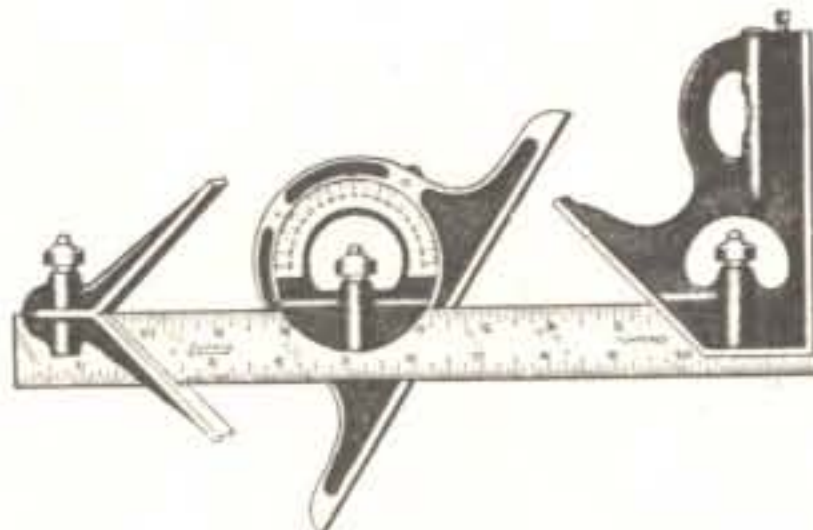
Blade marked, one side half-millimetres and 32nds inch; other side millimetres and 64ths inch.

Length .....	20 cm	30 cm	50 cm	60 cm
Wt. each .....	18 oz.	21 oz.	26 oz.	30 oz.
Price, each .....	\$5.40	\$5.70	\$6.90	\$7.50

Packing: One in a box.

NOTE—For general description of Bevel Protractors, see page 71.





COMBINATION SETS  
Tempered Blade

All square and protractor heads with level

Number

WITH No. 4 GRADUATION

525	Blade With Square, Center and Protractor Heads. Blade marked 8ths, 16ths, 32nds, 64ths inch.			
	Length . . . . . 9 inch	12 inch	18 inch	24 inch
	Wt. each . . . . . 24 oz.	30 oz.	35 oz.	39 oz.
	Price, each . . . . . \$6.00	\$6.60	\$7.50	\$8.40
	(Can be furnished in No. 7 graduation, 16ths, 32nds, 64ths, 100ths.)			

GRADUATED METRIC ONLY

525M	Blade With Square, Center and Protractor Heads. Blade marked, three edges in millimetres, one edge in half-millimetres.			
	Length . . . . . 20 cm	30 cm	50 cm	60 cm
	Wt. each . . . . . 24 oz.	30 oz.	35 oz.	39 oz.
	Price, each . . . . . \$6.00	\$6.60	\$7.50	\$8.40

GRADUATED METRIC AND ENGLISH

525ME	Blade With Square, Center and Protractor Heads. Blade marked, one side half-millimetres and 32nds inch; other side millimetres and 64ths inch.			
	Length . . . . . 20 cm	30 cm	50 cm	60 cm
	Wt. each . . . . . 24 oz.	30 oz.	35 oz.	39 oz.
	Price, each . . . . . \$6.00	\$6.60	\$7.50	\$8.40

Packing: One in a box.

NOTE—For general description of Combination Sets, see page 71.



COMBINATION SETS  
With Reversible Protractor Head  
Tempered Blade

All square and protractor heads with level

Number

WITH No. 4 GRADUATION

625	Blade With Square and Center Heads, and Reversible Protractor Head. Blade marked 8ths, 16ths, 32nds, 64ths inch.			
	Length . . . . . 9 inch	12 inch	18 inch	24 inch
	Wt. each . . . . . 27 oz.	34 oz.	39 oz.	43 oz.
	Price, each . . . . . \$7.20	\$7.80	\$8.70	\$9.60
	(Can be furnished in No. 7 graduation, 16ths, 32nds, 64ths, 100ths.)			

GRADUATED METRIC ONLY

625M	Blade With Square and Center Heads, and Reversible Protractor Head. Blade marked, three edges in millimetres, one edge in half-millimetres.			
	Length . . . . . 20 cm	30 cm	50 cm	60 cm
	Wt. each . . . . . 27 oz.	34 oz.	39 oz.	43 oz.
	Price, each . . . . . \$7.20	\$7.80	\$8.70	\$9.60

GRADUATED METRIC AND ENGLISH

625ME	Blade With Square and Center Heads, and Reversible Protractor Head. Blade marked, one side half-millimetres and 32nds inch; other side millimetres and 64ths inch.			
	Length . . . . . 20 cm	30 cm	50 cm	60 cm
	Wt. each . . . . . 27 oz.	34 oz.	39 oz.	43 oz.
	Price, each . . . . . \$7.20	\$7.80	\$8.70	\$9.60

Packing: One in a box.

NOTE—For general description of Combination Sets, see page 71

ROSE TOOLS, INC.





## DROP FORGED COMBINATION SQUARES

Tempered Blade

The square heads are drop forged and hardened. These are our highest grade Combination Squares.

Number

WITH No. 4 GRADUATION

35

Blade With Square Head.

Blade marked 8ths, 16ths, 32nds, 64ths inch.

Length .....	6 inch	9 inch	12 inch	18 inch	24 inch
Wt. each.....	7 oz.	11 oz.	19 oz.	24 oz.	28 oz.
Price, each.....	\$3.00	\$3.60	\$3.90	\$5.10	\$5.70

(Can be furnished in No. 7 graduation, 16ths, 32nds, 64ths, 100ths.)

GRADUATED METRIC ONLY

35M

Blade With Square Head.

Blade marked three edges in millimetres, one edge in half-millimetres.

Length .....	15 cm	20 cm	30 cm	50 cm	60 cm
Wt. each.....	7 oz.	11 oz.	19 oz.	24 oz.	28 oz.
Price, each.....	\$3.00	\$3.60	\$3.90	\$5.10	\$5.70

GRADUATED METRIC AND ENGLISH

35ME

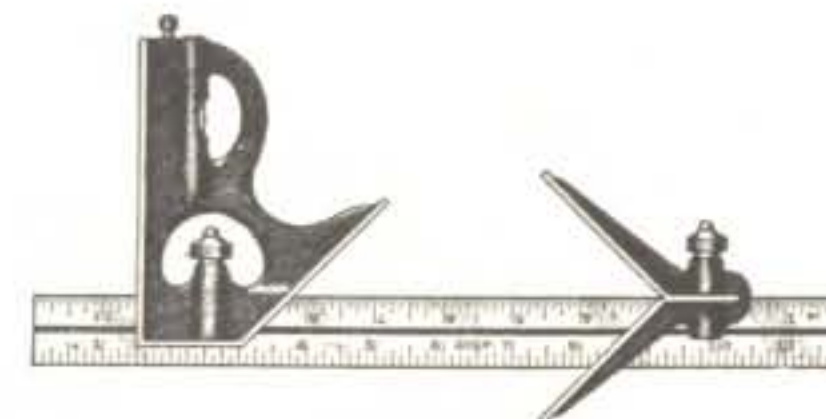
Blade With Square Head.

Blade marked, one side half-millimetres and 32nds inch; other side millimetres and 64ths inch.

Length .....	15 cm	20 cm	30 cm	50 cm	60 cm
Wt. each.....	7 oz.	11 oz.	19 oz.	24 oz.	28 oz.
Price, each.....	\$3.00	\$3.60	\$3.90	\$5.10	\$5.70

Packing: One in a box.

NOTE—For general description of Combination Squares, see page 71.



## DROP FORGED COMBINATION SQUARES, WITH CENTER HEAD

Tempered Blade

The square and center heads are drop forged and hardened. These are our highest grade Combination Squares.

Number

WITH No. 4 GRADUATION

35C

Blade With Square and Center Heads.

Blade marked 8ths, 16ths, 32nds, 64ths inch.

Length .....	6 inch	9 inch	12 inch	18 inch	24 inch
Wt. each.....	9 oz.	14 oz.	23 oz.	28 oz.	32 oz.
Price, each.....	\$3.90	\$4.50	\$4.80	\$6.00	\$6.60

(Can be furnished in No. 7 graduation, 16ths, 32nds, 64ths, 100ths.)

GRADUATED METRIC ONLY

35C-M

Blade With Square and Center Heads.

Blade marked three edges in millimetres, one edge in half-millimetres.

Length .....	15 cm	20 cm	30 cm	50 cm	60 cm
Wt. each.....	9 oz.	14 oz.	23 oz.	28 oz.	32 oz.
Price, each.....	\$3.90	\$4.50	\$4.80	\$6.00	\$6.60

GRADUATED METRIC AND ENGLISH

35C-ME

Blade With Square and Center Heads.

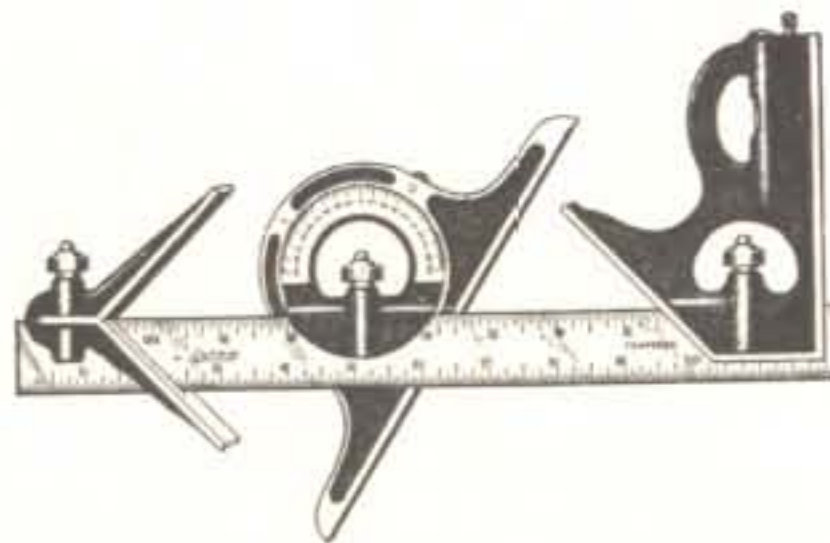
Blade marked, one side half-millimetres and 32nds inch; other side millimetres and 64ths inch.

Length .....	15 cm	20 cm	30 cm	50 cm	60 cm
Wt. each.....	9 oz.	14 oz.	23 oz.	28 oz.	32 oz.
Price, each.....	\$3.90	\$4.50	\$4.80	\$6.00	\$6.60

Packing: One in a box.

NOTE—For general description of Combination Squares, see page 71.





## DROP FORGED COMBINATION SETS

### Tempered Blade

The square and center heads are drop forged and hardened. Both the square and protractor head are fitted with level. These are our highest grade Combination Sets.

Number

#### WITH No. 4 GRADUATION

<b>535</b>	<b>Blade With Square, Center and Protractor Heads.</b>			
	Blade marked 8ths, 16ths, 32nds, 64ths inch.			
	Length . . . . . 9 inch	12 inch	18 inch	24 inch
	Wt. each . . . . . 26 oz.	32 oz.	37 oz.	41 oz.
	Price, each . . . . . \$7.50	\$7.80	\$9.00	\$9.60
	(Can be furnished in No. 7 graduation, 16ths, 32nds, 64ths, 100ths.)			

#### GRADUATED METRIC ONLY

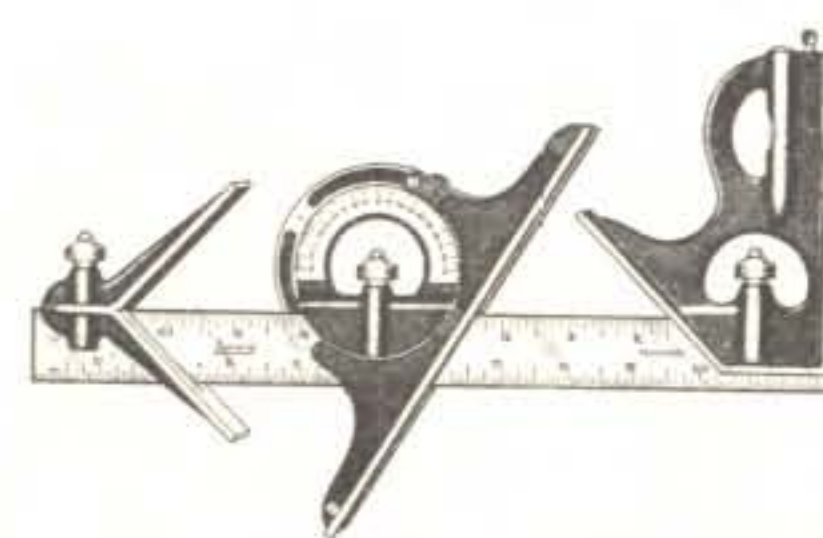
<b>535M</b>	<b>Blade With Square, Center and Protractor Heads.</b>			
	Blade marked, three edges in millimetres, one edge in half-millimetres.			
	Length . . . . . 20 cm	30 cm	50 cm	60 cm
	Wt. each . . . . . 26 oz.	32 oz.	37 oz.	41 oz.
	Price, each . . . . . \$7.50	\$7.80	\$9.00	\$9.60

#### GRADUATED METRIC AND ENGLISH

<b>535ME</b>	<b>Blade With Square, Center and Protractor Heads.</b>			
	Blade marked, one side half-millimetres and 32nds inch; other side millimetres and 64ths inch.			
	Length . . . . . 20 cm	30 cm	50 cm	60 cm
	Wt. each . . . . . 26 oz.	32 oz.	37 oz.	41 oz.
	Price, each . . . . . \$7.50	\$7.80	\$9.00	\$9.60

Packing: One in a box.

NOTE—For general description of Combination Sets, see page 71.



## DROP FORGED COMBINATION SETS

### With Reversible Protractor Head

### Tempered Blade

These are our highest grade Combination Sets. The square and center heads are drop forged and hardened. Both the square and protractor head are fitted with level.

Number

#### WITH No. 4 GRADUATION

<b>635</b>	<b>Blade With Square and Center Heads, and Reversible Protractor Head.</b>			
	Blade marked 8ths, 16ths, 32nds, 64ths inch.			
	Length . . . . . 9 inch	12 inch	18 inch	24 inch
	Wt. each . . . . . 29 oz.	36 oz.	41 oz.	45 oz.
	Price, each . . . . . \$8.70	\$9.00	\$10.20	\$10.80
	(Can be furnished in No. 7 graduation, 16ths, 32nds, 64ths, 100ths.)			

#### GRADUATED METRIC ONLY

<b>635M</b>	<b>Blade With Square and Center Heads, and Reversible Protractor Head.</b>			
	Blade marked three edges in millimetres, one edge in half-millimetres.			
	Length . . . . . 20 cm	30 cm	50 cm	60 cm
	Wt. each . . . . . 29 oz.	36 oz.	41 oz.	45 oz.
	Price, each . . . . . \$8.70	\$9.00	\$10.20	\$10.80

#### GRADUATED METRIC AND ENGLISH

<b>635ME</b>	<b>Blade with Square and Center Heads, and Reversible Protractor Head.</b>			
	Blade marked, one side half-millimetres and 32nds inch; other side millimetres and 64ths inch.			
	Length . . . . . 20 cm	30 cm	50 cm	60 cm
	Wt. each . . . . . 29 oz.	36 oz.	41 oz.	45 oz.
	Price, each . . . . . \$8.70	\$9.00	\$10.20	\$10.80

Packing: One in a box.

NOTE—For general description of Combination Sets, see page 71.





## DROP FORGED COMBINATION SQUARES

Tempered Blade

With Readable Graduations

These Drop Forged Squares are same general pattern as our No. 35 line, but with smaller Square and Center Heads and narrower blades than the corresponding lengths in that line. Because of their size and weight they will appeal particularly to tool and die makers, pattern makers and others. Blades have No. 4 graduation, 8ths, 16ths, 32nds and 64ths inch. A distinctive feature is Readable Graduations, 64ths numbered every 8th division, which greatly facilitates reading.

Made in 6-inch size only.

Number

WITH No. 4 GRADUATION

### 135 Blade With Square Head.

Blade marked 8ths, 16ths, 32nds, 64ths inch.  
With readable graduations.

Length	6 inch
Wt. each	4 ozs.
Price, each	\$3.50

## DROP FORGED COMBINATION SQUARES, WITH CENTER HEAD

Tempered Blade

With Readable Graduations.

### 135C Blade With Square and Center Heads.

Blade marked 8ths, 16ths, 32nds, 64ths inch.  
With readable graduations.

Length	6 inch
Wt. each	6 ozs.
Price, each	\$4.40

Packing: One in a box.

NOTE—For general description of Combination Squares, see page 71.

## SEPARATE PARTS OF COMBINATION SQUARES—BEVEL PROTRACTORS COMBINATION SETS

In Ordering Any Head Always Specify Length Blade On Which It  
Is To Be Used.

For Nos. 25, 25C, 5, 6, 525, 625.

Length		Blade	Stock	Center Head
4 inch (10 cm)	Each	\$0.80	\$0.90	\$0.75
6 inch (15 cm)	"	1.20	.90	.75
9 inch (20 cm)	"	1.50	1.20	.75
12 inch (30 cm)	"	1.90	1.50	.75
18 inch (50 cm)	"	3.00	1.50	.75
24 inch (60 cm)	"	3.90	1.50	.75

Scribers ..... Each, \$0.15

For Nos. 35, 35C, 535, 635, 135, 135C.

## STOCK AND CENTER HEADS DROP FORGED AND HARDENED

Length		Blade	Stock	Center Head
4 inch (10 cm)	Each	\$0.80	\$1.90	\$1.50
6 inch (15 cm)	"	1.20	2.00	1.50
6 inch (15 cm)	"			
Blade with readable				
Graduations	Each	1.70		
9 inch (20 cm)	"	1.50	2.20	1.90
12 inch (30 cm)	"	1.90	2.40	1.90
18 inch (50 cm)	"	3.00	2.40	1.90
24 inch (60 cm)	"	3.90	2.40	1.90

Scribers ..... Each, \$0.15

Bolt, Nut and Spring ..... Each, \$0.40

## PROTRACTOR HEADS ONLY

For Nos. 5, 6, 525, 625, 535, 635.

### Number 05 Protractor Head (not reversible)

For 9-inch blade ..... Price, each, \$3.00  
For 12, 18 or 24-inch blades ..... Price, each, 3.00

### Number 06 Reversible Protractor Head.

For 9-inch blade ..... Price, each, \$4.20  
For 12, 18 or 24-inch blades ..... Price, each, 4.20

NOTE—Prices on this page apply also to parts of M and ME Combination Squares, Bevel Protractors and Combination Sets.





## "UNIVERSAL" TRY AND MITRE SQUARES FOR CARPENTERS

(And All Woodworkers)

WITH LEVEL — WITHOUT LEVEL

These squares are designed especially for the use of carpenters and all other woodworkers. They combine in one tool the try and mitre squares with blade adjustable in length, the level and plumb, marking gage, height and depth gage, and separate rule. While popular priced, they are accurate, durable, and well designed.

They consist of a graduated steel blade, grooved on one side and fitted with metal head, which, by means of a convenient thumb nut, can be securely clamped at any point along the blade, and also is removable from it.

Blade, or rule, is accurately and clearly marked on both edges of both sides. The head has square and mitre faces and is furnished with and without level glass.

Marked both sides, one edge 8ths, other edge 16ths inches.

With Level

No. 65L	9 inch	Each, \$1.35
No. 65L	12 inch	Each, 1.50

Without Level

No. 65	9 inch	Each, \$1.10
No. 65	12 inch	Each, 1.25

Marked Metric Only.  
(Millimetres both edges of both sides)

With Level

No. 65L-M	20 cm	Each, \$1.35
No. 65L-M	30 cm	Each, 1.50

Without Level

No. 65M	20 cm	Each, \$1.10
No. 65M	30 cm	Each, 1.25

Marked Metric and English.

One side, one edge millimetres, other edge inches to 16ths.  
Other side, one edge millimetres, other edge inches to 8ths.

With Level

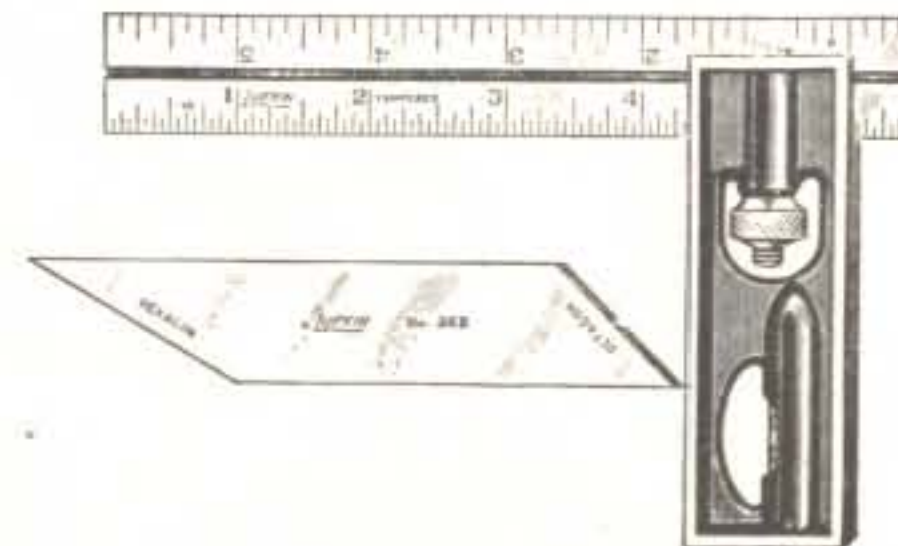
No. 65L-ME	20 cm	Each, \$1.35
No. 65L-ME	30 cm	Each, 1.50

Without Level

No. 65ME	20 cm	Each, \$1.10
No. 65ME	30 cm	Each, 1.25

Weight each: 9 inch (20 cm), 12 ozs.; 12 inch (30 cm), 18 ozs.

Packing: One in a box.



## DOUBLE SQUARES Tempered Blades

These are very convenient for pattern makers, machinists and tool makers in certain classes of work. Unlike simple try squares, the blades are adjustable in length by moving the head. Both faces of the head are square. In the 6-inch and 9-inch (15 and 20 cm) Squares, the head is equipped with level.

The bevel blade, illustrated above, gives hexagon and octagon angles, and is so marked, an improved feature. The drill grinding blade converts the tool into a most practical Drill Grinding Gage.

WITH No. 4 GRADUATION

Blade marked 8ths, 16ths, 32nds, 64ths inch.

ROSE TOOLS, INC.

With Graduated Blade  
Only.

With Graduated and  
Bevel Blades

With Graduated, Bevel  
and Drill Grinding  
Blades.

Number	26A	Length	Price, Each
		4-inch	\$1.50
		6-inch	2.40
		9-inch	3.60

Number	26B	Length	Price, Each
		4-inch	\$2.00
		6-inch	3.00
		9-inch	4.20

Number	26C	Length	Price, Each
		6-inch	\$4.25
		9-inch	5.45

GRADUATED METRIC ONLY

Blade marked three edges in millimetres, one edge in half-millimetres

Number	26M-A	Length	Price, Each
		10 cm	\$1.50
		15 cm	2.40
		20 cm	3.60

Number	26M-B	Length	Price, Each
		10 cm	\$2.00
		15 cm	3.00
		20 cm	4.20

Number	26M-C	Length	Price, Each
		15 cm	\$4.25
		20 cm	5.45

GRADUATED METRIC AND ENGLISH

Blade marked one side half-millimetres and 32nds inch, other side millimetres and 64ths inch.

Number	26ME-A	Length	Price, Each
		10 cm	\$1.50
		15 cm	2.40
		20 cm	3.60

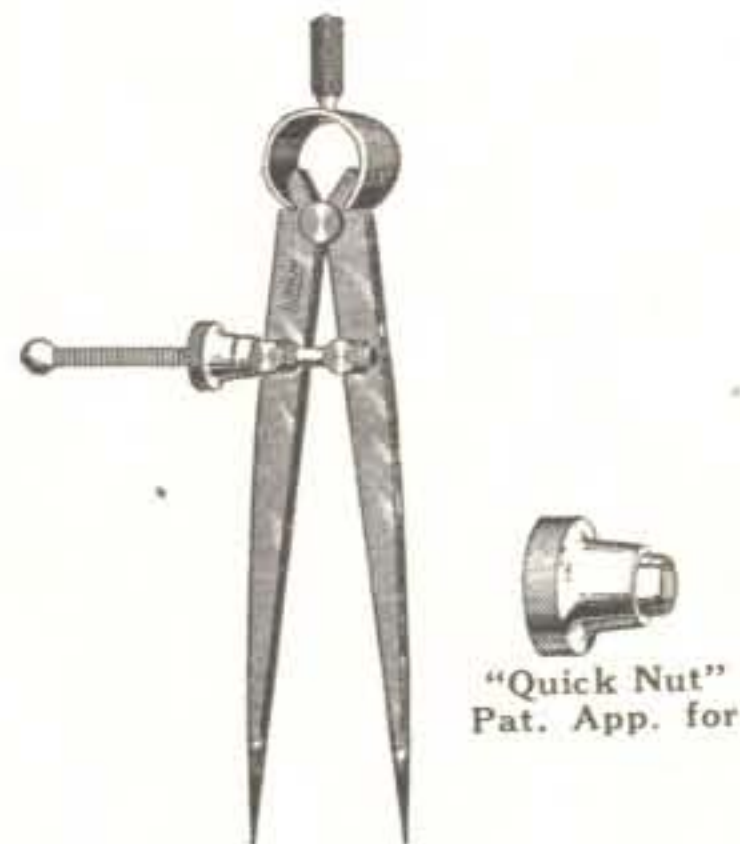
Number	26ME-B	Length	Price, Each
		10 cm	\$2.00
		15 cm	3.00
		20 cm	4.20

Number	26ME-C	Length	Price, Each
		15 cm	\$4.25
		20 cm	5.45

Weight, each, with 2 blades; 4-inch...2 ozs. 6-inch...7 ozs. 9-inch...8 ozs.

Packing: One in a box.





**"BANNER" SPRING DIVIDERS**  
With Solid Nut.      With "Quick Nut"

This is the type of Spring Divider most widely used. In these Dividers each part is made of steel best suited to the purpose. The points are properly hardened and the heavy bow spring insures reliability. These tools are correct in shape and size and have a fine uniform finish.

Of the two kinds listed below the Divider with solid nut is most popular.

**WITH SOLID NUT**

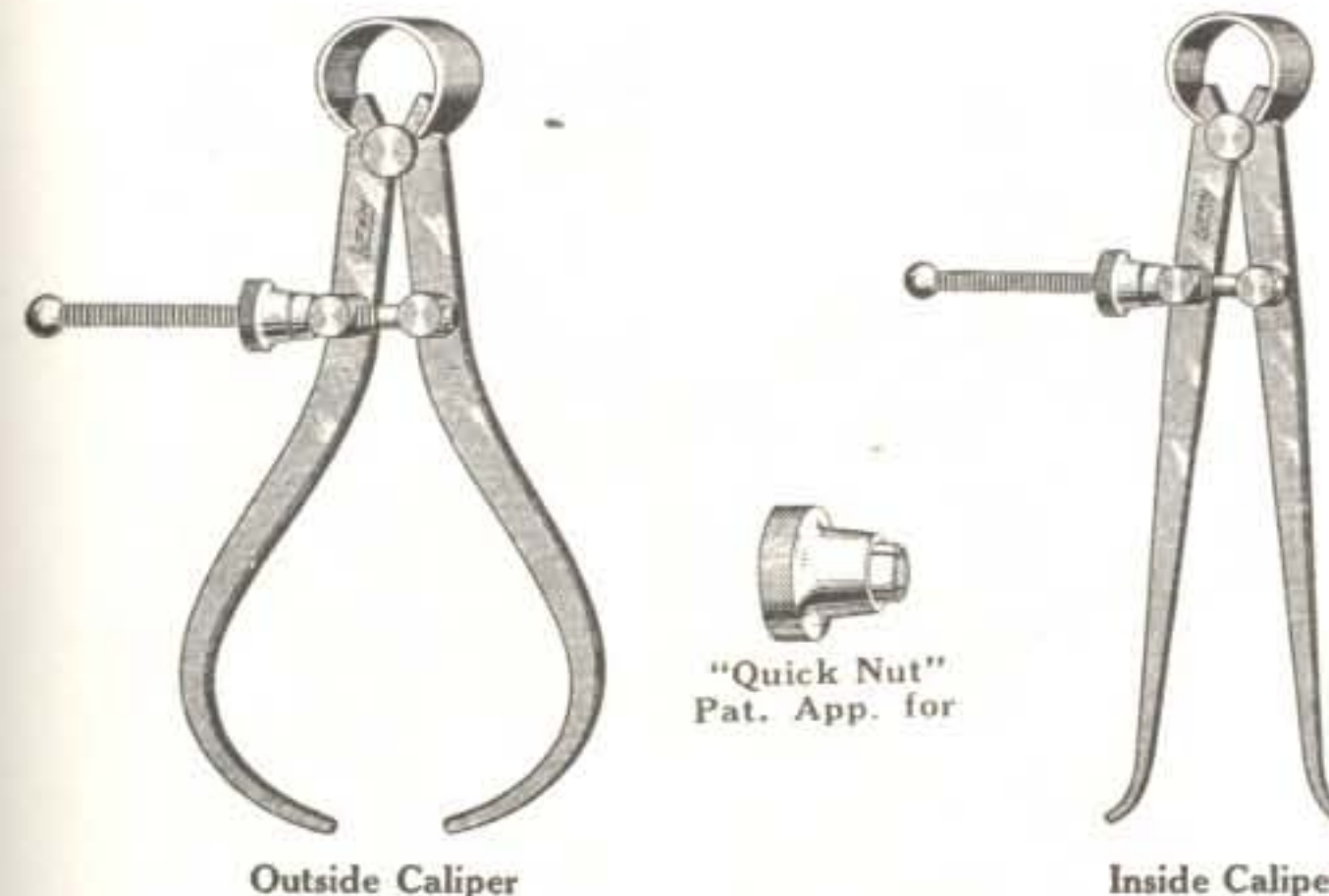
No. 40					
Length . . . . .	2 1/2 inch	3 inch	4 inch	5 inch	6 inch
Wt. per dozen . . . .	1/2 lb.	3/4 lb.	1 1/4 lb.	1 1/2 lb.	2 1/4 lb.
Price, each . . . . .	\$0.80	\$0.85	\$0.90	\$1.00	\$1.05
					8 inch
					4 lb.
					\$1.35

**WITH "QUICK NUT"**

The Quick Nut is designed for making quick adjustments. On release of pressure this nut slides freely over the threads of the screw, but on slightest pressure grips the screw firmly.

No. 50					
Length . . . . .	2 1/2 inch	3 inch	4 inch	5 inch	6 inch
Wt. per dozen . . . .	1/2 lb.	3/4 lb.	1 1/4 lb.	1 1/2 lb.	2 1/4 lb.
Price, each . . . . .	\$1.00	\$1.05	\$1.10	\$1.15	\$1.20
					8 inch
					4 lb.
					\$1.50

Packing: Three in a box.



**"BANNER" OUTSIDE AND INSIDE SPRING CALIPERS**  
With Solid Nut.      With "Quick Nut"

These Spring Calipers are the type most widely used. All parts are made of steel best suited to the purpose, and those subject to wear are properly hardened. Stiff flat bow spring insures reliability. These tools are correct in shape and size and have a fine, uniform finish.

The inside type can be used as a Transfer Caliper, as the legs can be sprung in and withdrawn after calipering, and when released will spring back and show the size calipered.

The Quick Nut is designed for making quick adjustments. On release of pressure this nut slides freely over the threads of the screw, but on slightest pressure it grips the screw firmly.

Of the two kinds listed below, solid nut and Quick nut, the former is the most popular.

**OUTSIDE CALIPERS WITH SOLID NUT**

No. 41					
Length . . . . .	2 1/2 inch	3 inch	4 inch	5 inch	6 inch
Wt. per dozen . . . .	2/3 lb.	3/4 lb.	1 1/2 lb.	1 3/4 lb.	2 1/2 lb.
Price, each . . . . .	\$0.80	\$0.85	\$0.90	\$1.00	\$1.05
					8 inch
					4 3/4 lb.
					\$1.20

**OUTSIDE CALIPERS WITH "QUICK NUT"**

No. 51					
Length . . . . .	2 1/2 inch	3 inch	4 inch	5 inch	6 inch
Wt. per dozen . . . .	2/3 lb.	3/4 lb.	1 1/2 lb.	1 3/4 lb.	2 1/2 lb.
Price, each . . . . .	\$1.00	\$1.05	\$1.10	\$1.15	\$1.20
					8 inch
					4 3/4 lb.
					\$1.40

**INSIDE CALIPERS WITH SOLID NUT**

No. 42					
Length . . . . .	2 1/2 inch	3 inch	4 inch	5 inch	6 inch
Wt. per dozen . . . .	1/2 lb.	3/4 lb.	1 1/4 lb.	1 1/2 lb.	2 1/4 lb.
Price, each . . . . .	\$0.80	\$0.85	\$0.90	\$1.00	\$1.05
					8 inch
					4 lb.
					\$1.20

**INSIDE CALIPERS WITH "QUICK NUT"**

No. 52					
Length . . . . .	2 1/2 inch	3 inch	4 inch	5 inch	6 inch
Wt. per dozen . . . .	1/2 lb.	3/4 lb.	1 1/4 lb.	1 1/2 lb.	2 1/4 lb.
Price, each . . . . .	\$1.00	\$1.05	\$1.10	\$1.15	\$1.20
					8 inch
					4 lb.
					\$1.40

Packing: Three in a box.





Outside Caliper  
No. 11



Inside Caliper  
No. 12

### FIRM JOINT OUTSIDE AND INSIDE CALIPERS

The distinctive feature of these Firm Joint Calipers is the adjustable joint. Lock screw construction enables one to set and hold the legs to any desired tension or friction.

These tools are of sturdy construction throughout, smooth working, nicely proportioned, and have a fine, uniform finish.

All sizes below refer to lengths of legs. Actual capacity of the Calipers is about one-quarter greater than this length.

#### FIRM JOINT OUTSIDE CALIPERS No. 11

Sizes	Price, Each
3 inch .....	\$0.50
4 " .....	.60
5 " .....	.70
6 " .....	.80
8 " .....	1.00
10 " .....	1.10
12 " .....	1.20
14 " .....	1.80
16 " .....	2.10
18 " .....	2.55
20 " .....	3.00
24 " .....	3.60
*30 " .....	6.00
*36 " .....	7.20

\*These two sizes made in the outside pattern only.

#### FIRM JOINT INSIDE CALIPERS No. 12



Outside Caliper  
No. 21



Inside Caliper  
No. 22

### SCREW ADJUSTING FIRM JOINT CALIPERS

ROSE TOOLS, INC.

The Screw Adjusting Firm Joint Caliper is used for quickly taking fine measurements. The joint can be set to any desired tension; the legs are stiff and well proportioned, and the tool is finely finished throughout.

All sizes below refer to length of legs. Actual capacity is about one-quarter greater than this length.

#### No. 21

Sizes	Price, Each
4 inch.....	\$1.10
6 inch.....	1.20
8 inch.....	1.50
10 inch.....	1.80
12 inch.....	2.10
14 inch.....	2.40
16 inch.....	2.70
18 inch.....	3.00
20 inch.....	3.30
24 inch.....	4.20

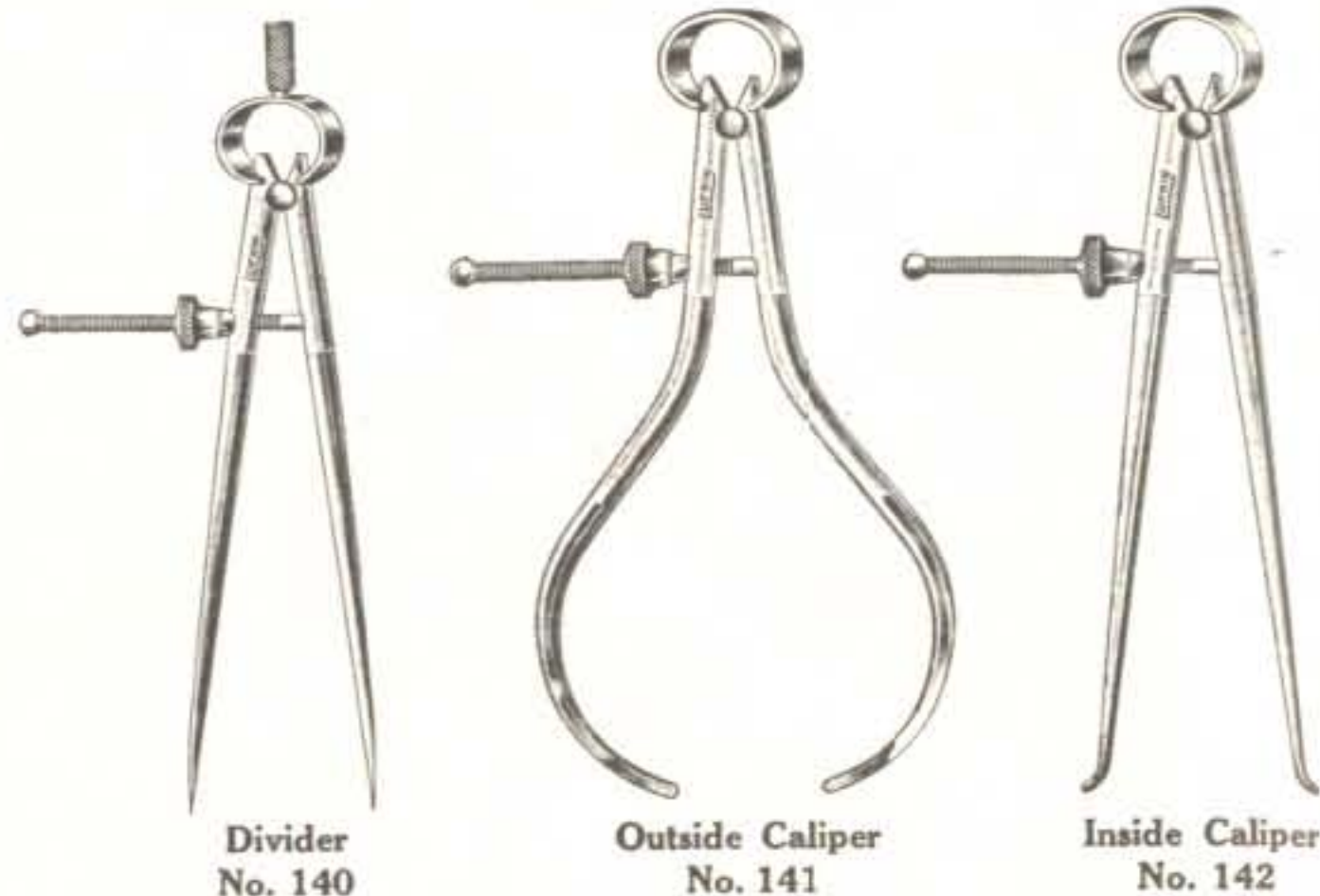
#### No. 22

Packing: 4 to 12 inch—3 per box.

14 to 20 inch—2 per box.

24 inch—wrapped one in a package.





**TOOLMAKERS SPRING CALIPERS AND DIVIDERS**  
Round Leg Pattern.

This is the type of Caliper and Divider preferred by fine mechanics. The legs are of round stock, nicely tapered by swaging. The adjustment screw is mounted central with the legs, avoiding all torsion on legs and spring. These features add to the stability of the tool. The legs are finely formed. Stiff flat bow spring insures reliability. Parts most subject to wear are hardened.

These tools are especially well proportioned and finished, so are most attractive.

Round Leg Calipers and Dividers are furnished only with solid nut.

**TOOLMAKERS DIVIDERS**  
No. 140

Length .....	2 inch	3 inch	4 inch	5 inch	6 inch
Price, each.....	\$1.20	\$1.50	\$1.80	\$1.80	\$2.10

**TOOLMAKERS OUTSIDE CALIPERS**  
No. 141

Length .....	2 inch	3 inch	4 inch	5 inch	6 inch
Price, each.....	\$1.20	\$1.50	\$1.80	\$1.80	\$2.10

**TOOLMAKERS INSIDE CALIPERS**  
No. 142

Length .....	2 inch	3 inch	4 inch	5 inch	6 inch
Price, each.....	\$1.20	\$1.50	\$1.80	\$1.80	\$2.10

Packing: Three in a box.



**FIRM JOINT HERMAPHRODITE CALIPERS**

This type of caliper is used principally in laying out work, locating centers, etc.

A distinctive feature of these Calipers is the adjustable joint. Lock screw construction enables one to set and hold the legs to any desired tension or friction.

These tools are of sturdy construction throughout, smooth working, nicely proportioned, and have a fine, uniform finish.

The No. A17 is furnished with adjustable point.

**FIRM JOINT HERMAPHRODITE CALIPERS**

No. 17

Length .....	4 inch	6 inch	8 inch
Wt. per doz.....	1 1/4 lb	2 1/2 lb	3 1/4 lb
Price, each .....	\$0.60	\$0.80	\$1.00

**FIRM JOINT HERMAPHRODITE CALIPERS**

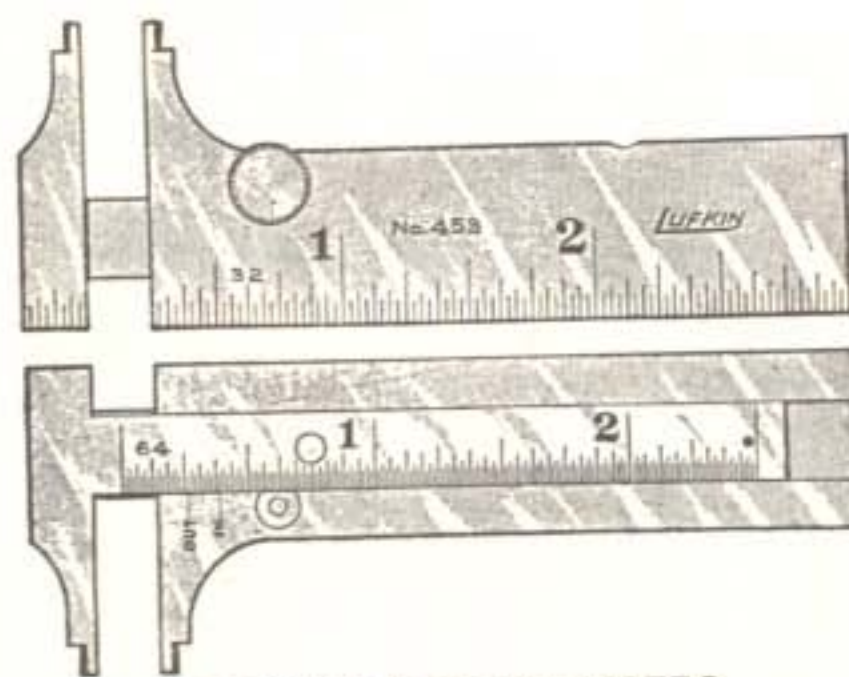
With Adjustable Point

No. A17

Length .....	4 inch	6 inch	8 inch
Wt. per doz.....	1 1/4 lb	2 1/2 lb	3 1/4 lb
Price, each .....	\$0.80	\$1.00	\$1.20

Packing: Three in a box.





POCKET SLIDE CALIPERS

Suitable for outside and inside calipering. Measurement, both outside and inside, being read to a line rather than to face of jaw, is an aid to accuracy. To simplify reading the outside and inside reading lines are marked "out" and "in".

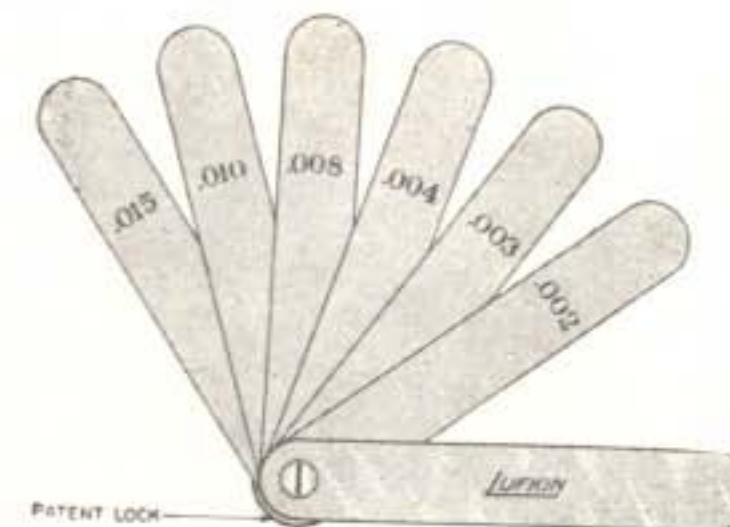
These calipers are equipped with lock to securely set them at any point. This locking device is readily set or released by thumb of the same hand in which tool is held.

The slide has stop, so that it cannot be entirely withdrawn or lost out.

Number		Price Each
SLIDE MARKED 64THS; STOCK MARKED 32NDS INCH		
453	3-inch Depth jaws 1 1/16 inch; width nibs, closed, 1/8 inch.	\$4.00
455	5-inch Depth jaws 1 7/16 inch; width nibs, closed, 1/4 inch.	5.00
456	6-inch Depth jaws 1 7/16 inch; width nibs, closed, 1/4 inch.	6.50
MARKED METRIC ONLY		
453M	7-centimetre Slide graduated half-millimetres; stock graduated millimetres. Depth jaws 17 mm; width nibs, closed, 3 mm.	\$4.00
455M	13-centimetre Slide graduated millimetres one edge, half-millimetres other edge; stock graduated millimetres. Depth jaws 36 mm; width nibs, closed, 6 mm.	5.00
456M	15-centimetre Slide graduated millimetres one edge, half-millimetres other edge; stock graduated millimetres. Depth jaws 36 mm; width nibs, closed, 6 mm.	6.50
MARKED METRIC AND ENGLISH		
Slide marked half-millimetres one edge, 64ths inch other edge; stock marked 32nds inch.		
453EM	7-centimetre (3 inch) Depth jaws 17 mm (1 1/16 inch); width nibs, closed, 3 mm (1/8 inch).	\$4.00
455EM	13-centimetre (5 inch) Depth jaws 36 mm (1 7/16 inch); width nibs, closed, 6 mm (1/4 inch).	5.00
456EM	15-centimetre (6 inch) Depth jaws 36 mm (1 7/16 inch); width nibs, closed, 6 mm (1/4 inch).	6.50

Packing: One in a box.

Weights, each, 3 inch.. 1 oz. 5 inch.. 3 ozs. 6 inch.. 5 ozs.



THICKNESS GAGES  
With Patent Lock.

Pat. Jan. 27, 1925

The Thickness Gages listed on this page are designed to meet the demand of the automobile world for a low priced, yet accurate tool. Among other use they are employed in determining the clearance of tappets, fitting pistons, and adjusting spark gap.

A distinctive feature of these, like all other Lufkin Thickness Gages, is the patent lock. By means of a lock nut operated by the same hand in which the tool is held, any one or more leaves can be locked in any position. This permits the use of the tool in its full length, 5 1/2 inches, and guards against error. Convenient in all gaging, it especially appeals to motor mechanics, whose work is often difficult of access or requires that the tool be held at an angle, as on V type motors. Two or more of the leaves being separated and locked makes the tool a handy limit gage.

While these Thickness Gages are without case, the leaves, when closed and locked with the name plate and the .015 leaf on the outsides, are well protected. Removal of the screw stud makes the inserting of a new leaf very simple.

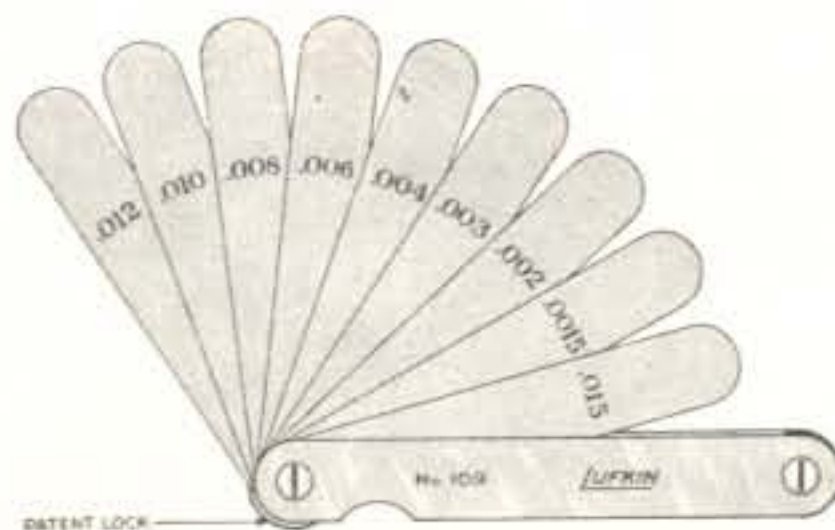
All leaves are tempered steel ground to exact thickness, individually tested, and each one clearly marked with its thickness. They also are of the most popular length.

Number		Price, Each
06	6-Leaf Thickness Gage. Leaves 1/2 inch wide, 3 inches long. Thicknesses: .002, .003, .004, .008, .010, .015 inch.	\$0.90
07	7-Leaf Thickness Gage. Leaves 1/2 inch wide, 3 inches long. Thicknesses: .0015, .002, .003, .004, .008, .010, .015 inch.	1.10
09	9-Leaf Thickness Gage. Leaves 1/2 inch wide, 3 inches long. Thicknesses: .0015, .002, .003, .004, .006, .008, .010, .012, .015 inch. This is a very good range of sizes.	1.35

(For gage same as this but with case, see No. 109, page 93A)

Weight each, 1/2 oz. Packing: 6 in a box.





### THICKNESS GAGES

With Patent Lock.

Pat. Jan. 27, 1925

Widely used not only in the automobile field, but by all tool makers and machinists in jig and fixture work, in the making of gages, etc.

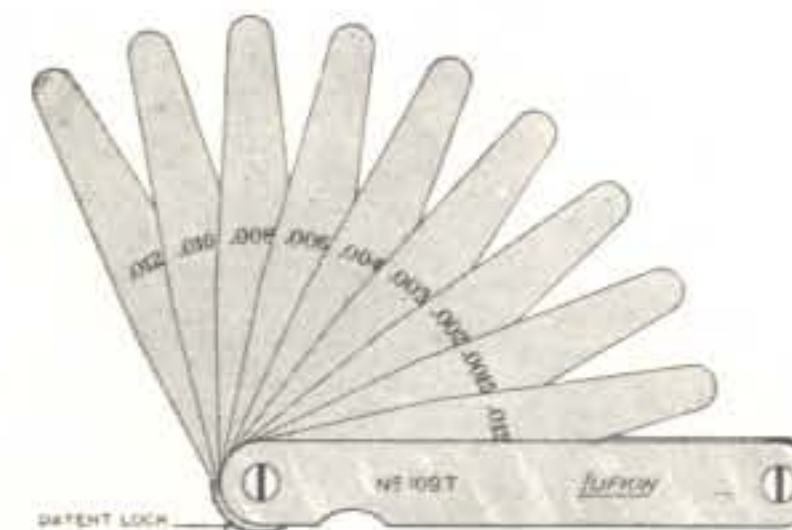
All gages on this page have regular case into which the leaves fold.

All have patent lock feature, i. e., by means of a lock nut any one or more leaves can be locked in any position. This is handy in all work. It permits the use of the gage in its full length and reduces the chance of error. With it also the leaves can be securely held in the case when not in use.

The leaves are of tempered steel, ground to exact thickness, individually tested and each one clearly marked with its thickness. They are also of the length that is most popular.

Number		Price, Each
109	<b>9-Leaf Thickness Gage.</b> Leaves $\frac{1}{2}$ inch wide, 3 inches long. Thicknesses: .0015, .002, .003, .004, .006, .008, .010, .012, .015 inch. Overall length of gage with leaf extended and locked, 6 inches. Weight each, 1 oz. ....	\$1.50
110	<b>10-Leaf Thickness Gage.</b> Leaves $\frac{1}{2}$ inch wide, 3 inches long. Thicknesses: .0015, .002, .0025, .003, .004, .006, .008, .010, .012, .015 inch. Weight each, 1 oz. ....	1.65
	(Same as No. 109 but having in addition leaf .0025)	
109M	<b>9-Leaf Metric Thickness Gage.</b> Leaves approximately 12 mm wide, $7\frac{1}{2}$ cm long. Thicknesses: .04, .05, .06, .07, .08, .10, .15, .20, .25 millimetres. Combined thickness 1 millimetre. Weight each, 1 oz. ....	1.50
116M	<b>16-Leaf Metric Thickness Gage.</b> Leaves approximately 12 mm wide, $7\frac{1}{2}$ cm long. Thicknesses: .04, .05, .06, .07, .08, .10, .15, .20, .25, .30, .35, .40, .45, .50 millimetres and two leaves of 1 mm each. A very good range of metric sizes. Combined thickness of leaves 5 mm. Weight each, 2 ozs. ....	2.50

Packing: One in a box, three in a carton.



### THICKNESS GAGES WITH TAPERED LEAVES

With Patent Lock.

Pat. Jan. 27, 1925

The tapered leaf patterns are particularly popular with many users of Thickness Gages, because they give access to narrow openings. Aside from the leaves being tapered, the gages below are identically the same as those on preceding page.

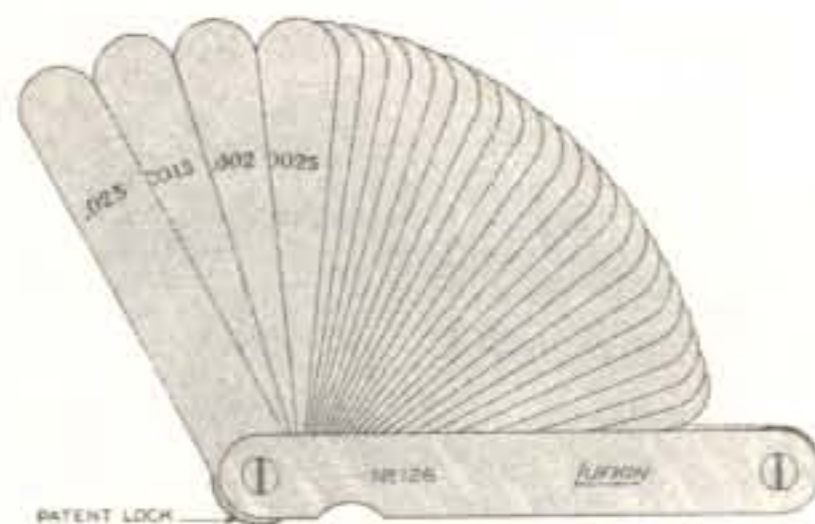
All have regular case into which the leaves fold. They also have the patent lock nut, making possible the locking of any leaf in any position, which is always convenient and especially valuable in some classes of work.

All leaves are tempered steel, ground to exact thickness, individually tested, and each one clearly marked with its thickness. They are of the length most in demand.

Number		Price, Each
109T	<b>9-Leaf Thickness Gage.</b> Leaves 3 inches long, tapered to $\frac{1}{4}$ inch. Thicknesses: .0015, .002, .003, .004, .006, .008, .010, .012, .015 inch. Overall length of gage with leaf extended and locked, 6 inches. Weight each, 1 oz. ....	\$1.50
110T	<b>10-Leaf Thickness Gage.</b> Leaves 3 inches long, tapered to $\frac{1}{4}$ inch. Thicknesses: .0015, .002, .0025, .003, .004, .006, .008, .010, .012, .015 inch. Weight each, 1 oz. ....	1.65
	(Same as No. 109T, but having in addition leaf .0025)	
109TM	<b>9-Leaf Metric Thickness Gage.</b> Leaves approximately $7\frac{1}{2}$ cm long, tapered to $6\frac{1}{2}$ mm. Thicknesses: .04, .05, .06, .07, .08, .10, .15, .20, .25 millimetres. Combined thickness 1 mm. Weight each, 1 oz. ....	1.50

Packing: One in a box, three in a carton.





### THICKNESS GAGES

With Patent Lock.

Pat. Jan. 27, 1925

One of the features of these gages is the wide range of thicknesses they offer. No. 126 has leaves increasing in thickness by one-thousandth inch from .002 to .025 inch inclusive, and carries also leaves .0015 and .0025 inch. No. 122 runs by thousandths from .004 to .025 inch. There is hardly a line of work in which these tools will not take care of every requirement.

Both have regular case into which the leaves fold, and also the patent lock feature. Any one or more leaves can be locked in any position for use or all locked into the case for protection.

All leaves are of tempered steel ground to exact thickness, individually tested, and each one clearly marked with its thickness. They have 3-inch leaves, the most popular length.

#### Number

Price,  
Each

**126 26-Leaf Thickness Gage.** Leaves  $\frac{1}{2}$  inch wide, 3 inches long. Thicknesses: .0015, .002, .0025, .003, .004, .005, .006, .007, .008, .009, .010, .011, .012, .013, .014, .015, .016, .017, .018, .019, .020, .021, .022, .023, .024, .025 inch. Overall length of gage with leaf extended and locked, 6 inches. This gage gives the widest range of sizes, and, unlike others, it has .0025 leaf. Weight each, 2 ozs. . . . . \$3.50

**122 22-Leaf Thickness Gage.** Leaves  $\frac{1}{2}$  inch wide, 3 inches long. Thicknesses: Leaves increase by thousandths from .004 to .025 inch. A wide range of sizes. Weight each,  $1\frac{1}{2}$  ozs. . . . . 2.50

Packing: One in a box, three in a carton.

### THICKNESS GAGE LEAVES ONLY

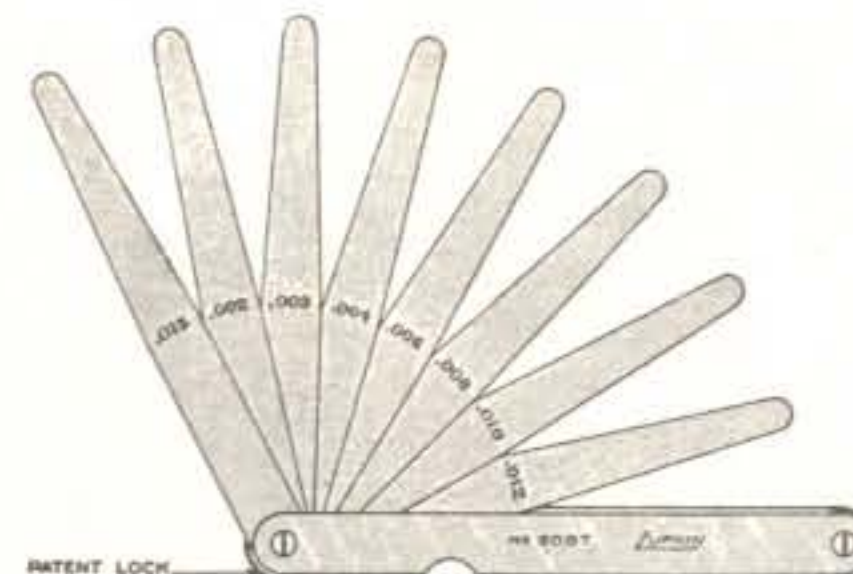
For use as separate pieces or for replacing leaves in gages. In ordering always specify thickness and whether leaves should be straight or tapered.

Price, each, . . . 3-inch, \$0.25       $4\frac{1}{2}$ -inch, \$0.40      6-inch, \$0.50

### THICKNESS GAGE STOCK

There is a demand for thickness gage stock only, in long pieces. These we supply in any of our standard thicknesses and in 6, 12 and 18 inch lengths,  $\frac{1}{2}$  inch wide. Each of these pieces is, like the leaves of our gages, marked with its thickness.

6-inch length. . . . .	Price, each, \$0.40
12-inch length. . . . .	Price, each, .80
18-inch length. . . . .	Price, each, 1.20



### THICKNESS GAGES WITH TAPERED LEAVES

With Patent Lock.

Pat. Jan. 27, 1925

Particularly popular with the motor service mechanic for finding the clearance between pistons and cylinder walls.

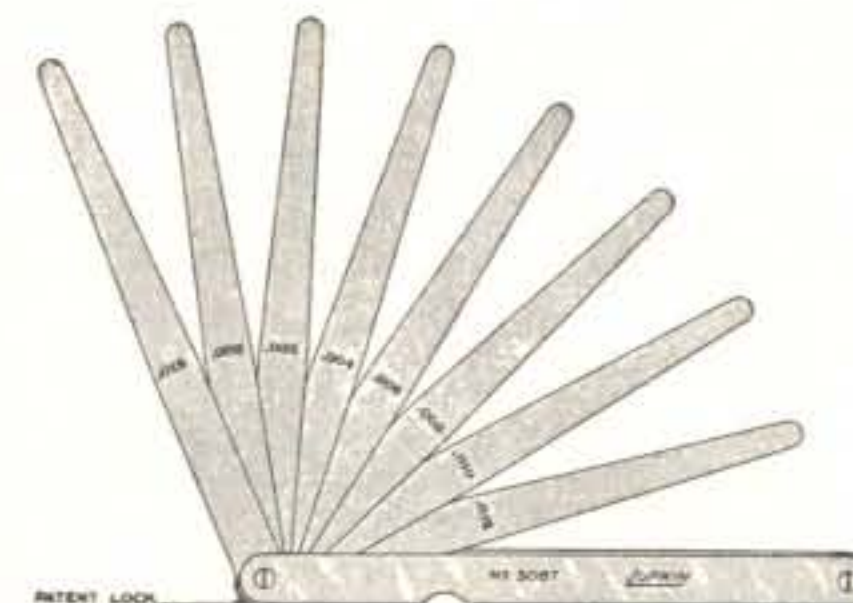
They have regular case into which leaves fold. They also have the patent lock which makes possible locking of any leaf in any position.

All leaves are of tempered steel, ground to exact thickness, individually tested, and each clearly marked with its thickness.

#### Number

Price  
Each

**208T 8-Leaf Thickness Gage**  
Leaves  $4\frac{1}{2}$  inches long,  $\frac{1}{2}$  inch wide at base, tapered to  $\frac{1}{4}$  inch. Thicknesses: .002, .003, .004, .006, .008, .010, .012, .015 inch. Overall length of gage with leaf extended and locked, 9 inches. Weight each,  $1\frac{1}{2}$  ozs. . . . . \$2.50



### THICKNESS GAGES WITH TAPERED LEAVES

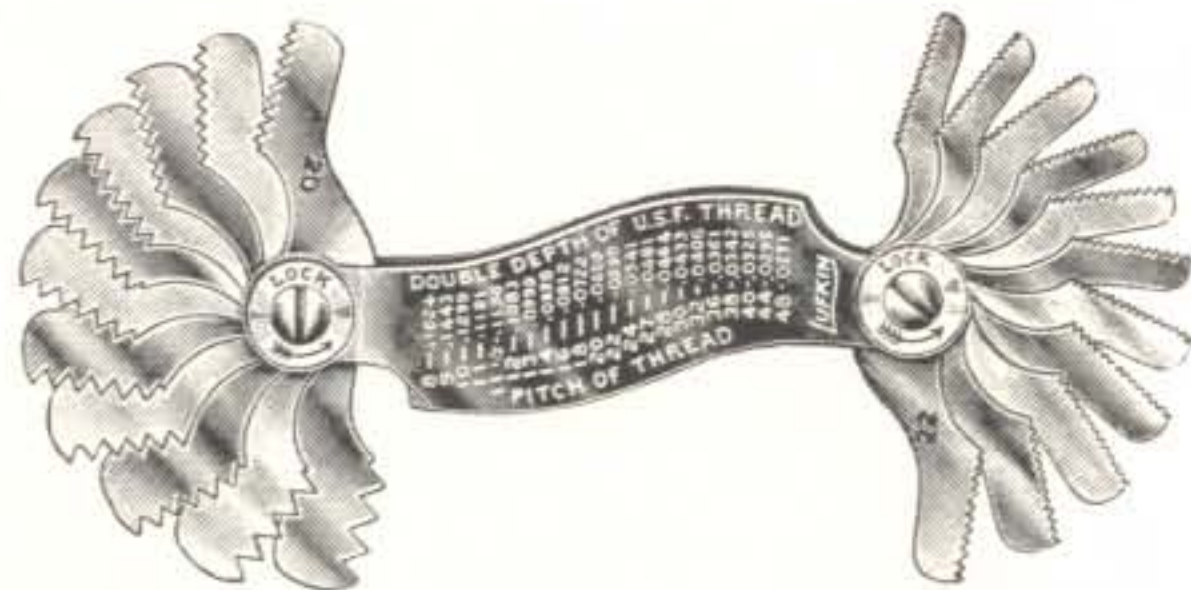
With Patent Lock.

Pat. Jan. 27, 1925

**308T 8-Leaf Thickness Gage**  
Leaves 6 inches long,  $\frac{1}{2}$  inch wide at base, tapered to  $\frac{1}{4}$  inch. Thicknesses: .002, .003, .004, .006, .008, .010, .012, .015 inch. Overall length of gage with leaf extended and locked, 12 inches. Weight each, 2 ozs. . . . . \$3.00

Packing: One in a box.





This tool is designed to measure the pitch, or number of threads per inch, of both the U. S. Form Thread, and the sharp "V" Thread. Each blade is marked with its pitch, and on the outside of the case, the Double Depth of the U. S. Form Thread is given, as it is the recognized standard thread used in this country. To obtain the Double Depth of Sharp "V" Threads, for the same pitch, add  $\frac{1}{3}$  to the double Depth given for U. S. Form Thread.

The blades are shaped to measure quickly the inside threads of nuts, as well as bolts, and screws.

These Screw Pitch gauges are furnished either with or without the Patent Lock Nut. The lock nut permits the locking of any one blade in any position, where that particular pitch is being used constantly.

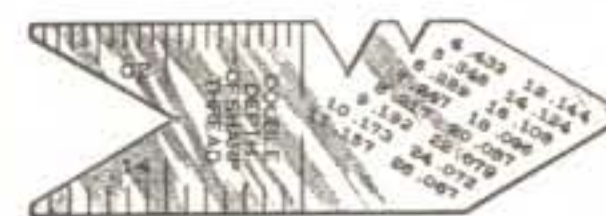
#### WITH LOCK NUT

No. 74A—22 Pitches	Each \$1.50
8-9-10-11-11½-12-13-14-16-18-20 22-24-27-28-30-32-36-38-40-44-48	
No. 74B—24 Pitches	Each \$1.75
4-4½-5-5½-6-7-8-9-10-11-11½-12-13 14-16-18-20-22-24-27-28-30-32-36	
No. 74C—28 Pitches	Each \$2.00
8-9-10-11-11½-12-13-14-16-18-20-22-24-27 28-30-32-36-38-40-44-48-50-56-60-64-72-80	
No. 74D—28 Pitches	Each \$2.00
3-3¼-3½-4-4½-5-5½-6-7-8-9-10-11-11½-12 13-14-16-18-20-22-24-27-28-30-32-36-38	

#### WITHOUT LOCK NUT

No. 73A—22 Pitches	Each \$1.25
8-9-10-11-11½-12-13-14-16-18-20 22-24-27-28-30-32-36-38-40-44-48	
No. 73B—24 Pitches	Each \$1.50
4-4½-5-5½-6-7-8-9-10-11-11½-12-13 14-16-18-20-22-24-27-28-30-32-36	
No. 73C—28 Pitches	Each \$1.75
8-9-10-11-11½-12-13-14-16-18-20-22-24-27 28-30-32-36-38-40-44-48-50-56-60-64-72-80	
No. 73D—28 Pitches	Each \$1.75
3-3¼-3½-4-4½-5-5½-6-7-8-9-10-11-11½-12 13-14-16-18-20-22-24-27-28-30-32-36-38	

Packing: One in a box. Six in a carton.



#### CENTER GAGES

Used in grinding and setting screw cutting tools. Made of steel and carrying markings such as are most commonly required in determining the number of threads per inch or per centimetre.

Nos. 36 and 036 are especially popular as they carry a table of double depth figures, a valuable feature in determining tap drill size for sharp 60 degree V threads. Allowance is to be made for the extent to which thread is flattened, as it is not practical to tap a perfectly sharp thread.

Number	Price, Each
36 Center Gage. Spring tempered. Angles of 60 degrees	\$0.50
036 Center Gage. Not tempered. Angles of 60 degrees	.40
37 Whitworth Standard Center Gage. Spring tempered. Angles of 55 degrees	.50
037 Whitworth Standard Center Gage. Not tempered. Angles of 55 degrees	.40

Marked three edges in millimetres  
one edge in half-millimetres

36M Metric Center Gage. Spring tempered. Angles of 60 degrees	.50
036M Metric Center Gage. Not tempered. Angles of 60 degrees	.40

Weight per dozen, 4 ozs. Packing: Six in a box.





CENTER PUNCHES

Made of fine quality tool steel. Neatly shaped, hardened, tempered and polished. The points are carefully ground. Knurled on the body to afford a good finger grip.

NUMBER	LENGTH INCHES	DIAM. TOP OF TAPERED POINT	WEIGHT EACH	PRICE EACH
71AA	3 1/8	1/16	1/2 oz.	\$0.25
71A	3 1/2	5/64	1/2 oz.	.25
71B	3 7/8	3/32	1 oz.	.25
71C	4 1/4	9/64	1 oz.	.25
71D	4 5/8	5/32	1 1/2 oz.	.25
71E	5	1/4	2 oz.	.30

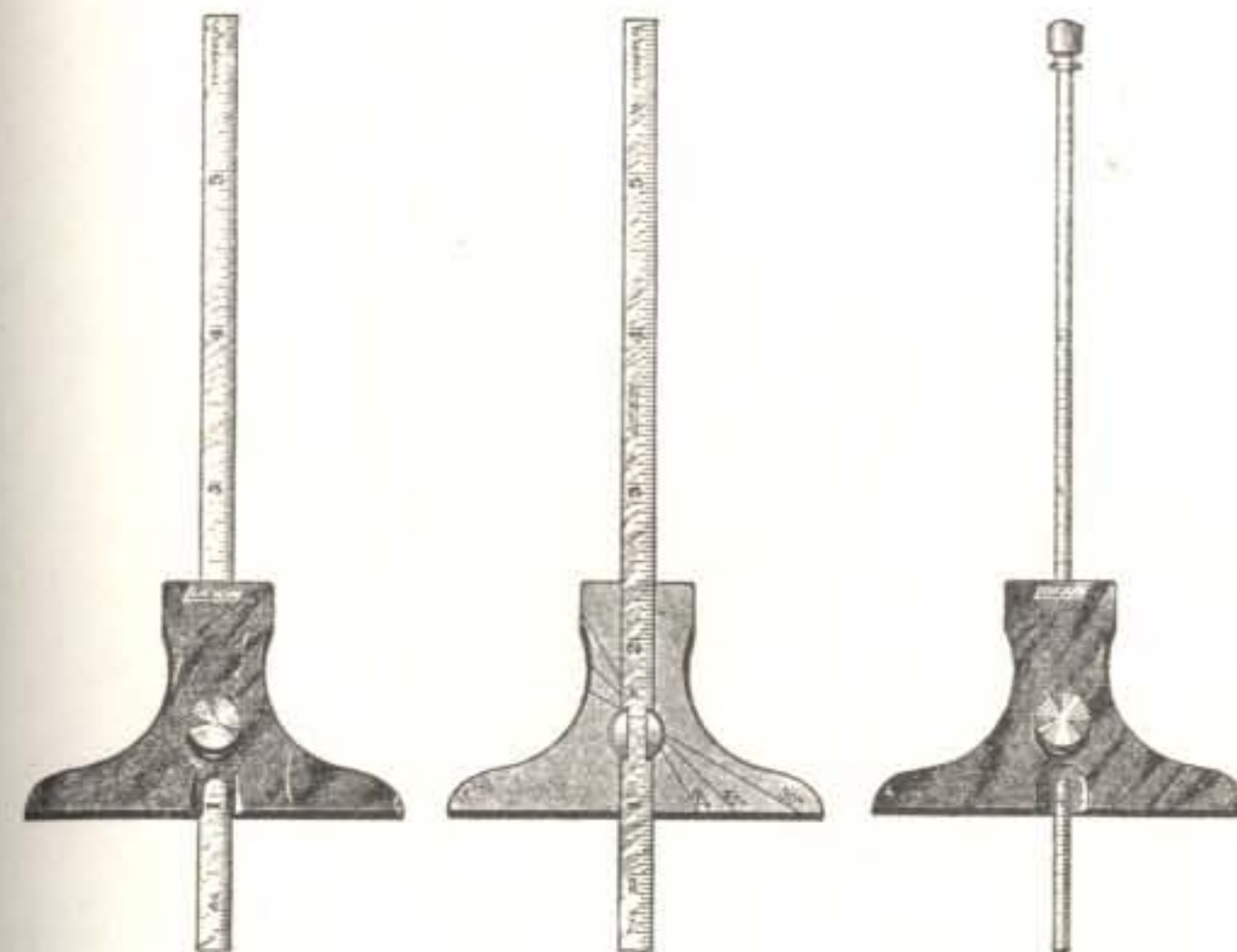
Packing: Twelve in a box—No. 71E, Six in a box.

**71S Center Punch Set**

6 oz.

1.75

This set consists of one each of the above Center Punches packed in a compact canvas case.



No. 510

No. 511

No. 512

DEPTH GAGES

These are very handy Depth Gages for tool and die makers, machinists, and others. All heads are of steel, case hardened and nicely finished. They are 2 1/2 inches wide across the base, giving good range; 1/8 inch thick, and properly designed to best fit the hand. All heads on our gages are deeply notched on one side, so graduations can be most accurately and easily read. All blades are tempered, machine divided, and fitted in slot of the head. They can be securely clamped at any point by means of the knurled lock nut. Blades are also removable for use simply as scales.

Number		Price, Each
510	<b>6-Inch Depth Gage.</b> Fitted with narrow (3/16 inch) spring tempered blade, marked one side 32nds, other side 64ths inch . . . . .	\$1.50
511	<b>6-Inch Depth Gage With Degree Lines on Head.</b> A particularly popular item. One side of head is marked with 30, 45 and 60 degree lines, to which the blade can be swung and set, converting the tool into a simple protractor for certain classes of work. Fitted with narrow (3/16 inch) spring tempered blade marked one side 32nds, other side 64ths inch. . . . .	2.00
512	<b>6-Inch Depth Gage With Round, Graduated Blade.</b> The distinctive feature of this gage is that the blade, while round, is graduated. It is tempered, and being but 1/10 inch in diameter, gives access to small holes. Graduated 4 inches to 32nds. Measurement is arrived at without the additional use of a rule, making this the ideal tool of its kind . . . . .	1.50

Weight each, 2 ozs. Packing: One in a box.

NOTE—All lengths of our narrow rules, Nos. 2310, 2311, and narrow hook rule No. H2310, are interchangeable with the blades of Nos. 510 and 511 Depth Gages.



## GRADUATIONS OF STEEL RULES

### ENGLISH MEASURE

Steel Rules or Scales as shown on the following pages are divided into parts of inches, as follows:

#### No. 1 Graduation

1st corner—10-20-50-100ths.  
2nd corner—12-24-48ths.  
3rd corner—16-32-64ths.  
4th corner—14-28ths.

#### No. 2 Graduation

1st corner—10-20-50-100ths.  
2nd corner—12-24-48ths.  
3rd corner—16-32-64ths.  
4th corner—8ths.

#### No. 4 Graduation

1st corner—64ths.  
2nd corner—32nds.  
3rd corner—16ths.  
4th corner—8ths.

#### No. 7 Graduation

1st corner—64ths.  
2nd corner—32nds.  
3rd corner—16ths.  
4th corner—100ths.

#### No. 10 Graduation

1st corner—32nds.  
2nd corner—64ths.

#### No. 11 Graduation

1st corner—64ths.  
2nd corner—100ths.

#### No. 12 Graduation

1st corner—50ths.  
2nd corner—100ths.

**NOTE**—We also list on the following pages other combinations of English graduations, as well as rules in metric and metric and English.



Showing Readable Graduations



Showing End Graduations

## SPRING TEMPERED RULES

### Machine Divided

Approximate Thickness 3/64 Inch.

All rules on this page are spring tempered. They are the weight most extensively used. Carefully ground and graduated, and having easily read lines and figures. For prices, etc., of all, see foot of page.

### WITHOUT READABLE GRADUATIONS

#### Number

- 2204** No. 4 graduation, 8ths, 16ths, 32nds, 64ths. **Lengths, 1 to 48 inches.** Rules from 2 to 24 inches long have end graduations (one end of both sides graduated to 32nds).
- 2201** No. 1 graduation, 10ths, 20ths, 50ths, 100ths; 12ths, 24ths, 48ths; 16ths, 32nds, 64ths; 14ths, 28ths. **Lengths, 6 and 12 inch only.** For gear cutting work.
- 2202** No. 2 graduation, 10ths, 20ths, 50ths, 100ths; 12ths, 24ths, 48ths; 8ths; 16ths, 32nds, 64ths. **Lengths, 6 and 12 inch only.**

### WITH READABLE GRADUATIONS

- 2204R** No. 4 graduation, 8ths, 16ths, 32nds, 64ths. **Lengths, 1 to 24 inches.** Readable Graduations (64ths numbered every eighth division) on all rules 24 inches and under. Rules 2 to 24 inches long have end graduations (one end of both sides graduated to 32nds).
- 2207R** No. 7 graduation, 16ths, 32nds, 64ths, 100ths. **Lengths, 1 to 48 inches.** Readable Graduations (64ths numbered every eighth division) on all rules 24 inches and under.

Length	1 in.	2 in.	3 in.	4 in.	6 in.	9 in.	12 in.	18 in.	24 in.	36 in.	48 in.
Approx. width, in.	1/2	1/2	1/2	3/8	3/4	3/8	1	1 1/4	1 1/4	1 1/4	1 1/4
Wt. doz., lbs.	1/8	1/8	1/4	1/2	3/4	1 1/2	2	4 1/2	6	9	12
Price, each	\$.30	.45	.60	.75	.90	1.35	1.65	2.60	3.25	7.00	10.00

**Packing:** Rules 12 inches and under, six in a box; others one in a package.

**NOTE**—For rule such as No. 2204 but extra heavy, see page 106.





Showing Readable Graduations



Showing End Graduations

**SEMI-FLEXIBLE RULES**  
**Machine Divided**

Approximate Thickness 1/50 Inch.

All rules on this page are of tempered steel but lighter weight than those on previous page classified as spring tempered. These are, however, heavier than our flexible rules. For prices, etc., of all, see foot of page.

**WITH READABLE GRADUATIONS**

**2604R** No. 4 graduation, 8ths, 16ths, 32nds, 64ths. **Lengths, 2 to 12 inches.** All have Readable Graduations (64ths numbered every eighth division); and end graduations (one end of both sides graduated to 32nds).

**2607R** No. 7 graduation, 16ths, 32nds, 64ths, 100ths. **Lengths, 2 to 12 inches.** All have Readable Graduations (64ths numbered every eighth division).

Length .....	2 in.	3 in.	4 in.	6 in.	9 in.	12 in.
Approx. width, in. ....	1/2	1/2	5/8	3/4	7/8	1
Weight doz., ozs. ....	3	4	5	7	10	17
Price, each .....	\$0.45	\$0.60	\$0.75	\$0.90	\$1.35	\$1.65

Packing: Six in a box.



**FLEXIBLE RULES**  
**Machine Divided**

Made of the finest quality spring tempered steel, very thin and flexible. Rules 12 inches and under in length are 1/2 inch wide, and will conform to a 2-inch circle. Rules 18 inches and over are 3/4 inch wide and a trifle heavier. All are graduated one side only. Six-inch rules are regularly furnished with metal-bound leather cases.

- No. 2110.... No. 10 graduation, 32nds and 64ths.
- No. 2111.... No. 11 graduation, 64ths and 100ths.
- No. 2112.... No. 12 graduation, 50ths and 100ths.

**Nos. 2110, 2111, 2112.**

Length .....	1 in.	2 in.	3 in.	4 in.	6 in.	9 in.	12 in.	18 in.	24 in.	36 in.	48 in.
Weight doz., lbs. ....	1/8	1/8	1/8	1/8	1/4	1/2	1/2	1 1/2	2 1/4	3	4 1/2
Price, each.....	\$0.30	.45	.60	.75	.90	1.35	1.65	2.60	3.25	7.00	10.00

Packing: Rules 12 in. and under in length, six in a box; others one in a package.



**NARROW RULES**  
**Machine Divided — Spring Tempered**

Approximate Width 3/16 Inch, Thickness 3/64 Inch.

Of high grade, spring tempered steel. Being but 3/16 inch wide, these rules are easily inserted in small openings. They are interchangeable with the blades of our Depth Gages. They are graduated one edge of each side.

- No. 2310.... No. 10 graduation, 32nds and 64ths.
- No. 2311.... No. 11 graduation, 64ths and 100ths.

**Nos. 2310, 2311**

Length .....	4 in.	6 in.	9 in.	12 in.
Weight per doz., ozs. ....	3	4	6	10
Price, each.....	\$0.75	\$0.90	\$1.35	\$1.65

Packing: Six in a box.





## SPRING TEMPERED RULES

With One Beveled Edge  
Machine Divided

Approximate Thickness 3/64 Inch.

These rules are used by tool makers, draftsmen, engineers and architects, and are very handy for laying out work.

**No. 2224 Beveled.** No. 4 graduation, 8ths, 16ths, 32nds, 64ths. With the 64ths on the beveled edge. **Lengths, 4 to 12 inches.** With end graduations (one end of both sides graduated to 32nds).

**No. 2227 Beveled.** No. 7 graduation, 16ths, 32nds, 64ths, 100ths. With 100ths on the beveled edge. **Made in 6 and 12 inch lengths only.**

Length .....	4 in.	6 in.	9 in.	12 in.
Approximate width, in. ....	3/8	3/4	7/8	1
Weight per doz. ....	7 oz.	13 oz.	1 1/2 lbs.	2 lbs.
Price, each ..	\$0.75	\$0.90	\$1.35	\$1.65

Packing: Six in a box.



## SPRING TEMPERED RULE

English and Metric  
Machine Divided

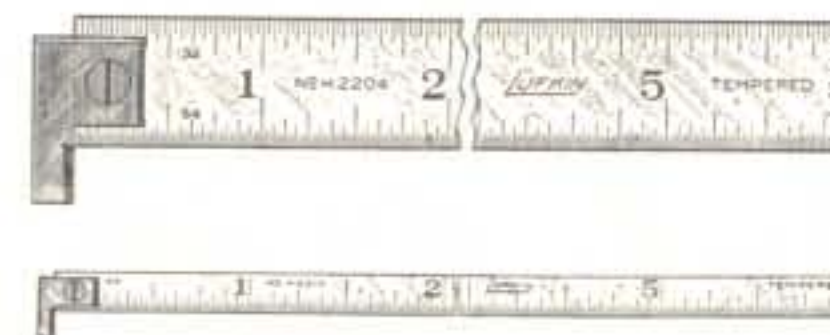
Approximate Thickness 3/64 Inch.

This rule has a very wide range of graduations, both English and metric.

**No. 3227** Marked both sides. One side, upper edge 16ths, 32nds, 64ths, lower edge 10ths, 20ths, 50ths and 100ths inches; other side, upper edge millimetres, lower edge half-millimetres.

Length .....	1 in.	2 in.	3 in.	4 in.	6 in.	9 in.	12 in.	18 in.	24 in.	36 in.	48 in.
Approx. width, in. ....	1/2	1/2	1/2	3/8	3/4	7/8	1	1 1/4	1 1/4	1 1/4	1 1/4
Weight doz., lbs. ....	1/8	1/8	1/4	1/2	3/4	1 1/2	2	4 1/2	6	9	12
Price, each .....	\$0.30	.45	.60	.75	.90	1.35	1.65	2.60	3.25	7.00	10.00

Packing: Rules 12 inches and under, six in a box; others one in a package.



## SPRING TEMPERED HOOK RULES

Machine Divided

STANDARD WEIGHT. HEAVY PATTERN. NARROW PATTERN.

These are Steel Rules as listed on other pages but fitted with a removable hook. They are very convenient in taking measurements over round or square corners, through openings, such as the hubs of pulleys or wheels, and wherever the measuring edge is difficult to see or determine (also in setting and reading dividers and calipers).

Hooks are of hardened steel and are quickly removed by giving eccentric stud a half turn, making the article for use same as a rule without hook.

The narrow pattern Hook Rules are suitable for measuring through openings as small as 3/8 inch or 10 millimetres. These are interchangeable with the blades in our Depth Gages.

### STANDARD WEIGHT

Approximate Thickness 3/64 Inch (1 MM)

<b>No. H2204</b>	No. 4 graduation, 8ths, 16ths, 32nds, 64ths. Rules 6 to 24 inches long have one end of both sides graduated to 32nds.					
Length .....	6 in.	9 in.	12 in.	18 in.	24 in.	36 in.
Approx. width rule .....	3/4 in.	7/8 in.	1 in.	1 1/4 in.	1 1/4 in.	1 1/4 in.
Wt. doz., lbs. ....	1	1 3/4	2 1/4	5	6 1/2	9 1/2
Price, each .....	\$1.25	\$1.75	\$2.15	\$3.10	\$3.75	\$7.65

<b>No. H2200M</b>	Metric graduation. Three edges in mm, one edge in 1/2 mm.		
Length .....	15 cm	20 cm	30 cm
Wt. per doz., lbs. ....	1	1 1/2	2 1/4
Price, each .....	\$1.25	\$1.60	\$2.15

### HEAVY PATTERN

Approximate Thickness 1/10 Inch; Width 1 1/2 Inch.

<b>No. H2404</b>	No. 4 graduation, 8ths, 16ths, 32nds, 64ths.			
Length .....	36 in.	48 in.	60 in.	72 in.
Weight each, lbs. ....	2 1/4	2 3/4	3 1/4	3 3/4
Price, each ..	\$8.00	\$11.00	\$21.00	\$25.00

### NARROW PATTERN

Approximate Thickness 3/64 Inch (1 MM); Width 3/16 Inch (5 MM)

<b>No. H2310</b>	No. 10 graduation, 32nds and 64ths.			
Length .....	4 in.	6 in.	9 in.	12 in.
Wt. per doz., ozs. ....	4	5	8	12
Price, each .....	\$1.00	\$1.20	\$1.65	\$2.00

<b>No. H2300M</b>	Metric graduation. Millimetres and half-millimetres.		
Length .....	15 cm	20 cm	30 cm
Wt. per doz., ozs. ....	5	7	12
Price, each .....	\$1.20	\$1.50	\$2.00

Packing: Rules 12 inches and under in length, three in a box; others one in a package.

NOTE—Hook Rules can also be furnished marked metric and English, in the standard weight and the narrow pattern. Specify as "H2200ME" and "H2300ME".





## METRIC STEEL RULES

### Machine Divided

Of highest quality tempered rule steel, carefully ground. Finely graduated and having most legible lines and figures.

### SPRING TEMPERED

#### Approximate Thickness 1 MM

No. 2200M Marked both sides; three edges in mm, one edge in  $\frac{1}{2}$  mm.

Length	5 cm	10 cm	15 cm	20 cm	30 cm	50 cm	1 m
Width in mm	13	16	19	22	25	32	32
Weight per doz., lbs.	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{3}{4}$	$1\frac{1}{2}$	2	5	10
Price, each	\$0.45	\$0.75	\$0.90	\$1.20	\$1.65	\$2.60	\$10.00

### SEMI-FLEXIBLE

#### Approximate Thickness $\frac{1}{2}$ MM

Of tempered steel, heavier than the flexible, though about  $\frac{1}{2}$  the thickness of No. 2200M rules above. Widths same as No. 2200M rules.

No. 2600M Marked both sides; three edges in mm, one edge in  $\frac{1}{2}$  mm.

Length	5 cm	10 cm	15 cm	20 cm	30 cm
Weight per doz., ozs.	3	5	7	9	17
Price, each	\$0.45	\$0.75	\$0.90	\$1.20	\$1.65

### FLEXIBLE

#### Approximate Thickness 3/10 mm (except 50 cm length)

Of full flexible spring tempered steel, easily held to the work.

No. 2100M Marked one side only; upper edge mm, lower edge  $\frac{1}{2}$  mm.

Length	5 cm	10 cm	15 cm	20 cm	30 cm	50 cm
Width in mm	13	13	13	13	13	19
Wt. per doz., ozs.	2	3	4	6	8	32
Price, each	\$0.45	\$0.75	\$0.90	\$1.20	\$1.65	\$2.60

### NARROW PATTERN, TEMPERED

#### Approximate Width 5 MM, Thickness 1 MM

Being but 5 millimetres wide, these rules can be inserted in small openings. They are interchangeable with the blades of our Depth Gages.

No. 2300M Marked one edge of one side in mm, one edge of other side in  $\frac{1}{2}$  mm.

Length	10 cm	15 cm	20 cm	30 cm
Wt. per doz., ozs.	3	4	6	10
Price, each	\$0.75	\$0.90	\$1.20	\$1.65

Packing: Rules 30 cm and under in length, six in a box; others one in a package.

NOTE—For these rules marked metric and English, see page 105.



## METRIC AND ENGLISH STEEL RULES

### Machine Divided

Of highest quality tempered rule steel, carefully ground. Finely graduated and having most legible lines and figures.

### SPRING TEMPERED

#### Approximate Thickness 1 MM (3/64 Inch)

No. 2200ME Marked both sides; one side millimetres and 64ths inches, other side half-millimetres and 32nds inches.

Length	5 cm	10 cm	15 cm	20 cm	30 cm	50 cm	1 m
Width in mm	13	16	19	22	25	32	32
Wt. per doz., lbs.	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{3}{4}$	$1\frac{1}{2}$	2	5	10
Price, each	\$0.45	\$0.75	\$0.90	\$1.20	\$1.65	\$2.60	\$10.00

### FLEXIBLE

#### Approximate Thickness 3/10 MM (except 50 CM length)

Of full flexible spring tempered steel, easily held to the work.

No. 2100ME Marked one side only; one edge millimetres, other edge 64ths inches.

Length	5 cm	10 cm	15 cm	20 cm	30 cm	50 cm
Width in mm	13	13	13	13	13	19
Wt. per doz., ozs.	2	3	4	6	8	32
Price, each	\$0.45	\$0.75	\$0.90	\$1.20	\$1.65	\$2.60

### NARROW PATTERN, TEMPERED

#### Approximate Thickness 1 MM (3/64 Inch), Width 5 MM (3/16 Inch)

Being but 5 millimetres wide, these rules can be inserted in small openings. They are interchangeable with the blades of our Depth Gages.

No. 2300ME Marked one edge of one side in millimetres, one edge of other side 64ths inches.

Length	10 cm	15 cm	20 cm	30 cm
Wt. doz., ozs.	3	4	6	10
Price, each	\$0.75	\$0.90	\$1.20	\$1.65

Packing: Rules 30 centimetres and under in length, six in a box; others one in a package.

NOTE—For these rules marked metric only, see page 104.





### HEAVY SPRING TEMPERED RULES Machine Divided

Approximate Thickness 1/10 inch

Heavier, wider, and made in longer lengths than our regular spring tempered rules. Especially recommended for factory use and wherever a long scale is required.

No. 2404	Heavy. No. 4 graduation, 8ths, 16ths, 32nds, 64ths.			
Length	36 in.	48 in.	60 in.	72 in.
Approx. width, in.	1 1/2	1 1/2	1 1/2	1 1/2
Weight each, lbs.	1 3/4	2 1/4	2 3/4	3 1/4
Price, each	\$7.00	\$10.00	\$20.00	\$24.00

Packing: One in a package.



### STEEL SHRINK RULES Machine Divided

For pattern makers, foundry workers, and others. Made of spring tempered steel, approximately 3/64 inch thick. These rules are the highest grade, finely graduated and guaranteed accurate. Lines and figures are cut into the steel and show up clear and distinct.

All In No. 4 Graduation, 8ths, 16ths, 32nds, 64ths.  
Always Specify Length As Well As Stock Number.

No.	83C	83E	83F	83G	83H	83K	83R	83T
Shrink per ft.	1/10 in.	1/8 in.	3/16 in.	1/4 in.	5/16 in.	3/8 in.	5/32 in.	9/32 in.
Length	6 inch				12 inch			24 inch
Width, inches	3/4				1			1 1/4
Weight each	1 oz.				2 1/2 oz.			6 oz.
Price, each	\$1.00				\$2.10			\$4.25

Packing: 6-inch and 12-inch rules, six in a box; 24-inch rules, one in a package.



### STEEL SHRINK RULES Etched Graduations

Of spring tempered steel 1 1/4 x 3/64 inch. Sunken graduation. While accurate rules, the graduation of these is neither as fine nor close as on No. 83 Rules, page 106. Recommended only for use where a fine degree of accuracy is not essential.

All Graduated 8ths and 16ths, Both Sides.

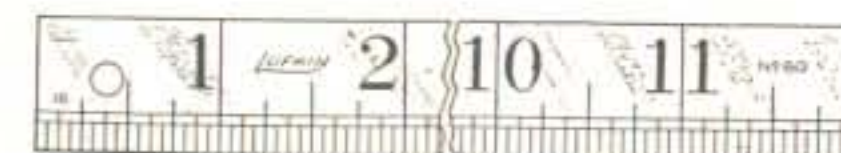
All Made in 24 Inch Length Only.

No.	90A	90B	90C	90D	90E	90F	90G	90H	90J	90R
Shrink per ft., in.	1/16	1/12	1/10	3/32	1/8	3/16	1/4	5/16	7/16	5/32
Length, 24 inch.										
Weight each, 5 ozs.										
Price, each	\$2.25									

Packing: One in a package.



No. 62



No. 60

### STRAIGHT STEEL RULES

These rules also have bright surface, distinct black sunken figures and lines. They have hole in one end.

No. 62 is well adapted to such general work as requires a long, one-piece steel rule of medium weight, with common markings somewhat heavier than on machine divided scales.

No. 60 is a narrower, lighter weight rule of somewhat similar type. It has become especially popular in manual training work.

No. 62	1 1/4 x 1/16 inch. Marked both sides, upper edge 8ths, lower 16ths.					
Length	1 ft.	2 ft.	3 ft.	4 ft.	5 ft.	6 ft.
Weight doz., lbs.	3 1/4	6 1/4	9 1/2	11 1/4	15	18 3/4
Price, each	\$1.25	\$2.10	\$3.00	\$4.60	\$6.25	\$8.00

No. 60	3/4 x 1/32 inch. Marked lower edge only, one side 8ths, other side 16ths.					
Length	1 ft.	2 ft.				
Weight, per doz.	14 ozs.	2 lbs.				
Price, each	\$.050	\$1.00				





Figure 1



Figure 2



Figure 3

### MECHANICS REFERENCE TABLES

These tables are especially handy for machinists, tool makers, and die makers, as they carry valuable information required in daily work. They are convenient also for anyone having occasion to refer to wire gages, decimal equivalents of common fractions, or tap and drill sizes.

Made of flexible spring steel  $1\frac{1}{4}$  inches wide and  $6\frac{3}{4}$  inches long, and carrying a 6-inch graduated scale. Machine divided, with figures and graduations showing black and distinct. Hole at upper end.

No. 97  $\frac{1}{2}$  Marked both sides as Figures 1 and 2. Price, each.....\$0.90

No. 98 Marked both sides as Figures 2 and 3. Price, each..... .90

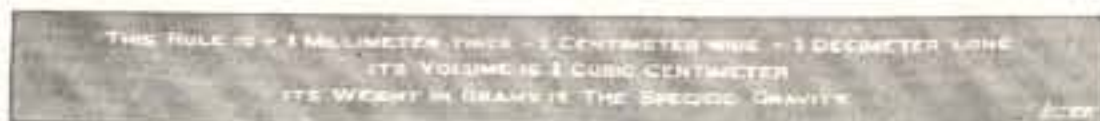
Figure 1 A table of U. S. S. Machine Screw Tap Sizes in fractional and numbered sizes, and S. A. E. and Briggs pipe standard in fractional sizes. Also a 6-inch scale graduated to 32nds.

Figure 2 A table of decimal equivalents of fractions in 64ths from  $1/64$  to  $63/64$ , and a 6-inch scale graduated to 64ths with Readable Graduations.

Figure 3 A table of decimal equivalents of wire gages, and a 6-inch scale graduated to 32nds.

Weight per doz., 12 ozs. Packing: Six in a box.

NOTE—Cases can be furnished for these tables at small extra charge.



### THE DECIMETRE RULE A KEY TO THE METRIC SYSTEM

As this rule gives a most comprehensive visual demonstration of metric sizes, it has been termed a key to the metric system. For educational purposes it has been widely distributed by the United States Bureau of Standards, The American Metric Association, and The Decimal Association of London, England.

It is of tempered steel, machine divided. The rule is 1 decimetre long, 1 centimetre wide and 1 millimetre thick. As shown by above illustrations it is marked one edge, one side, in centimetres and millimetres, and carries on both sides interesting facts regarding the metric system. Furnished with metal bound leather case.

No. 99 Length 10 cm (1 dm). Price, each..... \$0.50



### ENGLISH PATTERN STEEL RULES

#### Flexible — Machine Divided

Of spring tempered steel, very thin and flexible,  $\frac{1}{2}$  inch wide, 30 gage. One end rounded and with hole.

All Marked One Side Only.

No. 2110D Marked upper edge 32nds, lower edge 64ths inch.

No. 2110DM Marked upper edge metric to half-millimetres, lower edge 64ths inch.

No. 2111D Marked lower edge 64ths, upper edge 100ths inch.

#### Nos. 2110D, 2110DM, 2111D

Length .....	4 inch	6 inch	9 inch	12 inch
Weight per doz. ....	3 oz.	4 oz.	7 oz.	8 oz.
Price, per doz. ....	\$3.60	\$4.80	\$9.60	\$14.40

Packing:  $\frac{1}{2}$  doz. in a box.



### ENGLISH PATTERN STEEL RULES

#### Machine Divided — Tempered

#### Tapping and Spanner

The 4 and 6 inch rules are  $\frac{3}{4}$  inch wide, 21 gage; 12 inch rules,  $1\frac{1}{8}$  inch wide, 19 gage. All have one end rounded and with hole.

No. 2721 Marked one side only. Lower edge 16ths, 32nds, 64ths inches; upper edge tapping and spanner sizes.

Length .....	4 inch	6 inch	12 inch
Price, per doz. ....	\$3.60	\$4.80	\$12.00

No. 2722 Marked both sides. One side, lower edge 16ths, 32nds, 64ths inches, upper edge tapping and spanner sizes; other side, lower edge 16ths, upper edge 10ths, 20ths, 50ths, 100ths inches.

Length .....	4 inch	6 inch	12 inch
Price, per doz. ....	\$4.20	\$5.40	\$13.20

No. 2723 Marked both sides. One side, lower edge 16ths, 32nds, 64ths inches, upper edge tapping and spanner size; other side, upper edge 8ths, lower edge 16ths inches.

Length .....	4 inch	6 inch	12 inch
Price, per doz. ....	\$4.20	\$5.40	\$13.20

Weight per doz., 4 inch, 8 ozs.; 6 inch, 10 ozs.; 12 inch,  $2\frac{1}{4}$  lbs.

Packing:  $\frac{1}{2}$  doz. in a box.

ROSE TOOLS, INC.



# ENGLISH PATTERN STEEL RULES

Machine Divided



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6



Figure 7



Figure 8

# ENGLISH PATTERN STEEL RULES

Machine Divided — Tempered

One End Rounded And With Hole

Numbers without the suffix "N" are  $\frac{3}{4}$  inch wide, 21 gage, in 4 and 6 inch lengths;  $1\frac{1}{8}$  inch wide, 19 gage, in 12 and 24 inch lengths. Numbers with the suffix "N" are  $\frac{1}{2}$  inch wide, 25 gage.

CUT	MARKINGS	RULE NUMBER	PER DOZEN			
			4 in.	6 in.	12 in.	24 in.
Fig. 1.	One edge of one side only 8ths, 16ths, 32nds and 64ths...	2700 2700N	\$3.60 3.00	\$4.80 3.60	\$12.00 6.60	.....
Fig. 2.	One side only 8ths and 16ths.....	2701 2701N	\$3.60 3.00	\$4.80 3.60	\$12.00 6.60	\$25.20 .....
Fig. 3.	One side only 8ths, 16ths, 32nds and 64ths...	2702 2702N	\$3.60 3.00	\$4.80 3.60	\$12.00 6.60	\$25.20 .....
Fig. 2.	Both sides One side, 8ths and 16ths					
Fig. 3.	Other side, 8ths, 16ths, 32nds and 64ths .....	2703 2703N	\$4.20 3.60	\$5.40 4.20	\$13.20 8.40	\$27.00 .....
Fig. 4.	One side only 16ths inches and millimetres...	2704 2704N	\$3.60 3.00	\$4.80 3.60	\$12.00 6.60	\$25.20 .....
Fig. 5.	One side only 16ths, 32nds and 64ths inches Millimetres and $\frac{1}{2}$ millimetres...	2704 $\frac{1}{2}$ 2704 $\frac{1}{2}$ N	\$3.60 3.00	\$4.80 3.60	\$12.00 6.60	*\$25.20 .....
(*Also made in $\frac{1}{2}$ and 1 metre lengths. Prices \$24.00 and \$78.00 doz. respectively.)						
Fig. 5.	One side only 16ths, 32nds and 64ths inches, millimetres and $\frac{1}{2}$ millimetres, as Fig. 5, except that mark- ings are reversed, millimetres being on lower edge, inches on upper edge .....	2704 $\frac{1}{2}$ B 2704 $\frac{1}{2}$ BN	\$3.60 3.00	\$4.80 3.60	\$12.00 6.60	\$25.20 .....
Fig. 6.	One side only 16ths, 32nds and 64ths inches And 10ths, 20ths, 50ths and 100ths inches .....	2705 2705N	\$3.60 3.00	\$4.80 3.60	\$12.00 6.60	.....
Fig. 6.	Both sides One side, 16ths, 32nds and 64ths inches, 10ths, 20ths, 50ths and 100ths inches					
Fig. 7.	Other side millimetres and $\frac{1}{2}$ millimetres .....	2706 2706N	\$4.20 3.60	\$5.40 4.20	\$13.20 8.40	.....
Fig. 5.	Both sides One side 16ths, 32nds and 64ths inches, millimetres and $\frac{1}{2}$ millimetres					
Fig. 8.	Other side, 12ths, 24ths, 48ths, 96ths inches and 10ths, 40ths, 50ths and 100ths in. ....	2707 2707N	\$4.20 3.60	\$5.40 4.20	\$13.20 8.40	.....

Wt. per dozen rules without suffix "N": 4 in., 7 ozs.; 6 in., 9 ozs.; 12 in., 2  $\frac{1}{4}$  lbs.; 24 in., 4  $\frac{1}{2}$  lbs.  
Wt. per dozen rules with suffix "N": 4 in., 3 ozs.; 6 in., 4 ozs.; 12 in., 1 lb.

Packing: Rules 12 in. and under,  $\frac{1}{2}$  doz. in a box; others one in a package.

Danish or Swedish Measurements: Above rules will be supplied with Danish measurements or Swedish measurements, such as Nya and Gamla, if so ordered.



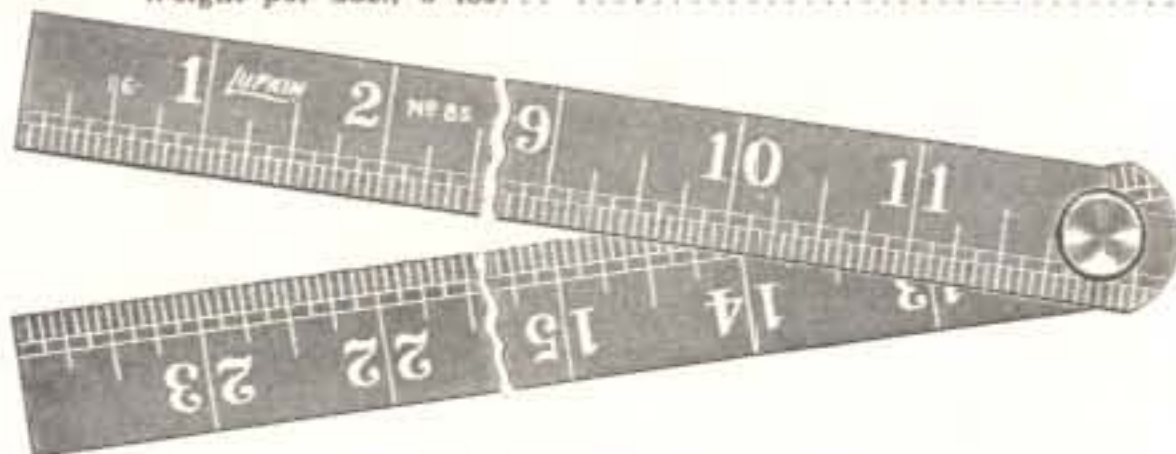


### CONTRACTION RULES

#### English Pattern — Machine Divided

Of tempered steel  $1\frac{1}{8}$  inch wide, 19 gage. One end rounded and with hole.  
All 24 Inches Long and Graduated to 16ths.

NUMBER		PER DOZ.
2710	Marked one side only; upper edge $1/5$ inch contraction, lower edge $1/10$ inch contraction per foot. Weight per doz., 6 lbs.	\$25.20
2711	Marked both sides. Lower edge one side $1/5$ inch contraction, lower edge other side $1/10$ inch contraction per foot. Upper edge both sides regular inches and 16ths. Weight per doz., 6 lbs.	30.60
2712	Marked both sides, $1/10$ , $3/20$ , $1/5$ inch contraction per foot, and one line regular inches and 16ths. Weight per doz., 6 lbs.	30.60



### FOLDING STEEL RULES

#### 12 Inch Sections

Of tempered steel approximately  $3/4$  inch wide and  $1/32$  inch thick. The sunken dark figures and lines are most legible. All except No. 80 have stop joint. The rules with ends brass tipped are popular with blacksmiths and others working on hot metals. Those with circumference measurement give at a direct reading circumference up to 75 inches opposite the respective diameter.

NO.	LENGTH	MARKING	PATTERN	PRICE, EACH
80	2 ft.	One side 8ths, other 16ths inches.	Plain joint. Plain ends	\$1.00
85	2 ft.	One side 8ths, other 16ths inches.	Stop joint. Plain ends	1.25
85T	2 ft.	One side 8ths, other 16ths inches.	Stop joint. Brass tipped ends	1.35
86	2 ft.	One side 16ths; other side, upper edge 8ths, lower edge circumference inches to 8ths.	Stop joint. Plain ends	1.45
86T	2 ft.	One side 16ths; other side, upper edge 8ths, lower edge circumference inches to 8ths.	Stop joint. Brass tipped ends	1.55

### STEEL RULE AND SQUARE COMBINED

#### Machine Divided — With Stop Joint

Of tempered steel  $1\frac{1}{8}$  inch wide, 19 gage. Square ends. Stop joint holds rule true and rigid when open, also stops the sections at 90 degrees, converting the rule into a square. A convenient, useful and durable tool.

No. 2781	2 foot, 2 fold (12 inch sections). Marked one side only; upper edge 8ths, lower edge 16ths inches. Weight per doz., $4\frac{1}{2}$ lbs. Price, per doz.,	\$36.00
No. 2783	2 foot, 2 fold (12 inch sections). Marked both sides. One side, upper edge 8ths, lower edge 16ths; other side, upper edge 16ths, lower edge 8ths, 32nds, 64ths. Weight per doz., $4\frac{1}{2}$ lbs. Price, per doz.,	\$37.20



No. 1141



### FOLDING FLEXIBLE STEEL POCKET RULES

#### With Stop Joints — "Nubian" Finish

#### COMPACT AND CONVENIENT TO CARRY EVERYWHERE

High grade popular rules, of flexible spring steel  $3/8$  inch wide. Stop joints hold the sections true when open. Over the "Nubian" (black) Finish background, the raised figures and markings, which are in the natural steel color, show up clearly. Rules furnished with or without metal-bound leather cases.

NO.	LENGTH	JOINTS	WT. PER DOZ.	WITHOUT CASES PRICE, EACH	WITH CASES PRICE, EACH
Marked Inches And 16ths, Both Sides.					
1131	1 ft.	3-inch joints	5 ozs.	\$0.55	\$0.65
1132	2 ft.	3-inch joints	7 ozs.	1.10	1.20
1141	1 ft.	4-inch joints	6 ozs.	.55	.65
1142	2 ft.	4-inch joints	11 ozs.	1.10	1.20
1143	3 ft.	4-inch joints	1 lb.	1.65	1.75
1162	2 ft.	6-inch joints	10 ozs.	1.05	1.20
1163	3 ft.	6-inch joints	14 ozs.	1.60	1.75
1164	4 ft.	6-inch joints	1 1/4 lbs.	2.10	2.25

#### Marked Inches And 16ths One Side; Feet, 10ths and 100ths of feet, other side.

1141D	1 ft.	4-inch joints	6 ozs.	\$0.55	\$0.65
1142D	2 ft.	4-inch joints	11 ozs.	1.10	1.20
1143D	3 ft.	4-inch joints	1 lb.	1.65	1.75
1162D	2 ft.	6-inch joints	10 ozs.	1.05	1.20
1163D	3 ft.	6-inch joints	14 ozs.	1.60	1.75

#### Marked Inches And 16ths One Side; Millimetres other side.

1141EM	1 ft.	4-inch joints	6 ozs.	\$0.55	\$0.65
1142EM	2 ft.	4-inch joints	11 ozs.	1.10	1.20
1143EM	3 ft.	4-inch joints	1 lb.	1.65	1.75
1163EM	3 ft.	6-inch joints	14 ozs.	1.60	1.75
1164EM	4 ft.	6-inch joints	1 1/4 lbs.	2.10	2.25
1143ME	1 metre	10-cm joints	1 1/4 lbs.	1.70	1.80
1163ME	1 metre	20-cm joints	1 1/4 lbs.	1.65	1.80

Packing: All, twelve in a box, except 4 ft., which are six in a box.

NOTE—Unless cases are specified, we ship rules without cases.

ROSE TOOLS, INC.





### FOLDING STEEL RULES

$\frac{3}{4}$  Inch Wide — With Stop Joints

HEAVIEST AND WIDEST OF OUR LONG FOLDING STEEL RULES.

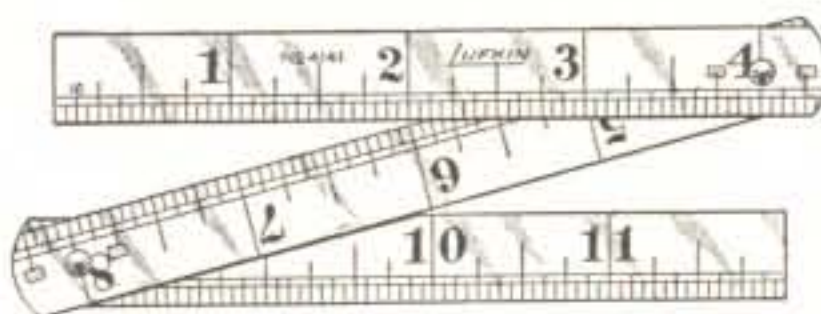
These rules withstand hard use such as in steel mills, machine shops and other places where steel rules of lighter weight and wood rules are often broken. They are of tempered steel,  $\frac{3}{4}$  inch wide,  $\frac{1}{32}$  inch thick. All have patent stop joints which hold rule true and rigid when open. The sunken black figures and lines give good contrast and legibility. These rules may be depended upon for a very fair degree of accuracy, though on the most precise work a one-piece steel scale should be used.

#### All Marked One Edge Of Both Sides.

NO.	LENGTH	MARKINGS	JOINTS	WEIGHT PER DOZ.	PRICE, EACH
1172.....	2 ft.	Inches to 16ths.	6-inch	1 $\frac{3}{4}$ lbs.	\$1.30
1173.....	3 ft.	Inches to 16ths.	6-inch	2 $\frac{1}{2}$ lbs.	1.95
1174.....	4 ft.	Inches to 16ths.	6-inch	3 $\frac{3}{4}$ lbs.	2.60
1175.....	5 ft.	Inches to 16ths.	6-inch	5 lbs.	3.25
1176.....	6 ft.	Inches to 16ths.	6-inch	6 $\frac{1}{2}$ lbs.	3.90
1177.....	7 ft.	Inches to 16ths.	6-inch	7 lbs.	4.65
1178.....	8 ft.	Inches to 16ths.	6-inch	8 lbs.	5.40
1174EM....	4 ft.	16ths. inches and millimetres	6-inch	3 $\frac{3}{4}$ lbs.	2.65
1173ME....	1 metre	16ths inches and millimetres	6-fold	3 lbs.	2.25
1173M....	1 metre	Millimetres both sides	6-fold	3 lbs.	2.35

Packing: 2 ft., 3 ft. and 1 metre rules, twelve in a box; all others six in a box.

NOTE—For Aluminum Folding Rules, see Section Five of this Catalog.



### FOLDING STEEL POCKET RULES

Machine Divided — With Stop Joints

MEDIUM WEIGHT — HIGHEST GRADE

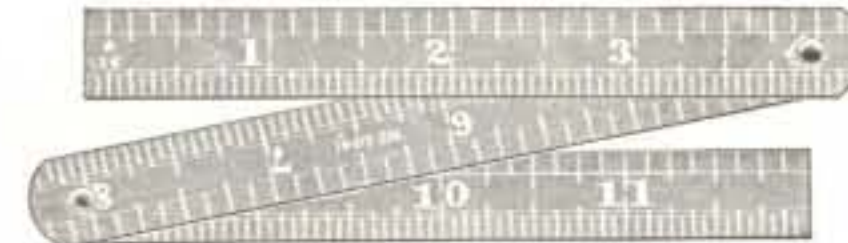
Of tempered steel, width  $\frac{1}{2}$  inch, semi-flexible. With sunken figures and lines clear cut and showing up in good contrast. Stop joints hold the rules true and rigid when open. Furnished with or without metal-bound leather cases. These rules may be depended upon for a very fair degree of accuracy, though on the most precise work a one-piece steel scale should be used.

All marked one edge of both sides, one side 8ths, other side 16ths of inches.

NO.	LENGTH	JOINTS	WT. PER DOZ.	WITHOUT CASES PRICE, EACH	WITH CASES PRICE, EACH
4141	1 ft.	4-inch joints	$\frac{1}{2}$ lb.	\$0.85	\$0.95
4142	2 ft.	4-inch joints	1 lb.	1.45	1.55
4143	3 ft.	4-inch joints	1 $\frac{1}{2}$ lb.	2.25	2.35
4144	4 ft.	4-inch joints	2 lbs.	3.00	3.10
4642	2 ft.	6-inch joints	1 lb.	1.40	1.55
4643	3 ft.	6-inch joints	1 $\frac{1}{2}$ lb.	2.20	2.35
4644	4 ft.	6-inch joints	2 $\frac{1}{4}$ lb.	2.95	3.10

Packing: Nos. 4141 and 4642—twelve in a box, all others six in a box.

NOTE—Unless cases are specified, we ship rules without cases.



### FOLDING STEEL POCKET RULES

Machine Divided — With Plain Joints

High grade rules of tempered steel,  $\frac{1}{2}$  inch wide and semi-flexible. With sunken figures and lines clear cut and showing up in good contrast. Furnished with or without metal-bound leather cases.

Number		Without Cases, Price, Ea.	With Cases, Price, Ea.
2041	1 ft. 4-inch joints. Marked both sides, upper edge 8ths, lower edge 16ths inches .....	\$0.75	\$0.85
2042	1 ft. 4-inch joints. Marked both sides, one side upper edge 8ths, lower edge 16ths; other side upper edge 8ths, lower edge first 2 inches in 32nds, third inch 64ths, balance 16ths inches .....	.85	.95
2043	1 ft. 4-inch joints. Marked both sides, one side upper edge 8ths, lower edge 16ths inches; other side upper edge first 5 centimetres in half-millimetres, balance millimetres, lower edge first 2 inches in 32nds, next $\frac{1}{2}$ inch 64ths, balance 16ths inches .....	.85	.95

Weight per doz.,  $\frac{1}{2}$  lb. Packing: Twelve in a box.

NOTE—Unless cases are specified, we ship rules without cases.



### ONE-FOOT FOLDING STEEL RULES WITH CASES IN UNIQUE DISPLAY

This is our lowest priced, yet a good pocket rule. Of flexible spring steel, folds to 4 inches and is  $\frac{3}{8}$  inch wide. Light and convenient to carry in the pocket anywhere. Marked one side only inches to 16ths. It has "Nubian" (black) Finish background, making the raised bright figures and lines most easily read. Cases are metal-bound.

The display device is in colors, has easel back, and will stand securely and attract attention anywhere.

This rule and display are popular with hardware, department and general stores, shops, bazaars, and others. This is the most effective method of selling rules of this class, which appeal to the general public.

No. 041 1 Foot Steel Rule With Case

Weight per gross, 6  $\frac{1}{4}$  lbs. Price, per gross.....\$28.80

Packing: One doz. in display, 12 displays (1 gross rules) per carton.





### FOLDING BRASS RULE

Popular with blacksmiths and other metal workers. Of hard brass, 9/16 inch wide, 15 gage (approximately 1/16 inch). Marked both sides on one edge, one side inches to 8ths, other side to 16ths.

No. 1085 2 ft. 12-inch sections. With spring joint.

Weight per doz., 3 1/4 lbs. Price, each.....\$1.00

Packing: Twelve in a box.

NOTE—For 2 foot, 2 fold Aluminum Rule, see Section Five of this Catalog.



### BLACKSMITHS BRASS HOOK AND HANDLE RULE

For blacksmiths and others working on hot metals, and also for measuring through holes, as hubs, etc. A one-piece rule and hook of hard brass 1 1/16 x 1/10 inch. Sunken and distinct lines and figures. Marked both sides 12 inches to 16ths; one side measures from inside of hook, other side from end of rule. Flat handle. Overall length 16 3/4 inches.

No. 1063 12 inch. Weight each, 1/2 lb. Price, each.....\$2.70



### BRASS COUNTER RULES

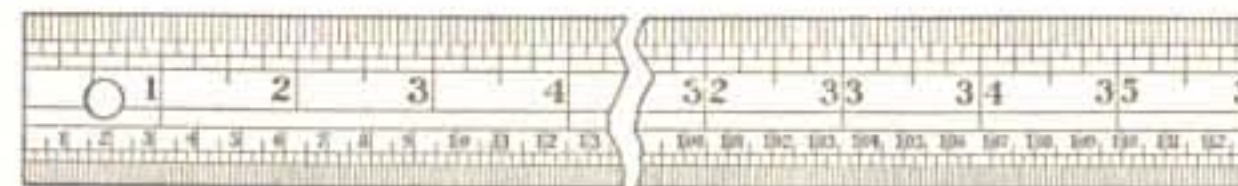
Convenient wherever goods are sold by the yard. Extensively used in dry goods and department stores. Accurate and most satisfactory to the dealer and the public. All marked one side only, and drilled and counter-sunk for attaching to counter.

No. 1068 3 ft. 3/4x19 gage (1/25 inch), hard brass.  
Marked in fractions of yards only as follows: 1/16, 1/8,  
1/4, 1/3, 3/8, 1/2, 5/8, 2/3, 3/4 and 7/8.

Weight each, 5 ozs. Price, each.....\$1.50

No. 1069 3 ft. 3/4 in. x 19 gage (1/25 inch), hard brass.  
Marked upper edge inches and 8ths, lower edge frac-  
tions of yards as follows: 1/16, 1/8, 1/4, 1/3, 3/8, 1/2,  
5/8, 2/3, 3/4 and 7/8.

Weight each, 14 ozs. Price, each.....\$2.00



THESE FIGURES DO NOT ALLOW FOR SEAMS	STRAIGHT DRY MEASURE	QT.	DIA.	HT.	TO FIND THE SURFACE OF A SPHERE MULTIPLY THE SQUARE OF THE DIA. BY 3.1416
		1	5	3 1/10	
		2	6 1/2	4 1/4	
		4	8 1/4	5 3/8	

### TINNERS STEEL CIRCUMFERENCE RULES

A STANDARD TOOL WITH TINNERS AND OTHER SHEET METAL WORKERS.

Of tempered steel, 1 1/4x1/16 inch (16 gage). Furnished in both plain and nickel plated finish.

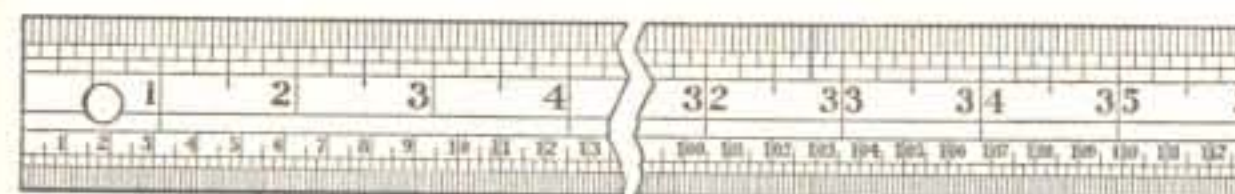
On one side this rule is marked on upper edge in standard measurement inches to 16ths, lower edge circumference inches to 8ths. With it the circumference of any circle is arrived at by simply measuring the diameter. This circumference is obtained at a direct reading, for the circumference markings bear the relation of 3.1416 to standard inches.

Other side of this rule carries a number of the most commonly used mathematical formulas, and size tables for laying out cans and measures as follows:

Liquid Measure,	flaring, 1/4 pint to 5 gallons.
Dry Measure,	flaring, 1/4 bushel to 2 bushels.
Dry Measure,	straight, 1 quart to 3 bushels.
Cans,	pitched top, 1 to 10 gallons.
Cans,	flat top, 1 to 100 gallons.

No. 95 PLAIN.	Length .....	3 ft.	4 ft.
	Price, each .....	\$3.75	\$4.50
No. 95 NICKEL PLATED.	Price, each .....	\$4.50	\$5.25
	Weights, each .....	3/4 lb.	1 lb.

NOTE—These rules can be supplied with the tables on the basis of Imperial, rather than United States wine gallons. They are regularly so furnished to the Canadian trade.



### STEEL CIRCUMFERENCE RULES

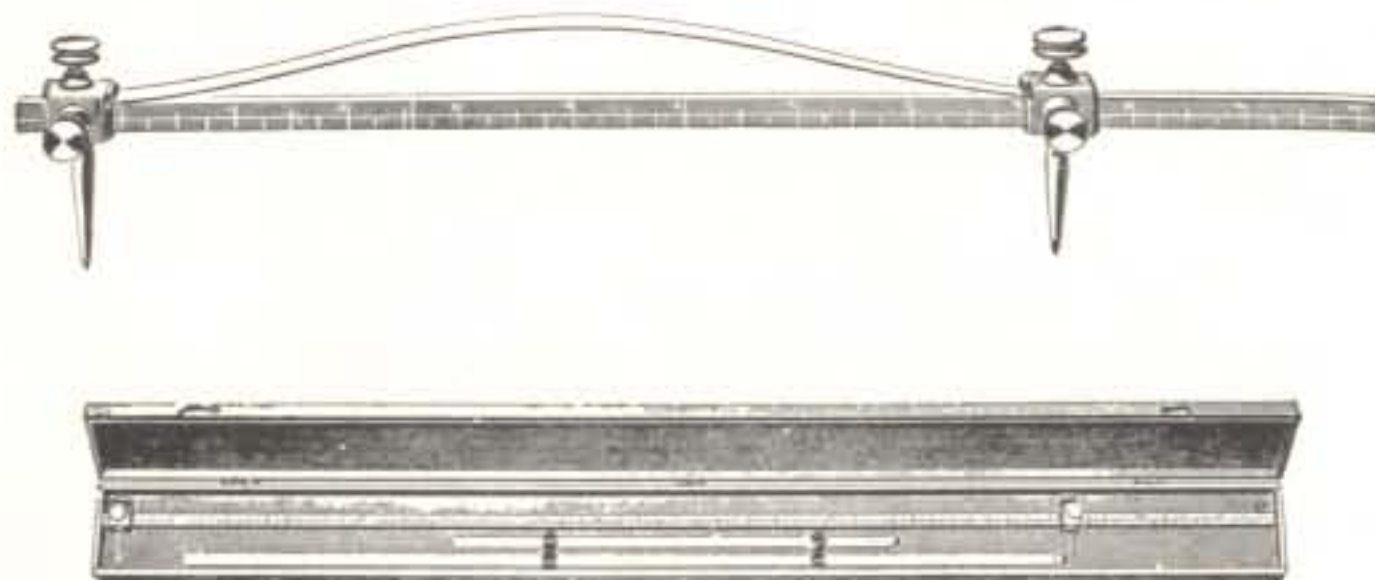
Of tempered steel, 1 1/4x1/16 inch. Furnished in both plain and nickel plated finish.

On one side this rule is marked upper edge inches to 16ths standard measurement, lower edge circumference inches to 8ths. With this, circumferences are determined directly by applying rule to diameter, as fully described in connection with No. 95 above. (This side of No. 96 is identically same as No. 95.) On other side this rule is marked standard measurement only, upper edge 8ths, lower edge 16ths of inches.

No. 96 PLAIN.	Length .....	3 ft.	4 ft.
	Price, each .....	\$3.75	\$4.50
No. 96 NICKEL PLATED.	Price, each .....	\$4.50	\$5.25
	Weights, each .....	3/4 lb.	1 lb.

ROSE TOOLS, INC.





### THE "MAGIC" PATTERN RULE With Chart

A GREAT LABOR SAVING TOOL FOR EVERY TIN SHOP.

A most popular device for quickly and accurately laying out sheet metal elbow patterns up to 14 inches in diameter and of any angle. The "Magic" Rule can be used also as a common rule, a circumference rule, a trammel, and a straight edge for ordinary work.

Consists of a graduated 48-inch steel bar 7/16 inch square, fitted with two brass sliding trammel heads with set screws, gibs and steel points. There is also a set of three flexible steel ribbons of different lengths and gages. The bar and all its parts are nicely nickel plated. The set also includes an instruction chart. The whole outfit is put up in a good hinged wooden box.

The bar is marked diameter inches to 8ths one side, standard inches to 8ths other side. When laying out an elbow pattern, first select the proper one of the three ribbons to be used with the bar. Fasten the left-hand trammel point to the end of the bar, and set the right-hand trammel point according to the diameter elbow wanted. Then raise the steel ribbon to the required height according to the angle elbow wanted. One glance at the chart gives this height.

For example, should an elbow be wanted 6 inches in diameter and of an angle corresponding with the long line "C" on the chart:

Set right-hand trammel point at figure 6 on front of rule. Measure with an ordinary rule the length of the perpendicular line 6 from bottom of diagram to where it meets angle line "C". Raise steel ribbon to this height, fasten it with set screw, and it is set ready for a pattern.

The chart is 18x22 inches in size, mounted on linen and very durable. It carries in addition to the elbow diagram, rules for cutting all kinds of flaring, oval, cylindrical and cone shaped vessels with the aid of the "Magic" rule.

"Magic" Pattern Rule Complete With Chart And Box.  
Weight each, 6 lbs. Price, each..... \$12.00

Chart only for "Magic" Rule. Price, each..... \$1.00

### Section Four

### BOXWOOD RULES

BOXWOOD Rules are the oldest type of folding wood rule now in common use. Ours are of genuine boxwood, thoroughly seasoned. The metal parts are of brass. Our rules are marked by improved methods, are well finished and carefully inspected.

There are three types of main joints: the round, as on popular priced rule No. 651; the sturdy square joint, also widely used; and the arch joint, a favorite with some mechanics. Boxwood Rules are made with edges plain, known as unbound; with outer edge only brass bound full length, known as half-bound; and with both edges brass bound, known as full-bound. Rules with middle plates have legs of hinge inserted in the wood; those with edge plates have legs of hinge flush with edge of the wood.

All of our Boxwood Rules have ends brass capped. All have closing pins, which hold the sections in alignment when closed. Widths specified are widths of the rules closed.

We stock and supply without extra charge Boxwood Rules in English pattern, that is, with figures running from left to right. Specify by prefixing "E" to stock number, as "E-651". The demand for such rules is practically limited to Great Britain and her possessions.

The following Boxwood Rules in English lengths, marked English and metric, are regular stock and take regular price:

465EM, 651EM, 751EM, 752EM, 771EM, 781EM, 881EM, 863L-EM, 873L-EM, 171EM, 372EM, 386EM, 388EM, 781C-EM.

We make the following rules in the 1 metre length, 4 fold, marked metric and English:

3851ME. 3852ME.

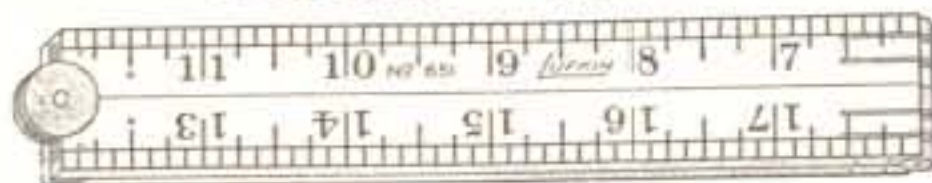
NOTE—Various miscellaneous rules made of boxwood are listed in Section Six of this Catalog.

ROSE TOOLS, INC.



## TWO FOOT BOXWOOD RULES

FOUR FOLD. UNBOUND.

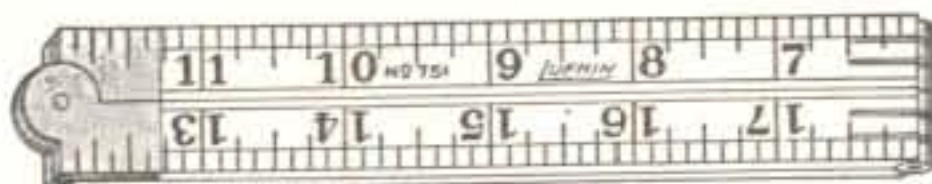


Number  
851 (68)

Two Foot. 1 inch wide. Round Joint. Middle Plates.  
Marked: 8ths and 16ths inch.  
The Markings And Figures, Being Especially Distinct,  
Are Most Easily Read. This Is The Popular Priced And  
Most Widely Used Boxwood Rule.  
Packing: 1 doz. in a box. Weight per doz., 1 1/4 lbs.

Per Doz.

\$3.00

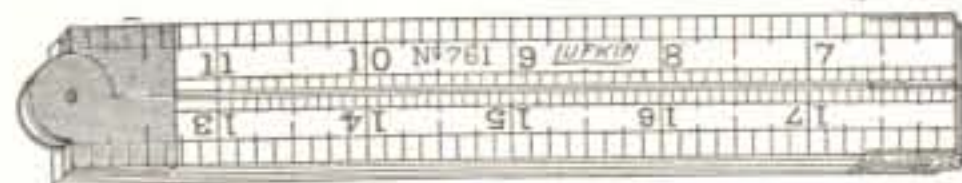


751 (61) Two Foot. 1 inch wide. Square Joint. Middle Plates.  
Marked: 8ths and 16ths inch.  
This Rule Also Has The Extra Prominent Markings And  
Figures, Most Legible. It Is The Largest Seller Among  
Medium Priced Rules.

\$4.20

752 (70) Two Foot. 1 3/8 inch wide. Square Joint. Middle Plates.  
Marked: Drafting scales and 8ths and 16ths inch.  
The Extra Width Gives This Rule Greater Strength.  
Packing: 1/2 doz. in a box. Weight per doz., 1 1/2 and 2 lbs.

\$6.00



760 (63 1/2) Two Foot. 3/4 inch wide. Square Joint. Edge Plates.  
Marked: 8ths, 10ths and 16ths inch.  
A Well Designed Narrow Rule.

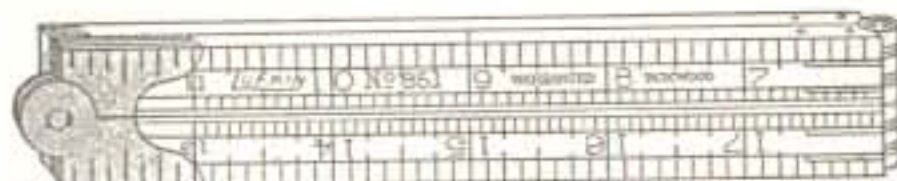
\$6.00

761 (63) Two Foot. 1 inch wide. Square Joint. Edge Plates.  
Marked: Drafting scales and 8ths, 10ths, 12ths and  
16ths inch.  
Affords A Wide Range of Markings And The Edge  
Plates Make This A Superior Rule.

\$6.00

762 (72) Two Foot. 1 3/8 inch wide. Square Joint. Edge Plates.  
Marked: Drafting scales and 8ths, 10ths, 16ths inch.  
Most Durable Of Our Unbound Two Foot Rules, Being  
Extra Width And Having Edge Plates.  
Packing: 1/2 doz. in a box. Weight per doz., 1, 1 1/2 and 2 lbs.

\$7.80



851 (51) Two Foot. 1 inch wide. Arch Joint. Middle Plates.  
Marked: Drafting scales and 8ths, 10ths, 12ths and  
16ths inch.  
A Wide Range Of Markings. The Strong Arch Joint  
Also Adds To The Appearance.

\$5.40

852 (73) Two Foot. 1 3/8 inch wide. Arch Joint. Middle Plates.  
Marked: Drafting scales and 8ths, 10ths, 16ths inch.  
The Neat Appearing Arch Joint In A Rule Of Extra  
Width.  
Packing: 1/2 doz. in a box. Weight per doz., 1 1/2 and 2 lbs.

\$7.80

## TWO FOOT BOXWOOD RULES

FOUR FOLD. UNBOUND.



Number  
861 (53)

Two Foot. 1 inch wide. Arch Joint. Edge Plates.  
Marked: Drafting scales and 8ths, 10ths, 12ths and  
16ths inch.  
Extra Strength Is Obtained By The Edge Plates, And  
The Substantial Arch Joint Also Adds To The Appearance.

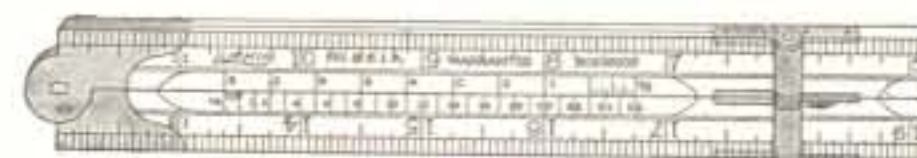
Per Doz.

\$7.20

862 (75) Two Foot. 1 3/8 inch wide. Arch Joint. Edge Plates.  
Marked: Drafting scales and 8ths, 10ths and 16ths inch.  
Being Extra Wide And Having Edge Plates, This Is A  
Substantial Rule.  
Packing: 1/2 doz. in a box. Weight per doz., 1 1/2 and 2 lbs.

\$9.60

## ARCHITECTS BOXWOOD RULE



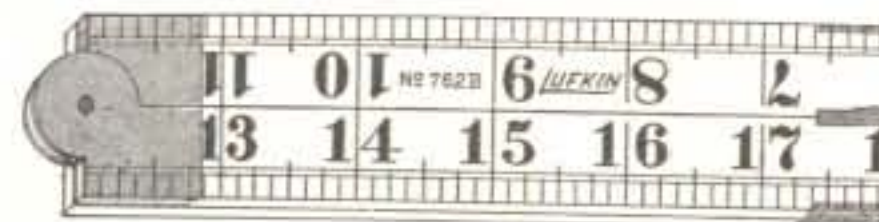
WITH INSIDE EDGES BEVELED.  
TWO FOOT. FOUR FOLD.

861A (53 1/2) 1 inch wide. Arch Joint. Edge Plates.  
Marked: 1/8, 1/4, 3/8, and 1/2 inch architect's scales, and  
with inches in 8ths, 10ths, 12ths and 16ths.  
Designed For Work On Drawings And Plans. The Scales,  
Being On The Beveled Faces, Lay Close To The Work.  
Packing: 1/2 doz. in a box. Weight per doz., 1 1/2 lbs.

\$12.00

## BLINDMANS RULES

These Boxwood Rules have especially large and heavy  
face figures, and are therefore very easily read. They  
are well adapted to use in poorly lighted places, or by  
persons with poor eyesight. They are also sturdy, being  
1 3/8 inch wide and having square joint.



TWO FOOT. FOUR FOLD.

762B (7) 1 3/8 inch wide. Square Joint. Edge Plates.  
Marked: 8ths and 16ths inch.  
The Standard Two Foot Blindman's Rule, Extra Legible.  
Packing: 1/2 doz. in a box. Weight per doz., 2 lbs.

\$12.00



THREE FOOT. FOUR FOLD.

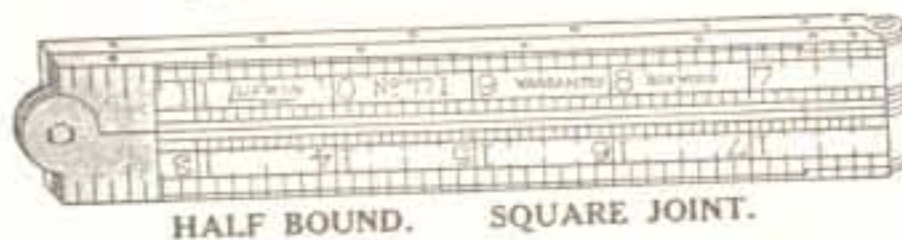
3752B 1 3/8 inch wide. Square Joint. Middle Plates.  
Marked: 8ths and 16ths inch.  
Combining Extra Length (3 ft.) And The Blindman's,  
Easy Reading, Feature, This Rule Is Popular.  
Packing: 1/2 doz. in a box. Weight per doz., 3 lbs.

\$13.80

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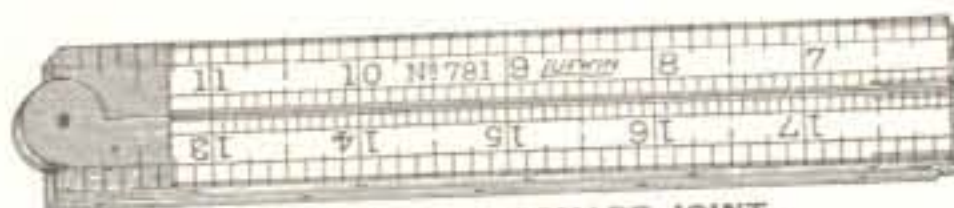


## TWO FOOT BOXWOOD RULES FOUR FOLD. BRASS BOUND.



HALF BOUND. SQUARE JOINT.

- Number** **Per Doz.**
- 771 (84) Two Foot. 1 inch wide. Square Joint. Outer Edge Brass Bound. \$9.00  
Marked: Drafting scales and 8ths, 10ths, 12ths and 16ths inch.  
Our Only Standard Pattern Half Bound Rule.  
Packing: 1/2 doz. in a box. Weight per doz., 2 lbs.



FULL BOUND. SQUARE JOINT.

- 780 (62 1/2) Two Foot. 3/4 inch wide. Square Joint. Both Edges Brass Bound. \$11.40  
Marked: 8ths, 10ths, 12ths and 16ths inch.  
Among Extra Narrow 2 Foot Rules, This Is The Most Durable.
- 781 (62) Two Foot. 1 inch wide. Square Joint. Both Edges Brass Bound. \$11.40  
Marked: Drafting scales and 8ths, 10ths, 12ths and 16ths inch.  
By Far The Most Popular Of Brass Bound Rules. A Durable And Practical Rule For Mechanics And For General Use.
- 782 (72 1/2) Two Foot. 1 3/8 inch wide. Square Joint. Both Edges Brass Bound. \$13.80  
Marked: Drafting scales and 8ths, 10ths and 16ths inch.  
Being Wide Pattern And Full Brass Bound, This Rule Is Extra Durable.  
Packing: 1/2 doz. in a box. Weights per doz., 2, 2 1/2 and 3 lbs.



FULL BOUND. ARCH JOINT.

- 881 (54) Two Foot. 1 inch wide. Arch Joint. Both Edges Brass Bound. \$12.60  
Marked: Drafting scales and 8ths, 10ths, 12ths and 16ths inch.  
The Neat Appearing Arch Joint In A Full Bound Rule Of Most Popular Width. And With Good Range of Markings.
- 882 (76) Two Foot. 1 3/8 inch wide. Arch Joint. Both Edges Brass Bound. \$15.00  
Marked: Drafting scales and 8ths, 10ths and 16ths inch.  
A Rule Of The Most Durable Type And With The Attractive Arch Joint.  
Packing: 1/2 doz. in a box. Weights per doz., 2 1/2 and 3 lbs.

## COMBINATION RULE, LEVEL AND PROTRACTOR



TWO FOOT. FOUR FOLD.

- Sturdy Boxwood Rules with Spirit Level and Protractor. Very handy for carpenters and other mechanics, and for general use. Not only practical rules, but with them angles of any degree are readily measured or laid out, by the aid of the protractor plate. They also carry a convenient level, which, when rule is closed, is well protected.
- Number** **Per Doz.**
- 863L Two Foot. 1 1/2 inch wide. Arch Joint. Edge Plates. \$24.00  
Marked: Drafting scales and 8ths and 16ths inch.
- 873L Two Foot. 1 1/2 inch wide. Arch Joint. Outer Edge Brass Bound. \$30.00  
Marked: Drafting scales and 8ths and 16ths inch.  
Packing: 1 rule in a box. Weights each, 4 and 5 oz.

## THREE FOOT BOXWOOD RULES



FOUR FOLD. UNBOUND.

- 3851 (66 1/2) Three Foot. 1 inch wide. Arch Joint. Middle Plates. Per Doz. \$9.00  
Marked: 8ths and 16ths inch.  
Rules Of This Length Are Steadily Becoming More Popular.  
Packing: 1/2 doz. in a box. Weight per doz., 2 lbs.



FOUR FOLD. UNBOUND.

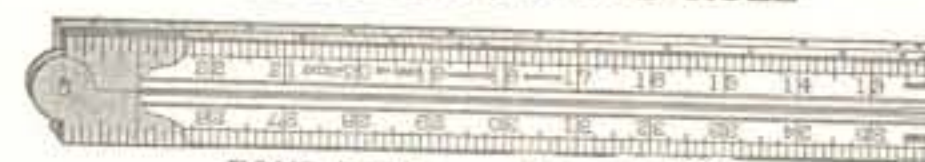
- 3861 (66 1/4) Three Foot. 1 inch wide. Arch Joint. Edge Plates. \$10.80  
Marked: 8ths and 16ths inch.  
A Good Rule, Having Edge Plates And Arch Joint.  
Packing: 1/2 doz. in a box. Weight per doz., 2 lbs.



FOUR FOLD FULL BOUND.

- 3881 (66 3/4) Three Foot. 1 inch wide. Arch Joint. Both Edges Brass Bound. \$22.20  
Marked: 8ths and 16ths inch.  
The Best Three Foot Rule.  
Packing: 1/2 doz. in a box. Weight per doz., 3 1/4 lbs.

## FOUR FOOT BOXWOOD RULE



FOUR FOLD. FULL BOUND.

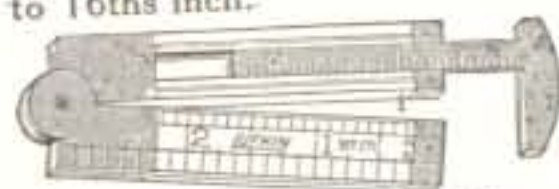
- 4883 (94) Four Foot. 1 1/2 inch wide. Arch Joint. Both Edges Brass Bound. \$40.20  
Marked: 8ths and 16ths inch.  
The Longest Of Our Folding Boxwood Rules. Staunchly Built, Of Good Width, And, Being Full Bound, Stands Up Well. Opening In 1 ft. Sections, This Is An Especially Practical Rule With Which To Take The Longer Measurements.  
Packing: 1/2 doz. in a box. Weight per doz., 5 1/2 lbs.

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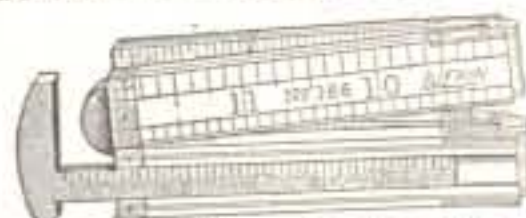


## BOXWOOD CALIPER RULES

Universally used in measuring pipe and fittings, rods and bars, bolts, nuts, and in other rough calipering work. Suitable as well for all measuring, the rule itself also being graduated. One leg of these rules carries a brass caliper slide, which is marked on outside face to 32nds, inside face to 16ths inch.



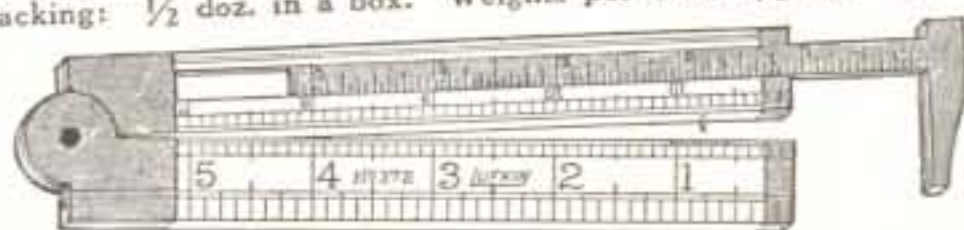
SIX INCH. TWO FOLD.



ONE FOOT. FOUR FOLD.

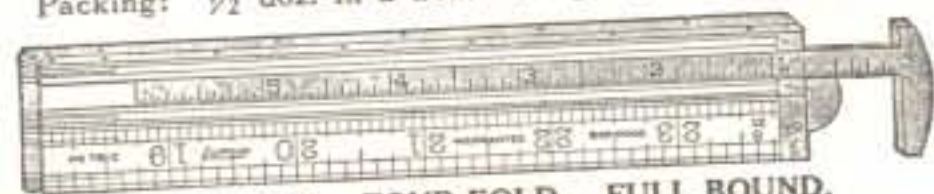
Per Doz.

- Number**
- 171 (36) Six Inch. Two Fold. 1 inch wide. Square Joint. Unbound.  
Marked: Rule..... 8ths, 10ths, 12ths and 16ths inch;  
Caliper..... 16ths and 32nds inch.  
A Compact, Light Weight Pocket Rule and Caliper. \$7.20
- 172 (13½) Six Inch. Two Fold. 1 ¾ inch wide. Square Joint.  
With brass bit plate, protecting wood from closing pin.  
Marked: Rule..... 8ths and 16ths inch;  
Caliper..... 16ths and 32nds inch. \$10.20
- A Short, Sturdy Rule And Caliper.  
Packing: ½ doz. in a box. Weight per doz., 1 lb.
- 386 (32) One Foot. Four Fold. 1 inch wide. Arch Joint. Edge Plates.  
Marked: Rule..... 8ths, 10ths, 12ths and 16ths inch;  
Caliper..... 16ths and 32nds inch. \$10.80
- A Convenient Small Pocket Size, Yet Opens To One Foot.
- 388 (32½) One Foot. Four Fold. 1 inch wide. Arch Joint. Full Bound.  
Marked: Rule..... 8ths, 10ths, 12ths and 16ths inch;  
Caliper..... 16ths and 32nds inch. \$16.20
- A Durable Rule. One Foot Long, Yet Folds to 3 Inches.  
Packing: ½ doz. in a box. Weight per doz., 1½ and 1¾ lbs.



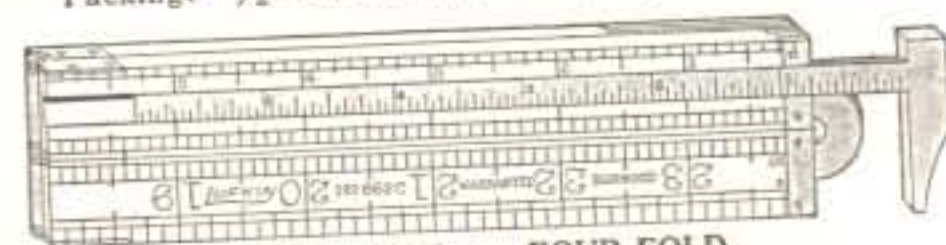
ONE FOOT. TWO FOLD.

- 372 (36½) 1 ¾ inch wide. Square Joint.  
With brass bit plate, protecting wood from closing pin.  
Marked: Rule..... 8ths, 10ths, 12ths and 16ths inch;  
Caliper..... 16ths and 32nds inch. \$10.20
- Popular Because Of Length of Caliper, And Being a Sturdy Rule.  
Packing: ½ doz. in a box. Weight per doz., 1¾ lbs.



TWO FOOT. FOUR FOLD. FULL BOUND.

- 781C (62C) 1 inch wide. Square Joint. Both Edges Brass Bound.  
Marked: Rule..... 8ths, 10ths, 12ths and 16ths inch;  
Caliper..... 16ths and 32nds inch. \$21.00
- Very Practical And Popular Both As Rule and Caliper. A 6 Inch Caliper In  
A Durable, Standard Size, 2 Foot Rule.  
Packing: ½ doz. in a box. Weight per doz., 2¾ lbs.



TWO FOOT. FOUR FOLD.

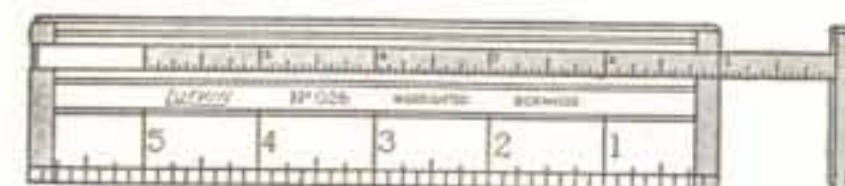
- 862C (83C) 1 ¾ inch wide. Arch Joint. Edge Plates.  
Marked: Rule..... 8ths, 10ths and 16ths inch;  
Caliper..... 16ths and 32nds inch. \$19.20
- Combines The 6 Inch Caliper Slide And A Substantial Rule, Having Edge  
Plates And Arch Joint.  
Packing: ½ doz. in a box. Weight per doz., 2¾ lbs.

## BOXWOOD CALIPER GAGES

FOUR INCH. SIX INCH.

This line of one-piece (not folding) Caliper Gages was developed by The Lufkin Rule Co. and is proving very popular. While the wood part, as well as the caliper slide, is graduated, these are primarily for ordinary calipering work, about mills, shops, stores, etc. They will quickly measure diameter of pipe and fittings, bolts and nuts, bars, rods, etc., and, being compact, are conveniently carried in the pocket everywhere.

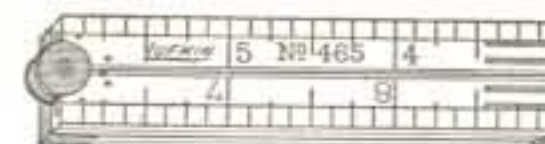
Markings: On all these gages the caliper slide is marked 32nds on outside, 16ths inch on inside face; the rule, or wood part, is in 8ths and 16ths.



- Number**
- 014 Four Inch. 1 in. wide. Unbound. Weight per doz., ¾ lb. \$6.00
- 016 Six Inch. 1 in. wide. Unbound. Weight per doz., 1 lb. 7.20
- 024 Four Inch. 1 ¾ in. wide. Unbound. Weight per doz., 1 lb. 6.60
- 026 Six Inch. 1 ¾ in. wide. Unbound. Weight per doz., 1¼ lb. 7.80
- Packing: ½ doz. in a box.

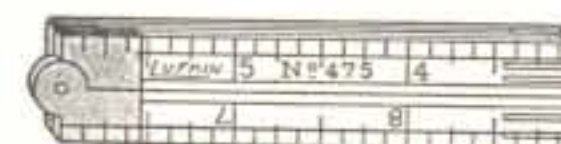
NOTE—Button Gage... 024 can, at small extra charge, be supplied with caliper marked 40ths of an inch, as used in measuring buttons. Known as rule No. 024B.

## ONE FOOT BOXWOOD RULES



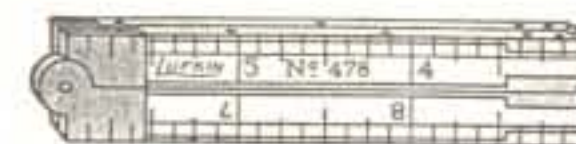
FOUR FOLD. UNBOUND.

- 465 (69) One Foot. ¾ inch wide. Round Joint. Middle Plates. Discontinued
- Marked: 8ths and 16ths inch.  
A Very Small, Low Priced Rule, Designed For Light Work.
- Packing: 1 doz. in a box. Weight per doz., ½ lb.



FOUR FOLD. UNBOUND.

- 475 (65) One Foot. ¾ inch wide. Square Joint. Middle Plates. Discontinued
- Marked: 8ths and 16ths inch.  
Our Very Small Pocket Rule With Square Joint.
- Packing: ½ doz. in a box. Weight per doz., ½ lb.



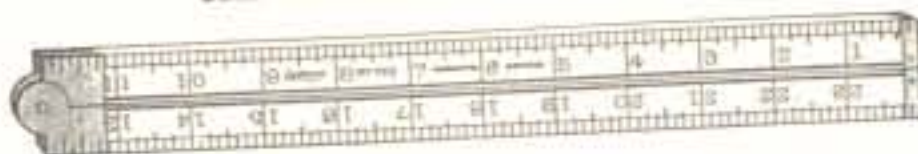
FOUR FOLD. FULL BOUND.

- 478 (65½) One Foot. ¾ inch wide. Square Joint. Both Edges Brass Bound. Discontinued
- Marked: 8ths and 16ths inch.  
Most Substantial Of Our Very Small One Foot Rules.  
A Convenient Vest Pocket Size.
- Packing: ½ doz. in a box. Weight per doz., 1 lb.

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## TWO FOOT BOXWOOD RULE THE MANUAL TRAINING RULE



TWO FOLD. - UNBOUND.

Per Doz.

Number  
703 (18)

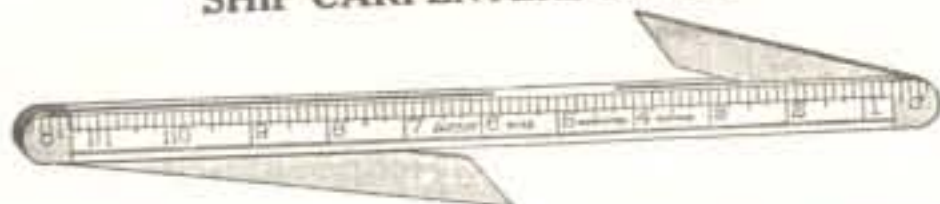
Two Foot. 1½ inch wide. Square Joint.  
Marked: 8ths and 16ths inch.  
This Is The Medium Priced Rule In 12-Inch Sections,  
A Type That Is Widely Used In Manual Training And  
Vocational School Work.

\$6.00

Packing: ½ doz. in a box. Weight per doz., 2 lbs.

NOTE—For 1 foot, one-piece Manual Training Rules in maple and boxwood,  
see page 138.

## SHIP CARPENTERS BEVEL

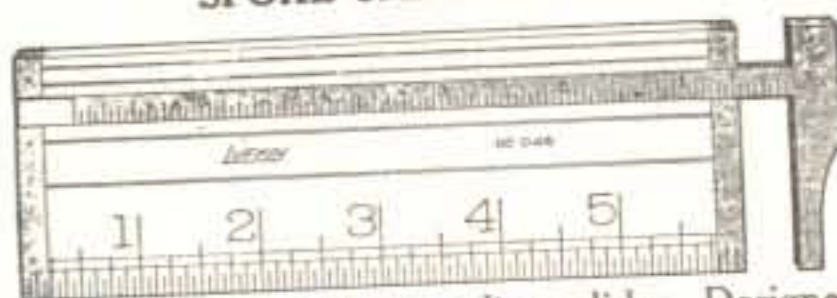


42

One Foot. Boxwood Rule. ¾ inch wide. With 2 brass tongues.  
The tongues or bevels fold into the rule.  
Rule marked. 8ths and 16ths inch.  
Well Adapted To Work Such As That Of Ship Carpenters.  
Packing: 1 doz. in a box. Weight per doz., 2 lbs.

\$7.80

## SPOKE CALIPER RULE



A Boxwood Rule with brass caliper slide. Designed and  
especially suitable for calipering diameter of wood spokes  
for automobile and other wheels. Being a wide and sub-  
stantial 6-inch Caliper Rule, this article will prove handy  
in other fields.

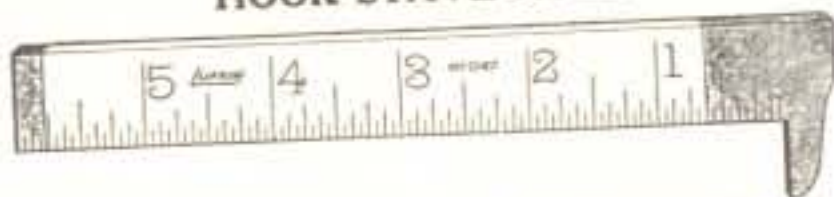
046

Six Inch. 2 inches wide. Not folding.  
Marked: Rule and Caliper in 16ths inch.

\$24.00

Packing: ½ doz. in a box. Weight per doz., 2 lbs.

## HOOKE STAVE RULE



Designed to meet the needs of barrel manufacturers in  
measuring staves. A substantial 6 inch one-piece Box-  
wood Rule, fitted at one end with strong brass hook,  
other end brass capped.

047

Six Inch. ¾ inch wide.  
Marked: Lower edge of both sides, inches to 16ths,  
measuring from inside of hook.

\$12.00

Packing: ½ doz. in a box. Weight per doz., 1 lb.

## Section Five

## SPRING JOINT RULES

**SPRING Joint Wood Rules** are the type of rule most widely  
used in common measuring. Ours are made of flexible,  
tough hardwood sections, nicely enameled and securely  
assembled, with firm, yet smooth-working spring joints.

We offer not only a complete line, but also exclusive  
features and items. Among these are the following:

The Folding End Hook Attachment, just the thing  
for taking measurements out of arm's reach, and  
handy in all places.

Boxwood Extension Rules, ideal for taking inside as  
well as other measurements. The sections are some-  
what heavier than those of common folding rules  
and are of genuine boxwood, making an article of  
the highest grade.

In Concealed Joint Rules the rivet is not visible: in the  
Rivet Joint Rules it passes entirely through the wood. The  
price of both is the same, and they sell in about equal quan-  
tities. All our Spring Joint Wood Rules have ends metal  
capped

**ALUMINUM Folding Rules** are also listed in this section  
of catalog. For these rust-proof metal rules there is  
large demand. Like all aluminum rules, ours are light  
weight, but the material we use is a composition made espe-  
cially for our purpose, producing a durable rule that holds its  
shape well.

Aluminum Rules With Folding Hook. This is an entirely  
new thing in rules of this kind. It is the feature that has  
proven so popular in connection with our Spring Joint Wood  
Rules. It is an exclusive Lufkin improvement and will stimu-  
late the sale of Aluminum Rules as it has that of the others.

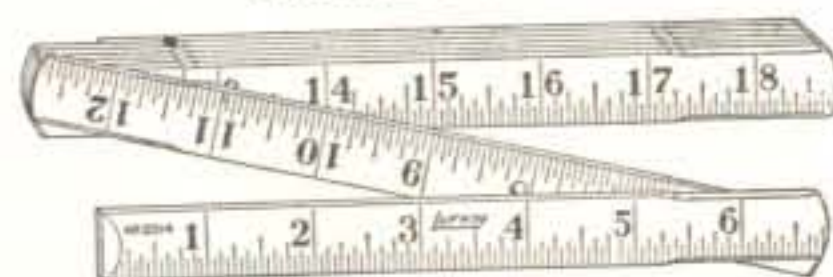
NOTE—Spring Joint Board and Log Rules, No. 523 and  
No. 524, are listed in Section Seven of this  
Catalog.



# SPRING JOINT RULES

Flexible. Six-Inch Folds.  $\frac{5}{8}$  Inch Wide.  
Brass Plated Trimmings.

## CONCEALED JOINTS



Marked Consecutive Inches to 16ths, Both Sides.

Yellow Enameled				White Enameled			
No.		Wt. Doz.	Per Doz.	No.		Wt. Doz.	Per Doz.
8512	2 ft.	1 lbs.	\$2.40	8612	2 ft.	1 lbs.	\$3.00
8513	3 ft.	1½ lbs.	3.60	8613	3 ft.	1½ lbs.	4.20
8514	4 ft.	2 lbs.	4.80	8614	4 ft.	2 lbs.	5.40
8515	5 ft.	2½ lbs.	6.00	8615	5 ft.	2½ lbs.	6.60
8516	6 ft.	3 lbs.	7.20	8616	6 ft.	3 lbs.	7.80
8518	8 ft.	4 lbs.	9.60	8618	8 ft.	4 lbs.	10.20

NOTE—For Above Rules With Folding End Hook, See Page 131.



With Inside Marking (numbering commences on inside face of rule)  
Marked Consecutive Inches to 16ths, Both Sides.

Yellow Enameled				White Enameled			
No.		Wt. Doz.	Per Doz.	No.		Wt. Doz.	Per Doz.
8513F	3 ft.	1½ lbs.	\$3.60	8613F	3 ft.	1½ lbs.	\$4.20
8514F	4 ft.	2 lbs.	4.80	8614F	4 ft.	2 lbs.	5.40
8515F	5 ft.	2½ lbs.	6.00	8615F	5 ft.	2½ lbs.	6.60
8516F	6 ft.	3 lbs.	7.20	8616F	6 ft.	3 lbs.	7.80
8518F	8 ft.	4 lbs.	9.60	8618F	8 ft.	4 lbs.	10.20



Marked Feet, Inches and 16ths, Both Sides.

With Instantaneous Readings (foot numbers in red and repeated at each inch).

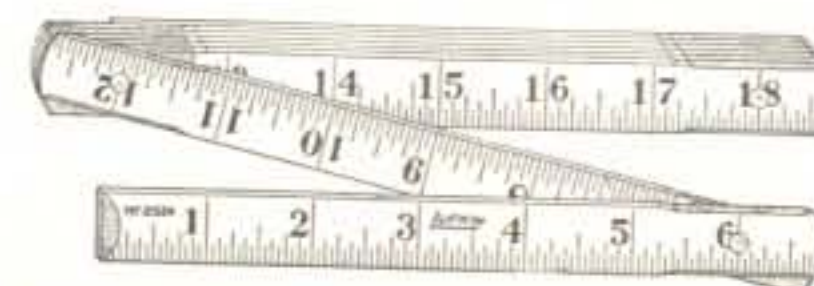
Yellow Enameled				White Enameled			
No.		Wt. Doz.	Per Doz.	No.		Wt. Doz.	Per Doz.
9513	3 ft.	1½ lbs.	\$3.60	9613	3 ft.	1½ lbs.	\$4.20
9514	4 ft.	2 lbs.	4.80	9614	4 ft.	2 lbs.	5.40
9515	5 ft.	2½ lbs.	6.00	9615	5 ft.	2½ lbs.	6.60
9516	6 ft.	3 lbs.	7.20	9616	6 ft.	3 lbs.	7.80
9518	8 ft.	4 lbs.	9.60	9618	8 ft.	4 lbs.	10.20

Packing: 2 and 3 ft. rules... 1 doz. in a box;  
all other lengths... ½ doz. in a box.

# SPRING JOINT RULES

Flexible. Six-Inch Folds.  $\frac{5}{8}$  Inch Wide.  
Brass Plated Trimmings.

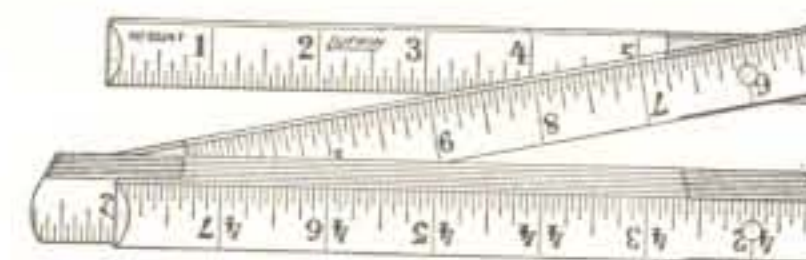
## RIVET JOINTS



Marked Consecutive Inches to 16ths, Both Sides

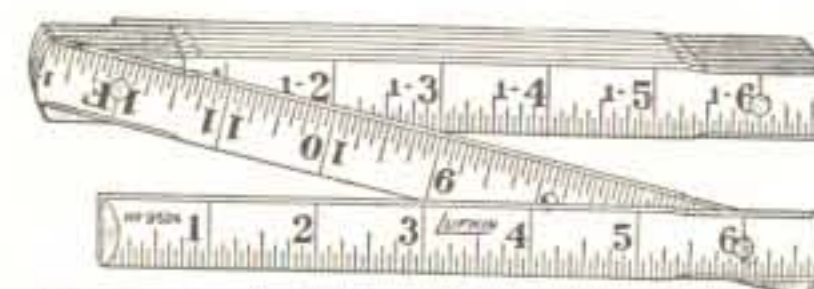
Yellow Enameled				White Enameled			
No.		Wt. Doz.	Per Doz.	No.		Wt. Doz.	Per Doz.
8522	2 ft.	1 lbs.	\$2.40	8622	2 ft.	1 lbs.	\$3.00
8523	3 ft.	1½ lbs.	3.60	8623	3 ft.	1½ lbs.	4.20
8524	4 ft.	2 lbs.	4.80	8624	4 ft.	2 lbs.	5.40
8525	5 ft.	2½ lbs.	6.00	8625	5 ft.	2½ lbs.	6.60
8526	6 ft.	3 lbs.	7.20	8626	6 ft.	3 lbs.	7.80
8528	8 ft.	4 lbs.	9.60	8628	8 ft.	4 lbs.	10.20

NOTE—For Above Rules With Folding End Hook, See Page 131.



With Inside Marking (numbering commences on inside face of rule)  
Marked Consecutive Inches to 16ths, Both Sides.

Yellow Enameled				White Enameled			
No.		Wt. Doz.	Per Doz.	No.		Wt. Doz.	Per Doz.
8523F	3 ft.	1½ lbs.	\$3.60	8623F	3 ft.	1½ lbs.	\$4.20
8524F	4 ft.	2 lbs.	4.80	8624F	4 ft.	2 lbs.	5.40
8525F	5 ft.	2½ lbs.	6.00	8625F	5 ft.	2½ lbs.	6.60
8526F	6 ft.	3 lbs.	7.20	8626F	6 ft.	3 lbs.	7.80
8528F	8 ft.	4 lbs.	9.60	8628F	8 ft.	4 lbs.	10.20



Marked Feet, Inches and 16ths, Both Sides.

With Instantaneous Readings (foot numbers in red and repeated at each inch).

Yellow Enameled				White Enameled			
No.		Wt. Doz.	Per Doz.	No.		Wt. Doz.	Per Doz.
9523	3 ft.	1½ lbs.	\$3.60	9623	3 ft.	1½ lbs.	\$4.20
9524	4 ft.	2 lbs.	4.80	9624	4 ft.	2 lbs.	5.40
9525	5 ft.	2½ lbs.	6.00	9625	5 ft.	2½ lbs.	6.60
9526	6 ft.	3 lbs.	7.20	9626	6 ft.	3 lbs.	7.80
9528	8 ft.	4 lbs.	9.60	9628	8 ft.	4 lbs.	10.20

Packing: 2 and 3 ft. rules... 1 doz. in a box;  
all other lengths... ½ doz. in a box.



**"RED END" SPRING JOINT RULES**  
With Strike Plates  
Flexible Six-inch Folds  $\frac{5}{8}$  inch wide  
Trimmings of Solid Brass

**Concealed Joints**



"RED END" Spring Joint Rules are the finest wood rules on the market. Joints and Strike Plates are of solid brass. Strike Plates are small brass plates fastened to the flat surfaces of each rule section which prevent the wearing away of the lines and figures when opening and closing the rule.

The Cream Enamel is a finish found on no other rule and is a marked improvement over the common yellow finish. The White Enamel is as near "Snow White" as it is possible to obtain and both colors have a beautiful gloss finish which will not crack, chip or blister. All ends are gloss red which give the rules a "dressed up" appearance and quickly distinguish them from the common grades of folding wood rules.

**Marked Consecutive Inches to 16ths, Both Sides**

**Cream Enameled**

No.	Wt. Doz.	Per Doz.
053 3 ft.	1½ lbs.	\$ 4.80
054 4 ft.	2 lbs.	6.00
055 5 ft.	2½ lbs.	7.20
056 6 ft.	3 lbs.	8.40
058 8 ft.	4 lbs.	10.80

**White Enameled**

No.	Wt. Doz.	Per Doz.
063 3 ft.	1½ lbs.	\$ 5.40
064 4 ft.	2 lbs.	6.60
065 5 ft.	2½ lbs.	7.80
066 6 ft.	3 lbs.	9.00
068 8 ft.	4 lbs.	11.40

NOTE:—For Above Rules With Folding End Hook, See Page 131.



**WITH INSIDE MARKING**

(Numbering commences on inside face of rule)

**Marked Consecutive Inches to 16ths, Both Sides**  
White Enameled Only

No.	Wt. Doz.	Per Doz.
064F 4 ft.	2 lbs.	\$ 6.60
065F 5 ft.	2½ lbs.	7.80
066F 6 ft.	3 lbs.	9.00
068F 8 ft.	4 lbs.	11.40

Packing:—3 ft. rules, 1 doz. in box; All other lengths  $\frac{1}{2}$  doz. in box.

**SPRING JOINT RULES WITH FOLDING HOOK**  
(Patented June 13, 1916)

Flexible. Six-Inch Folds.  $\frac{5}{8}$  Inch Wide.



Showing Hook Open



Showing Hook Closed

**AN EXCLUSIVE LUFKIN FEATURE MEETING AN EVERYDAY NEED.**

Just the thing for taking measurements out of arm's reach, and handy in all measuring. A small, substantial steel hook fitted to one end of Spring Joint Rules, so attached that with but a twist of the finger it will fold up and remain flush with the edge of the rule, making it for use same as ordinary rules without hook. Zero point falls at inside of hook when open, at extreme end of rule, same as regular rules, when hook is closed.

**Concealed Joints. Brass Plated Trimmings.**

**Marked Consecutive Inches to 16ths, Both Sides.**

**Yellow Enameled**

No.	Wt. Doz.	Per Doz.
H8514 4 ft.	2 lbs.	\$5.40
H8515 5 ft.	2½ lbs.	6.60
H8516 6 ft.	3 lbs.	7.80
H8518 8 ft.	4 lbs.	10.20

**White Enameled**

No.	Wt. Doz.	Per Doz.
H8614 4 ft.	2 lbs.	\$6.00
H8615 5 ft.	2½ lbs.	7.20
H8616 6 ft.	3 lbs.	8.40
H8618 8 ft.	4 lbs.	10.80

**Rivet Joints. Brass Plated Trimmings.**

**Marked Consecutive Inches to 16ths, Both Sides.**

**Yellow Enameled**

No.	Wt. Doz.	Per Doz.
H8524 4 ft.	2 lbs.	\$5.40
H8525 5 ft.	2½ lbs.	6.60
H8526 6 ft.	3 lbs.	7.80
H8528 8 ft.	4 lbs.	10.20

**White Enameled**

No.	Wt. Doz.	Per Doz.
H8624 4 ft.	2 lbs.	\$6.00
H8625 5 ft.	2½ lbs.	7.20
H8626 6 ft.	3 lbs.	8.40
H8628 8 ft.	4 lbs.	10.80

**"RED END" RULES**

**With Strike Plates Solid Brass Trimmings Concealed Joints**

**Marked Consecutive Inches to 16ths, Both Sides**

**Cream Enameled**

No.	Wt. Doz.	Per Doz.
H054 4 ft.	2 lbs.	\$6.60
H055 5 ft.	2½ lbs.	7.80
H056 6 ft.	3 lbs.	9.00
H058 8 ft.	4 lbs.	11.40

**White Enameled**

No.	Wt. Doz.	Per Doz.
H064 4 ft.	2 lbs.	\$7.20
H065 5 ft.	2½ lbs.	8.40
H066 6 ft.	3 lbs.	9.60
H068 8 ft.	4 lbs.	12.00



**SPRING JOINT RULES**  
Flexible. Six-Inch Folds.  $\frac{5}{8}$  Inch Wide.  
Brass Plated Trimmings.



Marked Feet, 10ths and 100ths of feet, one side;  
Feet, Inches and 16ths other side.

Instantaneous Readings (foot numbers in red and repeated at each 10th and each inch).

CONCEALED JOINTS							
Yellow Enameled				White Enameled			
No.	Wt. Doz.	Per Doz.		No.	Wt. Doz.	Per Doz.	
9514D	4 ft.	2 lbs.	\$4.80	9614D	4 ft.	2 lbs.	\$5.40
9515D	5 ft.	2½ lbs.	6.00	9615D	5 ft.	2½ lbs.	6.60
9516D	6 ft.	3 lbs.	7.20	9616D	6 ft.	3 lbs.	7.80

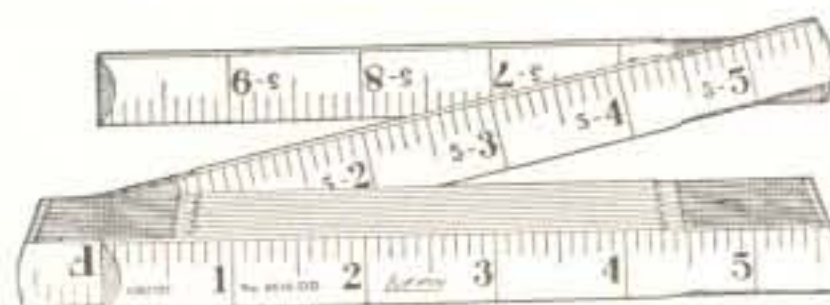


Marked Feet, 10ths and 100ths of feet, one side;  
Feet, Inches and 16ths other side.

Instantaneous Readings (foot numbers in red and repeated at each 10th and each inch).

RIVET JOINTS							
Yellow Enameled				White Enameled			
No.	Wt. Doz.	Per Doz.		No.	Wt. Doz.	Per Doz.	
9524D	4 ft.	2 lbs.	\$4.80	9624D	4 ft.	2 lbs.	\$5.40
9525D	5 ft.	2½ lbs.	6.00	9625D	5 ft.	2½ lbs.	6.60
9526D	6 ft.	3 lbs.	7.20	9626D	6 ft.	3 lbs.	7.80

Packing: ½ doz. in a box.



Marked Feet, 10ths and 100ths of Feet  
Both Sides

Instantaneous Readings (foot numbers in red and repeated at each 10th).

CONCEALED JOINTS

White Enameled Only

No.	Wt. per doz.	Per Doz.
9616DD 6 ft.	3 lbs.	\$7.80

Packing:—½ doz. in a box.

For  
Inside  
Measurements



For  
Regular  
Measurements



A MOST CONVENIENT RULE FOR BOTH PURPOSES

Particularly designed for taking inside measurements of openings such as door and window frames, for boilers, and other such measurements as are difficult to take with the ordinary folding rule. This rule, however, also perfectly serves every purpose of a common rule in ordinary measuring, and is extra durable. It will appeal especially to carpenters, architects, contractors, inspectors, automobile workers and others.

A six-inch graduated brass slide is fitted into the first section of the rule. This slide runs in a T slot, and, having stop at each end, cannot fall out.

The rule is made of genuine boxwood, with secure, smooth-working spring joints of the rivet type. The sections being of extra weight, the rule is somewhat more rigid than ordinary folding rules. The markings are especially distinct and the article is well finished in the natural boxwood.

To take an inside measurement, open rule to within 6 inches or less of the distance. Extend the brass slide by push button to point of measurement. Then add measurement on brass slide to that shown at extreme end of rule. This extension slide is well adapted also to measuring depth of mortises and other holes.

Rule Marked Consecutive Inches to 16ths, Both Sides.  
Brass Slide Marked Inches to 16ths.

No.	Wt. Per Doz.	Per Doz.
X8536 6 ft. (12 fold)	4 ¼ lbs.	\$16.00

Packing: ½ doz. in a box.

WITH FOLDING HOOK

No.	Wt. Per Doz.	Per Doz.
HX8536 6 ft. (12 fold)	4 ¼ lbs.	\$17.20

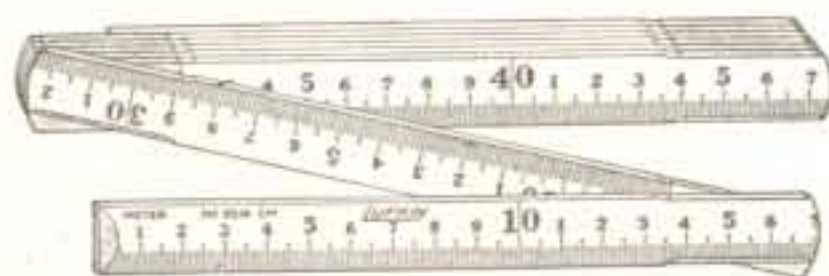
Packing: ½ doz. in a box.

ROSE TOOLS, INC.



# METRIC SPRING JOINT RULES

Flexible. 5/8 Inch (16 mm) Wide. Brass Plated Trimmings.  
CONCEALED JOINTS



In ordering metric rules always specify number of folds, in addition to stock number, as "7511ME—5 fold," etc.

## YELLOW ENAMELED

## WHITE ENAMELED

Marked Metric And English.  
Inches to 16ths one side; millimetres other side.

Number		Wt. Per Doz. Lbs.	Per Doz.
8512EM	2 ft. ( 4 Fold)	1	\$2.40
8513EM	3 ft. ( 6 Fold)	1 1/2	3.60
8514EM	4 ft. ( 8 Fold)	2	4.80
8515EM	5 ft. (10 Fold)	2 1/2	6.00
8516EM	6 ft. (12 Fold)	3	7.20
7511ME	5 FOLD, 1 metre	1 1/4	3.60
7511ME	6 FOLD, 1 metre	1 1/2	4.20
7511ME	8 FOLD, 1 metre	1 3/4	4.80
7511ME	10 FOLD, 1 metre	1 7/8	5.40
7512ME	10 FOLD, 2 metres	3 1/4	6.60
7512ME	12 FOLD, 2 metres	3 3/4	7.20

## Marked Metric Only. Millimetres Both Sides.

Number		Wt. Per Doz. Lbs.	Per Doz.
7511MM	5 FOLD, 1 metre	1 1/4	\$3.60
7511MM	6 FOLD, 1 metre	1 1/2	4.20
7511MM	8 FOLD, 1 metre	1 3/4	4.80
7511MM	10 FOLD, 1 metre	1 7/8	5.40
7512MM	10 FOLD, 2 metres	3 1/4	6.60
7512MM	12 FOLD, 2 metres	3 3/4	7.20

## Marked Metric, English And Burgos (Spanish). Metric and Burgos one side; inches to 16ths other side.

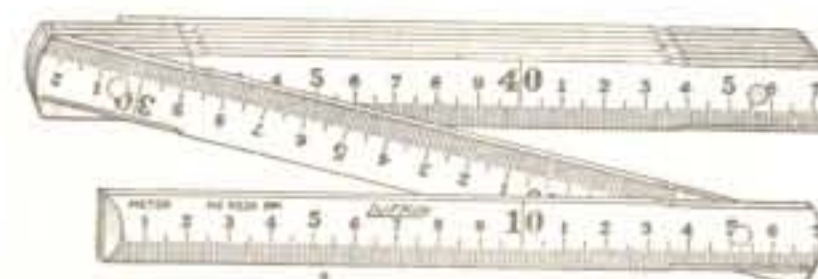
Number		Wt. Per Doz. Lbs.	Per Doz.
7511MEB	6 FOLD, 1 metre	1 1/4	\$4.80
7511MEB	10 FOLD, 1 metre	1 3/4	6.00
7512MEB	10 FOLD, 2 metres	3 1/4	7.20
8514EMB	8 FOLD, 4 foot	2	5.40

Packing: 2 ft., 3 ft., and 1 metre rules, 1 doz. in a box;  
all other lengths, 1/2 doz. in a box.

NOTE—Metric rules can be furnished with the folding end hook, as described on page 131. Specify as "H 7511ME 10 Fold", etc.  
We regularly stock rules marked English upper edge, metric lower edge of both sides. Specify as "7511MEME", etc. Price same as MEB rules.  
We can supply rules marked Metric and Norsk (Norwegian) measurement; also Metric, English and Norsk.  
We can supply rules marked Vershok and Sogene (Russian) measurements, such rules also carrying English and metric marking.

# METRIC SPRING JOINT RULES

Flexible. 5/8 Inch (16 mm) Wide. Brass Plated Trimmings.  
RIVET JOINTS



In ordering metric rules always specify number of folds, in addition to stock number, as "7521ME—5 fold", etc.

## YELLOW ENAMELED

## WHITE ENAMELED

Marked Metric and English.  
Inches to 16ths one side; millimetres other side.

Number		Wt. Per Doz. Lbs.	Per Doz.
8522EM	2 ft. ( 4 Fold)	1	\$2.40
8523EM	3 ft. ( 6 Fold)	1 1/2	3.60
8524EM	4 ft. ( 8 Fold)	2	4.80
8525EM	5 ft. (10 Fold)	2 1/2	6.00
8526EM	6 ft. (12 Fold)	3	7.20
7521ME	5 FOLD, 1 metre	1 1/4	\$3.60
7521ME	6 FOLD, 1 metre	1 1/2	4.20
7521ME	8 FOLD, 1 metre	1 3/4	4.80
7521ME	10 FOLD, 1 metre	1 7/8	5.40
7522ME	10 FOLD, 2 metres	3 1/4	6.60
7522ME	12 FOLD, 2 metres	3 3/4	7.20

## Marked Metric Only. Millimetres both sides.

Number		Wt. Per Doz. Lbs.	Per Doz.
7521MM	5 FOLD, 1 metre	1 1/4	\$3.60
7521MM	6 FOLD, 1 metre	1 1/2	4.20
7521MM	8 FOLD, 1 metre	1 3/4	4.80
7521MM	10 FOLD, 1 metre	1 7/8	5.40
7522MM	10 FOLD, 2 metres	3 1/4	6.60
7522MM	12 FOLD, 2 metres	3 3/4	7.20

## Marked Metric, English And Burgos (Spanish). Metric and Burgos one side; inches to 16ths other side.

Number		Wt. Per Doz. Lbs.	Per Doz.
7521MEB	6 FOLD, 1 metre	1 1/4	\$4.80
7521MEB	10 FOLD, 1 metre	1 3/4	6.00
7522MEB	10 FOLD, 2 metres	3 1/4	7.20
8524EMB	8 FOLD, 4 foot	2	5.40

Packing: 2 ft., 3 ft., and 1 metre rules, 1 doz. in a box;  
all other lengths, 1/2 doz. in a box.



ALUMINUM RULES  
Six-Inch Folds. 9/16 Inch Wide.



FOR THESE RUST-PROOF AND LIGHT WEIGHT METAL RULES  
THERE IS LARGE DEMAND

**Our Aluminum Rule Is Of A Special Hardness,  
Therefore Is Durable And Holds Its Shape Well.**

The Aluminum Rule occupies a position between folding wood and steel rules, both as regards weight and durability. It is especially popular in the building trades, and in mills, shops, etc., where folding wood rules are often broken.

While of a size accommodating good legible markings and figures, it is light and convenient to carry. Being of aluminum and having solid brass joints, our rules are rust-proof throughout. The spring joints are of the rivet type. The surface of rule is in natural color, with sunken graduations and figures in black showing up distinctly.

Marked Consecutive Inches to 16ths, Both Sides.

No.		Wt. Per Doz.	Per Doz.
1203	3 ft.	2 1/4 lbs.	\$12.60
1204	4 ft.	3 lbs.	16.80
1205	5 ft.	3 3/4 lbs.	21.00
1206	6 ft.	4 lbs.	25.20

Marked Feet, 10ths and 100ths of Feet, One Side;  
Feet, Inches and 16ths, Other Side

Graduations begin at same end on both sides.

No.		Wt. Per Doz.	Per Doz.
1306D	6 ft.	4 lbs.	\$25.20

Packing: 1/4 doz. in a box.

ALUMINUM RULES WITH FOLDING HOOK  
Six-Inch Folds. 9/16 Inch Wide.



JUST THE THING FOR TAKING MEASUREMENTS OUT OF ARMS REACH

These Rules are same as those above except having hook. This is the feature that has proven so popular in connection with our Wood Rules. While ideal for taking measurements out of usual reach, it is handy in many other places, yet in no way interferes with the use of the rule in the ordinary manner.

A small substantial steel hook is fitted to one end, so attached that it readily folds up and remains flush with edge of rule. Zero point falls at inside of hook when open, at extreme end of rule, same as other rules, when hook is closed.

Marked Consecutive Inches to 16th, Both Sides.

No.		Wt. Per Doz.	Per Doz.
H1204	4 ft.	3 lbs.	\$18.00
H1205	5 ft.	3 3/4 lbs.	22.20
H1206	6 ft.	4 lbs.	26.40

Marked Feet, 10ths and 100ths of Feet, One Side;  
Feet, Inches and 16ths Other Side

Graduations begin at same end on both sides.

No.		Wt. Per Doz.	Per Doz.
H1306D	6 ft.	4 lbs.	\$26.40

Packing: 1/4 doz. in a box.

Section Six  
MISCELLANEOUS WOOD RULES  
ET CETERA

THIS Section embraces the following varied assortment of Wood Rules, Measuring Sticks, and other unclassified items, practically all in common use:

FLAT WOOD RULES.

YARD STICKS.

METRE STICKS.

MANUAL TRAINING RULES.

BOXWOOD SHRINKAGE RULES.

EXTENSION RULES.

FREIGHT RULES.

GAUGING AND WANTAGE RODS.

SHOEMAKERS SIZE STICKS.

"PERFECTION" GLASS BOARDS.

GLASS CUTTERS AND GLAZIERS RULES.

GLASS CUTTERS L AND T SQUARES.

TAILORS AND DRESSMAKERS SQUARES.

TAILORS MEASURING STICKS.

YARD AND 1 1/4 YARD STICKS.

CURVE STICKS.

Most of these items are regularly stocked by hardware houses; all are obtainable through them. Some few, such for instance as Shoemakers Size Sticks, are distributed principally through supply houses reaching individual lines of trade.

"Perfection" Glass Boards, Glass Cutters Rules, etc., are handled as well by manufacturers and distributors of glass and supplies for that trade.

Our Tailors Squares and Measuring Sticks are stocked by tailor trimming houses in all centers. Ours is the most complete and high grade line of this kind, and on it, as on our other goods, we are equipped to give prompt, efficient service.

ROSE TOOLS, INC.



## FLAT WOOD RULES

Bench Rules For General Shop And Factory Use,  
And For Saddlers, Mechanics, Etc.



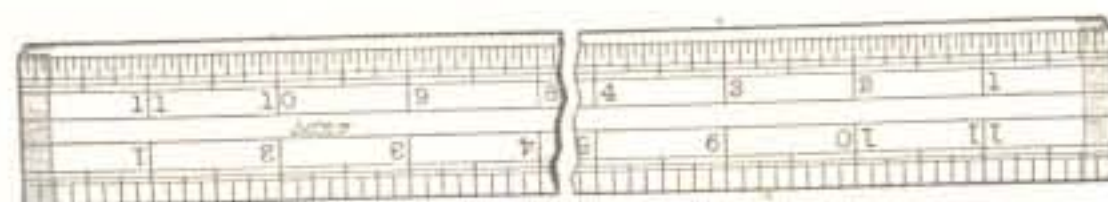
These are one-piece polished hard maple bench or table rules. On such work, or wherever many long measurements are taken, the 4, 5 and 6 foot lengths save much time as compared with yard sticks. Being marked both edges of both sides, with zero falling at opposite ends, these rules can instantly be brought to the work in any position.

The bound rules have brass binding entire length of both edges and are valuable in cutting or wherever the rule is subject to much wear.

Marked Both Sides, Both Edges, One Side 8ths, Other Side 16ths Inch.

No.	Length		Dimensions	Wt. Per Doz.	Per Doz.
7131	24 inch.	Brass Capped.	1 1/2 x 3/16 inch.	2 1/4 lbs.	\$ 6.60
7132	36 inch.	Brass Capped.	1 1/2 x 3/16 inch.	3 1/4 lbs.	9.60
7133	48 inch.	Brass Capped.	1 1/2 x 1/4 inch.	5 1/2 lbs.	13.20
7134	60 inch.	Brass Capped.	1 1/2 x 1/4 inch.	6 3/4 lbs.	16.80
7135	72 inch.	Brass Capped.	1 1/2 x 1/4 inch.	8 lbs.	21.00
7131 1/2	24 inch.	Brass Bound.	1 1/2 x 3/16 inch.	3 1/4 lbs.	\$24.00
7132 1/2	36 inch.	Brass Bound.	1 1/2 x 3/16 inch.	5 1/4 lbs.	33.00
7133 1/2	48 inch.	Brass Bound.	1 1/2 x 1/4 inch.	9 lbs.	42.00
7134 1/2	60 inch.	Brass Bound.	1 1/2 x 1/4 inch.	10 1/2 lbs.	54.00
7135 1/2	72 inch.	Brass Bound.	1 1/2 x 1/4 inch.	13 1/2 lbs.	66.00

## MANUAL TRAINING RULES



Handy one-foot, one-piece rules that are especially popular in the manual training and vocational school fields.

Marked Both Sides, Both Edges, One Edge 8ths, Other Edge 16ths Inch.

No.	Length		Dimensions	Wt. Per Doz.	Per Doz.
34 1/4	1 ft. Maple.	Brass Capped.	1 1/8 x 3/16 inch.	1 lb.	\$4.80
34 1/2	1 ft. Boxwood.	Brass Capped.	1 1/8 x 3/16 inch.	1 lb.	5.40

NOTE—For Steel Rule No. 60, 1 ft. and 2 ft. for school use, see page 107.

For 2 ft. Folding Wood Rule for manual training use, see page 126.

## BOXWOOD SHRINKAGE RULES

For Pattern Makers



TWO FOOT. BRASS CAPPED.

Boxwood Shrinkage Rules are suitable for rough work. Ours are high grade rules of their kind, of genuine boxwood, nicely finished.

On all close work machine divided steel shrinkage rules, such as our No. 83 line, page 106, should be used, as they carry fine graduations and can be depended upon for a high degree of accuracy.

(On the rules below shrinkage allowance is included in all measurements throughout. They are full 2 feet long in shrinkage measurement, i. e., extreme length of No. 8201 is 24-1/8 inches, No. 8202, 24-2/12 inches, etc.)

Marked Both Sides, Both Edges; One Side 8ths, Other Side 16ths.  
Dimensions: 1 1/2 x 1/8 inch.

No.	Shrinkage	Per Doz.
8201	1/16 inch per foot.	\$19.80
8202	1/12 inch per foot.	19.80
8203	1/10 inch per foot.	19.80
8204	3/32 inch per foot.	19.80
8205	1/8 inch per foot.	19.80
8206	3/16 inch per foot.	19.80
8207	1/4 inch per foot.	19.80
8208	5/16 inch per foot.	19.80
8209	3/8 inch per foot.	19.80
8251	1/2 inch per foot.	21.00
8252	3/4 inch per foot.	21.00
8253	7/8 inch per foot.	22.20
8254	15/16 inch per foot.	22.20
8255	1 inch per foot.	22.20

Weight Per Doz., 2 1/4 lbs.

Marked Both Sides, Both Edges: 8ths, 10ths, 12ths, 16ths.  
Dimensions: 1 1/2 x 1/8 inch.

No.	Shrinkage	Per Doz.
8211	1/16 inch per foot.	\$19.80
8212	1/12 inch per foot.	19.80
8213	1/10 inch per foot.	19.80
8214	3/32 inch per foot.	19.80
8215	1/8 inch per foot.	19.80
8216	3/16 inch per foot.	19.80
8217	1/4 inch per foot.	19.80
8218	5/16 inch per foot.	19.80

Weight Per Doz., 2 1/4 lbs.

Marked Both Sides, Both Edges; One Side 8ths, Other Side 16ths.  
Dimensions: 1 1/4 x 1/8 inch.

No.	Shrinkage	Per Doz.
823	1/10 inch per foot.	\$17.40
825	1/8 inch per foot.	17.40
826	3/16 inch per foot.	17.40

Weight Per Doz., 2 lbs.

Packing: All packed 1/2 doz. in a box.

NOTE—For Steel Shrinkage Rules, see pages 106 and 107.



## EXTENSION RULES



Used in measuring between fixed points such as floor and ceiling, across large openings, etc. Made of maple, with sections 1 inch wide,  $\frac{3}{8}$  inch thick. Clamps and end plates are brass plated. The rules are fitted with tension spring and set screw, securely holding the sections when closed or extended to any distance. They have stop at both ends so sections cannot fall apart.

### In Two Sections. With Set Screw.

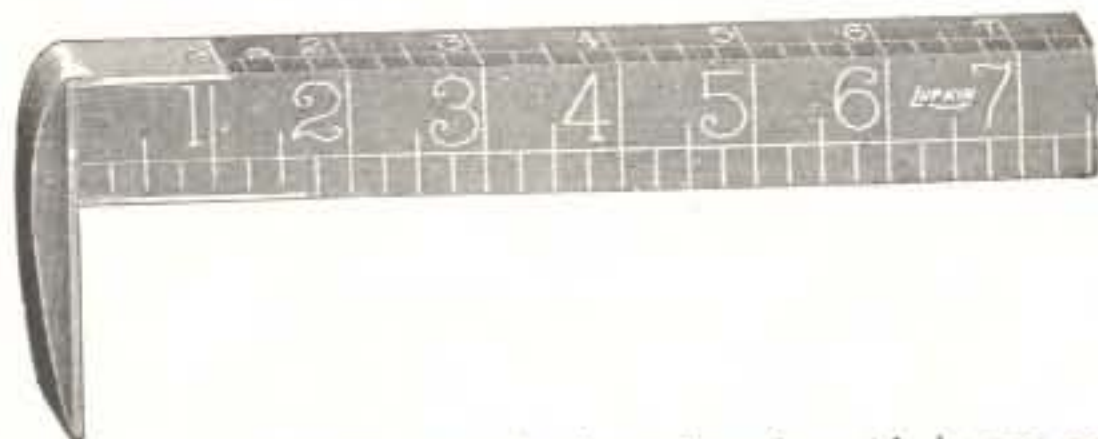
Marked Feet, Inches and 8ths Both Sides.

No.	Length Extended	Length Closed	Wt. Per Doz.	Per Doz.
7162	4 ft.	2 ft.	6½ lbs.	\$18.00
7163	6 ft.	3 ft.	8½ lbs.	21.00
7164	8 ft.	4 ft.	11 lbs.	24.00
7165	10 ft.	5 ft.	14 lbs.	30.00
7166	12 ft.	6 ft.	16½ lbs.	36.00

(While regularly marked as above, these can be furnished in consecutive inches, without additional charge.)

NOTE—For Folding Boxwood Rules with Extension Slide, see page 133

## FREIGHT RULES



These are extra durable, long hard maple rules with heavy end hook. They are well suited for quickly measuring boxes, crates, etc., around warehouses and docks, and for other heavy and rough work in shipping departments, at factories, and elsewhere. Both the rule and hook are sturdy, the former being of polished maple  $1 \times \frac{3}{8}$  inch, the latter of heavy cast brass extending 2 inches from edge of rule and most securely attached. Handle end of rule is rounded and with hole for hanging up.

Marked Feet, Inches and Quarters On Two Sides And Top Edge.

No.	Length	Wt. Per Doz.	Per Doz.
7155	5 ft.	14 lbs.	\$42.00
7156	6 ft.	16 lbs.	45.00

## GAUGING RODS



For determining capacity of standard type barrels (not drums). All of these rods are  $\frac{7}{16}$  inch square, of hardwood, nicely finished, and with zero end pointed and metal covered. In addition to gallon measurement, all are marked in 10ths of inches.

### Directions For Determining Barrel Capacity.

Insert Rod through the bung hole in the side of the barrel diagonally over to the head or end. Do this in both directions, right and left. Read the Rod at the center of the bung for both insertions, and take the average of the two readings. Example: If one reading is 50, and the other 48 gallons, the average, 49 gallons, is the capacity, i. e., contents when full.

### Maple. With Brass Point.

No.	Capacity	Length	Wt. Per Doz.	Per Doz.
7181	120 gals.	3 ft.	2¼ lbs.	\$15.00
7182	200 gals.	3½ ft.	2¾ lbs.	24.00
7183	300 gals.	4 ft.	3 lbs.	25.80
7184*	300 gals.	4 ft.	3 lbs.	36.00

\*With wantage table for 42 gallon barrel of 22 inch bung diameter.

### Boxwood.

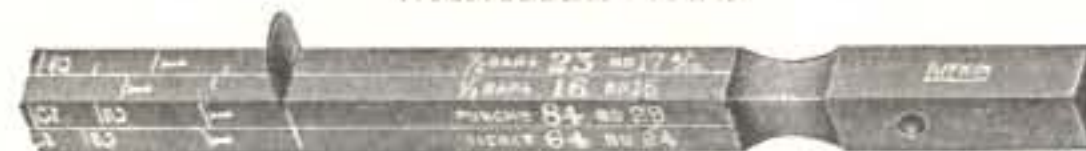
With Steel Tipped Brass Point, Ivory Face, Brass Back.

A Rod of extra high grade and fine finish.

No.	Capacity	Length	Wt. Per Doz.	Per Doz.
7284	120 gals.	3 ft.	3¾ lbs.	\$115.20

With wantage table for 42 gallon barrel of 22 inch bung diameter.

## WANTAGE RODS



For determining wantage or outage of standard type barrels. Overall length 18 inches. The 8-line rod is suitable for measuring wantage of barrels of 8 standard sizes, the 12-line will take care of 12 standard sizes.

### Directions For Determining Wantage.

Barrel should lay level on its side. Insert the Rod slowly and straight into the barrel through the bung hole at its side until brass angle of the rod rests under and against the staves. Using the column of figures that represents the capacity and bung diameter of the barrel, read the line of the liquid. If, for example, Rod is wet as far as 10, it shows a shortage of 10 gallons.

No.	Dimensions	Wt. Per Doz.	Per Doz.
7187	8 lines. Maple. ½ inch square	2 lbs.	\$24.00
7188	12 lines. Maple. ¾ inch square.	2¼ lbs.	36.00

NOTE—Gauging and Wantage Rods can be furnished in Imperial gallon measurements.

## SHOEMAKERS SIZE STICKS



Used in shoe stores, etc., for determining shoe sizes. These sticks carry on the inside face the standard scale of shoe sizes and half sizes; on the back 12 inches in 8ths. They have one stationary and one sliding jaw. The maple sticks are  $\frac{3}{4} \times 5 \frac{1}{16} \times 15 \frac{1}{2}$  inches. No. 8221 is  $15 \frac{1}{16} \times 5 \frac{1}{16} \times 16$  inches.

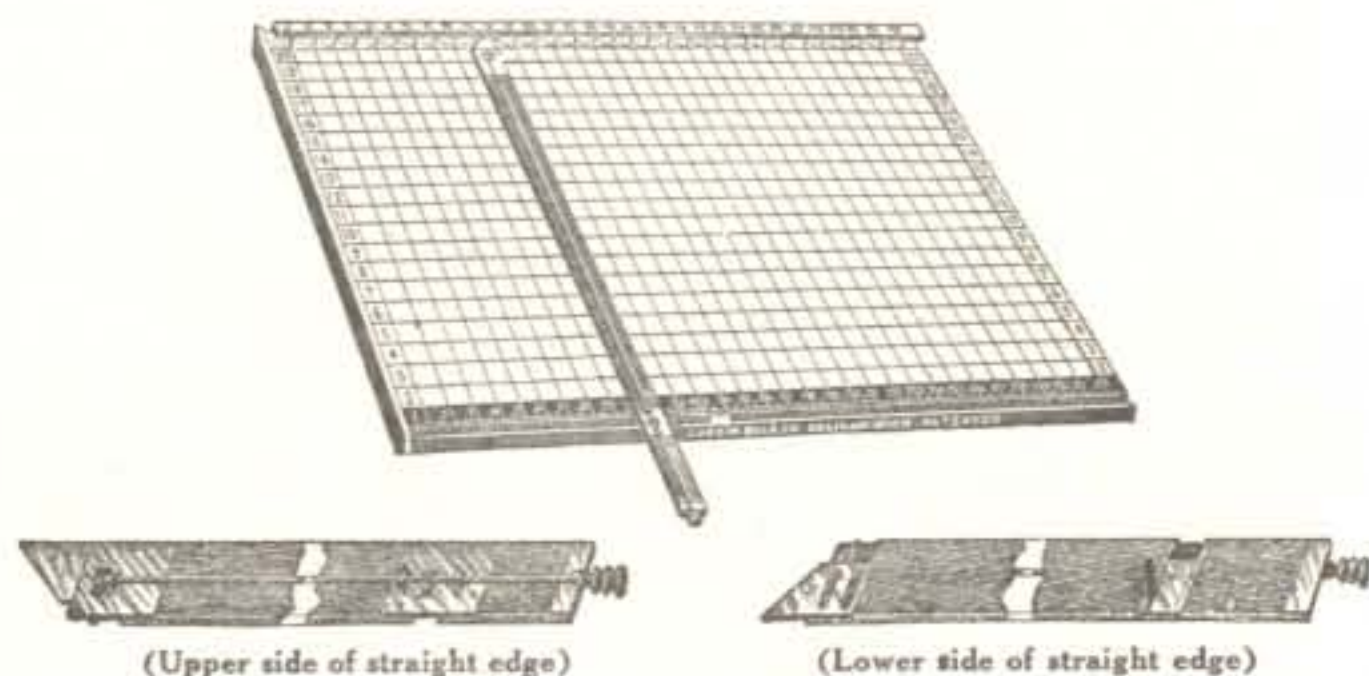
No.	Wt. Per Doz.	Per Doz.
8120 Maple, with steel trimmings.	2 lbs.	\$ 8.40
8121 Maple, with brass trimmings.	2 lbs.	10.20
8221 Boxwood, with brass trimmings.	3¾ lbs.	19.20
8223 Boxwood, folding, for pocket use. Brass trimmings.	2¼ lbs.	31.20

ROSE TOOLS, INC.



## "PERFECTION" GLASS BOARDS

With Adjustable Straight Edge



AN INDISPENSABLE ARTICLE TO ALL DEALERS IN WINDOW GLASS.  
WILL SAVE ITS COST IN A SHORT TIME.

The "Perfection" Glass Board is the modern device for cutting glass accurately and uniformly to size, in inches or fractions of inches.

The Board is made of narrow strips of well seasoned lumber, dovetail cleated. It is ruled in inches both ways, and well finished. By means of guide at the left edge and the upper edge the glass is quickly brought into position. The front edge has an embedded steel rule distinctly marked in inches and 8ths, by which the straight edge is set. The other three edges of the board are numbered in inches.

The Straight Edge is a unique and improved device, very simple and positive in operation. By turning knob at front end it is moved backward or forward to any inch or part of an inch on the steel rule; and turning the set screw on top locks it firmly at any location. When more than one light of glass of the same size is to be cut, the screw once set, every light will be exactly same size.

### "PERFECTION" GLASS BOARDS

Size of Board	Wt. Each, Packed	Price, Each
24 x 36 inches	36 lbs.	\$18.75
30 x 48 inches	58 lbs.	24.75
36 x 54 inches	72 lbs.	29.25
42 x 60 inches	100 lbs.	33.75
48 x 72 inches	136 lbs.	44.25

Straight Edges Only.  
For "Perfection" Glass Boards.

The Straight Edge, being the part of a Glass Board that receives most wear, we list below extra Straight Edges Only, which fit our standard size boards. These are Straight Edges complete with fittings.

For Board size 24 x 36	Price, Each	\$5.40
For Board size 30 x 48	Price, Each	5.55
For Board size 36 x 54	Price, Each	5.70
For Board size 42 x 60	Price, Each	5.85
For Board size 48 x 72	Price, Each	6.00

## GLASS CUTTERS RULES

With Brass Flange Or Lip



Glass Cutters Rules are put to severe use. Ours are of hard maple, of ample dimensions. They are fitted at one end with heavy cast brass lip securely attached by riveting through brass side plates, other end brass tipped. Lip extends 9/16 inch from flat face of rule. On upper face of rule zero point is at inside of lip and figures are placed perpendicularly. These rules are very well finished.

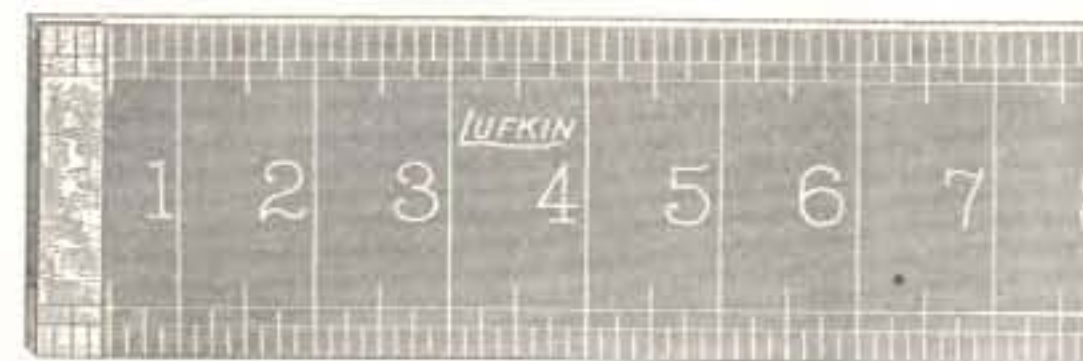
Marked Both Sides, Both Edges, Consecutive Inches To 8ths.

No.	Length	Dimensions	Wt. Each	Price, Each
7141	36 inch	2" x 1/4 inch	1/2 lbs.	\$ 3.40
7142	48 inch	2" x 1/4 inch	3/4 lbs.	4.00
7143	60 inch	2" x 1/4 inch	1 1/4 lbs.	4.80
7144	72 inch	2" x 3/8 inch	1 3/4 lbs.	5.80
7145	84 inch	2" x 3/8 inch	2 lbs.	7.00
7146	96 inch	2" x 3/8 inch	2 1/4 lbs.	8.50
7147	108 inch	2" x 3/8 inch	3 lbs.	10.30
7148	120 inch	2" x 3/8 inch	3 3/4 lbs.	12.40
7149	144 inch	2" x 3/8 inch	5 1/2 lbs.	17.00

ROSE TOOLS, INC.

## GLAZIERS RULES

Flat, Without Lip



Well finished, hard maple rules, with both ends brass tipped.

Marked Both Sides.

One Side, Both Edges, Consecutive Inches To 8ths.

One Side, Lower Edge Consecutive Inches To 8ths, Upper Edge Feet And Quarters.

No.	Length	Dimensions	Wt. Each	Price, Each
7136	36 inch	1 1/2 x 1/4 inch	1/2 lbs.	\$1.00
7137	48 inch	1 3/4 x 1/4 inch	3/4 lbs.	1.40
7138	60 inch	1 3/4 x 1/4 inch	1 lbs.	2.00
7139	72 inch	1 3/4 x 1/4 inch	1 lbs.	2.80
7140	84 inch	2 x 1/4 inch	1 lbs.	4.00



## GLASS CUTTERS L AND T SQUARES

These are well made polished hardwood squares designed for glass cutting and similar work.

In Addition To Length Always Specify Whether L Or T Square Is Wanted.

### L SQUARES

Blade of hard maple, 3 inches wide,  $\frac{1}{4}$  inch thick and marked outer edge of both sides inches to 8ths. Blade is mortised through and securely riveted into the stock.

The stock is of hard maple,  $2\frac{1}{2}$  inches wide,  $\frac{9}{16}$  inch thick, brass bound on inner face, and has shoulder on both sides of blade so square can be used on either side. Square has substantial corner brace with brass side plates.

Lengths given below are graduated length of the blade. Stock of the 24-inch square is 21 inches long, of the 36 and 48-inch, 24 inches, of the 60-inch, 27 inches long, inside the blade.

Length	Wt. Each	Price, Each
24 inch L Square	2 lbs.	\$14.40
36 inch L Square	$2\frac{1}{4}$ lbs.	18.00
48 inch L Square	$2\frac{1}{2}$ lbs.	21.60
60 inch L Square	3 lbs.	27.00

### T SQUARES

Blade of hard maple  $1\frac{3}{4}$  inch wide,  $\frac{3}{16}$  inch thick, and marked both edges of both sides inches to 8ths. Blade is mortised through and securely riveted into the stock. Other end of blade brass capped.

Stock of genuine boxwood 10 inches long,  $1\frac{3}{4}$  inch wide,  $\frac{1}{2}$  inch thick. It has shoulder on each side of blade so square is suitable for use on either side. Stock also is notched, giving clearance for glass cutting wheel.

Lengths given below are length of blade under the stock.

Length	Wt. Each	Price, Each
36 inch T Square	$\frac{3}{4}$ lbs.	\$ 9.00
48 inch T Square	$\frac{3}{4}$ lbs.	12.00

NOTE—Above lengths of L and T Squares are the popular ones, and the only ones we regularly stock. The demand for other lengths is very limited, and as they are made to order, their cost is considerably higher.

For Glass Cutting Boards, see page 142.

## YARD STICKS

Polished Hardwood

Our Yard Sticks are of the better grades, of hardwood, in the natural finish. The lines and figures, in black, show up distinctly. The sticks are well surfaced, finished and polished. We do not manufacture the very common soft wood and stained sticks.



Marked Both Sides.

One side lower edge inches to 8ths; other side fractions of yards.

No.	Dimensions	Ends	Wt. Per Doz.	Per Doz.
7121	Maple. 1 x $\frac{1}{4}$ inch.	Plain.	$2\frac{3}{4}$ lbs.	\$4.20
7122	Maple. 1 x $\frac{1}{4}$ inch.	Brass capped.	$2\frac{3}{4}$ lbs.	6.00
7424	Hickory. 1 x $\frac{1}{4}$ inch.	Brass capped.	$3\frac{3}{4}$ lbs.	9.00
7422	Hickory. $\frac{7}{8}$ x $\frac{3}{16}$ inch.	Brass capped.	$2\frac{1}{2}$ lbs.	8.40
	Rounded edges, flexible.			



Marked Both Sides.

Lower edge inches to 8ths, upper edge fractions of yards.

No.	Dimensions	Ends	Wt. Per Doz.	Per Doz.
7115	Maple. $1\frac{1}{4}$ x $\frac{3}{16}$ inch.	Plain.	$2\frac{3}{4}$ lbs.	\$6.00
7116	Maple. $1\frac{1}{4}$ x $\frac{3}{16}$ inch.	Brass capped.	$2\frac{3}{4}$ lbs.	7.80
7129	Maple. $1\frac{1}{4}$ x $\frac{5}{16}$ inch.	Brass capped.	$4\frac{1}{2}$ lbs.	9.60
7429	Hickory. $1\frac{1}{4}$ x $\frac{5}{16}$ inch.	Brass capped.	$5\frac{1}{2}$ lbs.	13.80

NOTE—For Flat Wood or Bench Rules 24 to 72 inches long, see page 138.  
See also Tailors Measuring Sticks, page 146.

## METRE STICKS

Marked Metric And English



We make only the better grade of Metre Sticks, of polished hard maple. 1 metre (39.37 inch) long, 25 millimetres (1 inch) wide, 8 millimetres ( $\frac{5}{16}$  inch) thick.

Marked One Edge Of Both Sides.

One Side, Lower Edge Only, In Centimetres And Millimetres;  
Other Side, Upper Edge Only, Inches To 8ths.

No.	Length	Ends	Wt. Per Doz.	Per Doz.
7111ME	1 metre.	Plain Ends.	3 lbs.	\$6.00
7112ME	1 metre.	Brass tipped ends.	3 lbs.	7.80

ROSE TOOLS, INC.



# BEVELED YARD STICKS. BEVELED YARD AND QUARTER STICKS. Polished Hardwood



These are popular in the tailoring and dressmaking trades, and other places in laying out and cutting work. They are double beveled on one side so lay close to the work. They are of hardwood in the natural finish. The stamped lines and figures filled in black are permanent and easily read. The sticks are smooth and well finished.

All Sticks Below Are Marked One Side,  
on both bevels in inches to 8ths, down the center in fractions of yards.

## Beveled Yard Sticks

No.	Dimensions	Ends	Wt. Per Doz.	Per Doz.
7124	36 inch. Maple.	1 1/2 x 5/16 inch. Plain.	4 lbs.	\$7.20
7125	36 inch. Maple.	1 1/2 x 5/16 inch. Brass tipped.	4 lbs.	10.80

## Beveled Yard and Quarter Sticks

7126	45 inch. Maple.	1 1/2 x 5/16 inch. Plain.	5 lbs.	\$7.80
7127	45 inch. Maple.	1 1/2 x 5/16 inch. Brass tipped.	5 lbs.	12.00
7128	45 inch. Maple.	Jointed, two-piece. Brass joint.		
	1 1/2 x 5/16 inch. Brass tipped ends.		6 3/4 lbs.	48.00

## TAILORS MEASURING STICKS



While low in price, these are polished hard maple rules, plainly marked. They are especially popular in the tailoring and dressmaking trades, schools, etc. All are 1 1/4 inch wide, 3/16 inch thick.

Marked Inches And 8ths Upper Edge Of Both Sides.

No.	Length	Ends	Wt. Per Doz.	Per Doz.
7031	12 inch	Plain Ends.	1 lbs.	\$3.00
7031	18 inch	Plain Ends.	1 1/2 lbs.	3.60
7031	24 inch	Plain Ends.	2 lbs.	4.20
7031	36 inch	Plain Ends.	3 lbs.	5.40
7030	12 inch	Brass Capped Ends.	1 lbs.	4.20
7030	18 inch	Brass Capped Ends.	1 1/2 lbs.	4.80
7030	24 inch	Brass Capped Ends.	2 lbs.	5.40

NOTE—See also Yard Sticks, page 145.

## CURVE STICKS

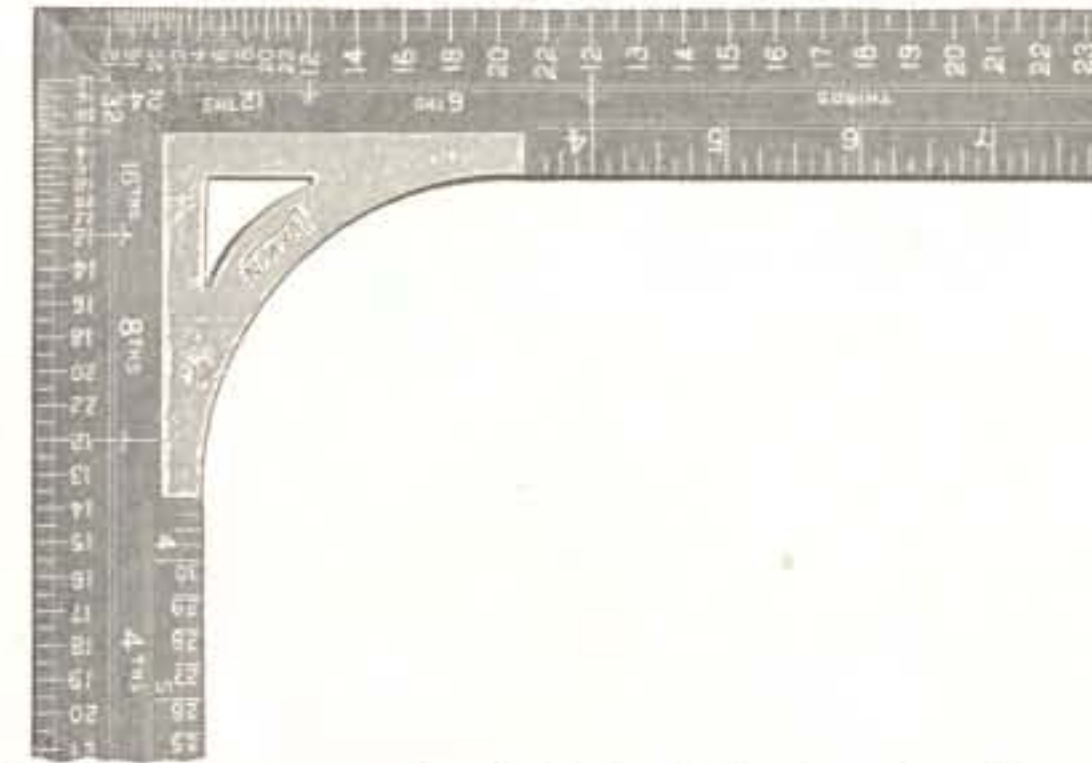


Used in tailoring work. Of well finished hard maple. Length, 24 inches. Thickness, 1/8 inch.

Marked Both Sides Inches To 8ths.

No.	Ends	Wt. Per Doz.	Per Doz.
8151	Plain Ends.	1 1/4 lbs.	\$4.80
8152	Brass Capped Ends.	1 1/4 lbs.	7.20

## TAILORS AND DRESSMAKERS SQUARES



Made of genuine boxwood and of selected hard maple. These squares are of the weight preferred by the tailoring trade, yet constructed so as to be serviceable. All have brass corner plate and corner brace. All carry on one side tailors measurements (regular or reverse as described below); other side inches and 8ths. They are marked by the best methods to insure permanence and legibility. They are well surfaced and finely finished.

### Regular Graduation:

Short arm in 32nds, 16ths, 8ths, quarters and halves.  
Long arm in 24ths, 12ths, 6ths, thirds and two-thirds.

### Reverse Graduation:

Short arm in 24ths, 12ths, 6ths, thirds and two-thirds.  
Long arm in 32nds, 16ths, 8ths, quarters and halves.

No.	Size	Graduation	Ends	Wt. Per Doz.	Per Doz.
8130	14x24 inch. Maple.	Regular	Plain.	2 lbs.	\$21.60
8132	14x24 inch. Maple.	Regular	Brass capped.	2 lbs.	24.00
8134	14x24 inch. Maple.	Reverse	Plain.	2 lbs.	24.00
8135	14x24 inch. Maple.	Reverse	Brass capped.	2 lbs.	26.40
8231	12x24 inch. Boxwood.	Regular	Brass capped.	2 1/2 lbs.	25.20
8232	14x24 inch. Boxwood.	Regular	Brass capped.	2 1/2 lbs.	26.40
8233	12x24 inch. Boxwood.	Reverse	Brass capped.	2 1/2 lbs.	27.60
8235	14x24 inch. Boxwood.	Reverse	Brass capped.	2 1/2 lbs.	28.80

### 8236 Half Size Square.

6x12 inch. Boxwood. Regular. Brass capped. 1 lb. ..\$26.40  
All graduations reduced to half size,  
making capacity of square 12x24 inches.

### 8237 Quarter Size Square.

4x6 inch. Boxwood. Regular. Brass capped. 1/2 lb. .. \$26.40  
All graduations reduced to quarter size,  
making capacity of square 16x24 inches.

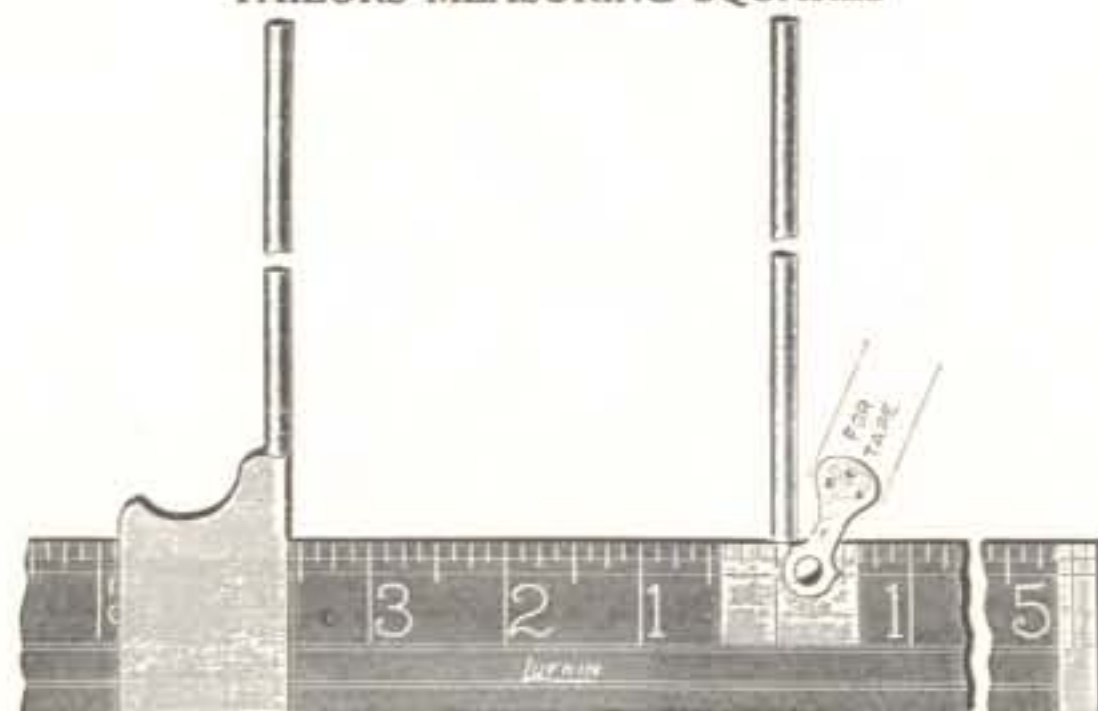
### 8238 Jointed Square.

14x24 inch. Boxwood. Regular. Brass capped. 5 1/2 lbs. .... \$54.00  
Corner full brass both sides and has substantial, well fitted snap  
joint. Most easily set up and taken down. This square is of  
extra weight throughout.

NOTE—For Tailors Tapes, see page 57.



# TAILORS MEASURING SQUARES



Measuring Squares With 9-Inch Stationary And Sliding Brass Arms,  
With 24-Inch Bar Marked Inches And 8ths Both Sides.

Sliding arm has tension spring. Squares have tape attachment.

No.	Size	Ends	Wt. Per Doz.	Per Doz.
8140	9x24 inch.	Maple.	Brass capped.	5 lbs. \$66.00
8240	9x24 inch.	Boxwood.	Brass capped.	5 lbs. 68.40

Measuring Square With 7-Inch Stationary And Sliding Boxwood Arms, 14-Inch  
Boxwood Bar With 14-Inch Flexible Brass Strip On Reverse Side.

Bar and arms marked one side inches and 8ths, brass strip in inches and quarters. Sliding arm has tension spring; square has tape attachment.

8241	7x14 inch.	Boxwood.	Plain ends, rounded.	Per Doz. \$54.00
Regularly made in right shoulder pattern. Sometimes known as the Mitchell square. Weight per doz., 3 1/4 lbs.				

## Measuring Squares

8142	14x24 inch.	Maple, with brace.	Plain ends.	Per doz. \$19.20
A standard type Tailors Square same as No. 8130, but marked both sides inches and 8ths only. This item is popular in instruction work, as at schools, etc., and wherever a simple measuring square is needed in the tailoring and dressmaking trades. Weight per doz. 2 lbs.				
8246	Arm Square.	6x10 inch.	Boxwood.	Plain ends. Per Doz. \$14.40
Marked inches and 16ths both sides. With tape attachment. Weight Per Doz., 3/4 lbs.				

## METRIC TAILORS SQUARES

### All With One Edge Beveled

These are standard Metric Measuring Squares. They are substantially built of genuine boxwood and selected hard maple. All have brass corner plate and corner brace. All are marked on the bevel and on one edge of the opposite side. These squares are marked by the best methods to insure permanence and legibility, are smooth and well finished.

#### Marked One Edge Of Both Sides in Millimetres.

No.	Size	Ends	Wt. Per Doz.	Per Doz.
8147MM	35x60 cm.	Maple.	Plain.	3 lbs. \$25.20
8148MM	35x60 cm.	Maple.	Brass capped.	3 lbs. 27.60
8248MM	35x60 cm.	Boxwood.	Brass capped.	3 1/2 lbs. 34.80

#### Marked One Edge Of Both Sides.

One side (on bevel) millimetres, other side inches and 8ths.

8147ME	35x60 cm.	Maple.	Plain.	3 lbs. \$25.20
8148ME	35x60 cm.	Maple.	Brass capped.	3 lbs. 27.60
8248ME	35x60 cm.	Boxwood.	Brass capped.	3 1/2 lbs. 34.80

NOTE—For Tailors Tapes, see page 57.

## Section Seven

## LUMBER RULES

### ET CETERA

LUMBER RULES, classified as Board and Log Rules, were our original line of manufacture and we are the largest makers of rules of this kind. Lufkin Lumber Rules are familiarly and favorably known wherever logs or lumber are handled.

The highest grade of hickory, though scarce as compared with the earlier days, is obtained for our rules by inspectors in the field, who have been with us for years and have made a study of our peculiar requirements.

As Narrow Pattern Board Rules became more popular we added to our line the N and XN Rules, 1 inch and 7/8 inch wide respectively. However, from the standpoint of durability, we recommend the use of Board Rules not less than 1 inch wide and preferably the old standard width, 1 1/8 inch. As lumber became more valuable there developed a demand for Board Rules with Half-Foot Marks, which accordingly were added to our line. Still more recently we brought out the Folding Spring Joint Board Rule and the Folding Spring Joint Log Rule, which are conveniently carried in the pocket and are suitable for certain classes of work. We have endeavored always to meet the new demands brought about by changing conditions in the lumber industry.

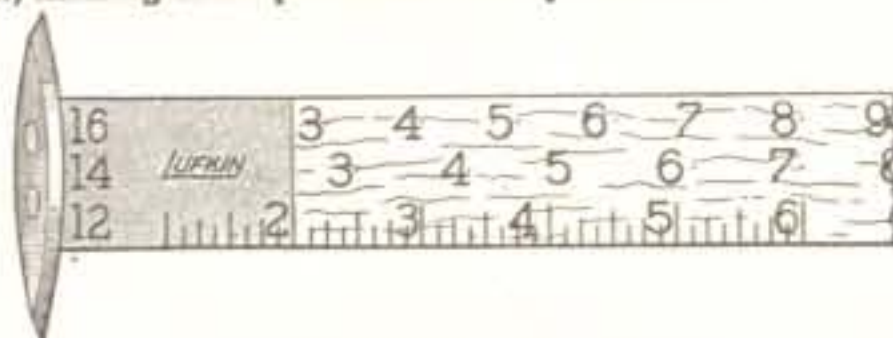
Details as to the different markings on both Board and Log Rules, the various log scales, etc., are given on the following pages.

This Section of Catalog covers also Combination Board and Log Rules, Steel Board Rules, Log Calipers, Biltmore Sticks, Dip Rods, Marking Sticks, Lumber Gages, Boot Calks and Calk Sets.



## HICKORY BOARD RULES

All of selected second growth white hickory, tough and flexible. The heads are most substantially made and securely attached. They consist of tempered steel cap riveted and brazed to brass shoulders (except No. 4). All have nicely formed 6-inch wedge handle and are well finished. The markings are burnt, making them prominent and permanent.



Burnt Figures. Oval Head.

### MARKINGS

8/18 rules measure one side 12, 14, 16; other side 8, 10, 18 foot lengths.  
12/22 rules measure one side 12, 14, 16; other side 18, 20, 22 foot lengths.

All Rules On This Page Are Marked 8/18 or 12/22.

8/18 Rules Are Supplied Unless 12/22 Is Specified.

### STANDARD WIDTH RULES

No.		Per Doz.
1	3-tier. Width, 1 1/8 inch. Full length, 3 1/2 ft. Figured 36 inches. Furnished marked 8/18 unless 12/22 is specified. Heavy brazed head (steel cap and 2-inch brass shoulders). Weight per doz., 7 1/2 lbs. Sometimes known as the inspectors rule.	\$33.60
2	3-tier. Width, 1 1/8 inch. Full length, 3 ft. Figured 30 inches. Furnished marked 8/18 unless 12/22 is specified. Heavy brazed head (steel cap and 2-inch brass shoulders). Weight per doz., 6 lbs. Most popular of all Board Rules for general work.	\$31.20
2 1/2	3-tier. Width, 1 1/8 inch. Full length, 2 1/2 ft. Figured 24 inches. Furnished marked 8/18 unless 12/22 is specified. Heavy brazed head (steel cap and 2-inch brass shoulders). Weight per doz., 6 lbs. Known as the sorting rule.	\$30.00
3	3-tier. Width, 1 1/8 inch. Full length, 3 ft. Figured 30 inches. Furnished marked 8/18 unless 12/22 is specified. Heavy brazed head (steel cap and 1 1/2-inch brass shoulders). Weight per doz., 6 lbs.	\$28.80

### NARROW RULES

1N	3-tier. Width, 1 inch. Full length, 3 1/2 ft. Figured 36 inches. Furnished marked 8/18 unless 12/22 is specified. Heavy brazed head (steel cap and 2-inch brass shoulders). Weight per doz., 6 1/2 lbs.	\$33.60
1XN	3-tier. Width, 7/8 inch. Full length, 3 1/2 ft. Figured 36 inches. Furnished marked 8/18 unless 12/22 is specified. Heavy brazed head (steel cap and 2-inch brass shoulders). Weight per doz., 6 lbs.	\$33.60
2N	3-tier. Width, 1 inch. Full length, 3 ft. Figured 30 inches. Furnished marked 8/18 unless 12/22 is specified. Heavy brazed head (steel cap and 2-inch brass shoulders). Weight per doz., 5 1/4 lbs.	\$31.20
2XN	3-tier. Width, 7/8 inch. Full length, 3 ft. Figured 30 inches. Furnished marked 8/18 unless 12/22 is specified. Heavy brazed head (steel cap and 2-inch brass shoulders). Weight per doz., 5 lbs.	\$31.20

NOTE—For these rules with markings other than as listed above an extra charge is made.

## HICKORY BOARD RULES

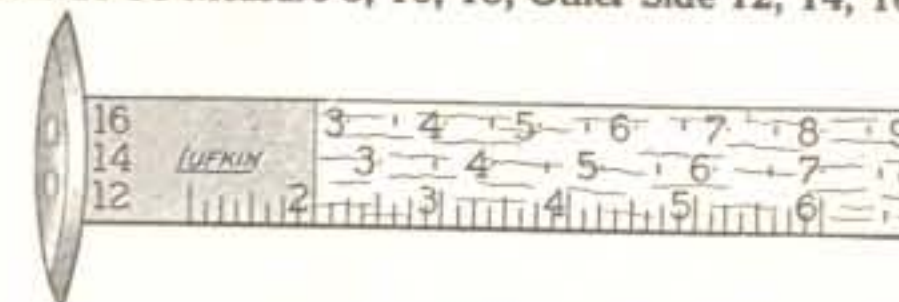
With Half-Foot Marks.

Burnt Figures. Oval Head.

Hardwood Manufacturers Association Rules.  
National Hardwood Lumber Association Rules.

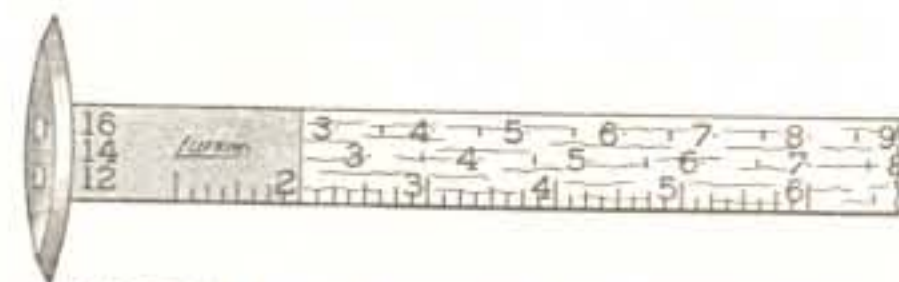
These Rules are same as our others, except having half-foot marks, the half feet indicated by vertical dashes, the feet by dots. They are coming more and more into use, particularly in measuring hardwoods, and have been adopted as standard by the Associations mentioned above. All have 6-inch wedge handle.

All Rules Below Except No. 08 Are Marked 8/18, i. e.,  
One Side To Measure 8, 10, 18, Other Side 12, 14, 16 Feet.



STANDARD WIDTH RULES WITH HALF-FOOT MARKS

No.		Per Doz.
01	3-tier. Width, 1 1/8 inch. Full length, 3 1/2 ft. Figured 36 inches. Heavy brazed head (steel cap and 2-inch brass shoulders). Marked 8/18. Weight per doz., 7 1/2 lbs.	\$36.00
02	3-tier. Width, 1 1/8 inch. Full length, 3 ft. Figured 30 inches. Heavy brazed head (steel cap and 2-inch brass shoulders). Marked 8/18. Weight per doz., 6 lbs.	\$33.60
03	3-tier. Width, 1 1/8 inch. Full length, 3 ft. Figured 30 inches. Heavy brazed head (steel cap and 1 1/2-inch brass shoulders). Marked 8/18. Weight per doz., 6 lbs.	\$31.20
08	4-tier. Width, 1 1/8 in. Full length, 3 ft. Figured 30 in. Heavy brazed head (steel cap and 1 1/2 inch brass shoulders). Marked, one side 9, 11, 13, 15; other side, 12, 10, 14, 16 ft. Weight per doz., 6 3/4 lbs.	\$33.60



NARROW RULES WITH HALF-FOOT MARKS

01N	3-tier. Width, 1 inch. Full length, 3 1/2 ft. Figured 36 inches. Heavy brazed head (steel cap and 2-inch brass shoulders). Marked 8/18. Weight per doz., 6 1/2 lbs.	\$36.00
02N	3-tier. Width, 1 inch. Full length, 3 ft. Figured 30 inches. Heavy brazed head (steel cap and 2-inch brass shoulders). Marked 8/18. Weight per doz., 5 1/4 lbs.	\$33.60
02XN	3-tier. Width, 7/8 inch. Full length, 3 ft. Figured 30 inches. Heavy brazed head (steel cap and 2-inch brass shoulders). Marked 8/18. Weight per doz., 5 lbs.	\$33.60

NOTE—For general description of Board Rules, see top of page 150.  
For these Rules with markings other than as listed above an extra charge is made.



## HICKORY BOARD RULES

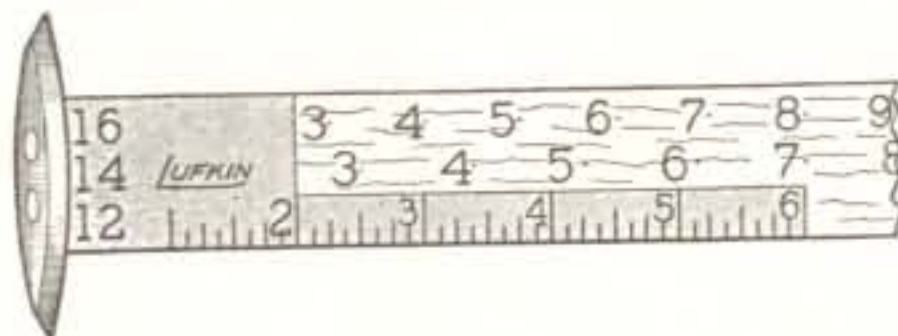
Burnt Figures. Oval Head.

### EXPLANATION OF MARKINGS

- 8/18 Rules are marked one side to measure 12, 14, 16; other side 8, 10, 18 ft.  
12/22 Rules are marked one side to measure 12, 14, 16; other side 18, 20, 22 ft.  
8/22 Rules are marked one side to measure 12, 14, 16, 18; other side 8, 10, 20, 22 ft.  
9/16 Rules are marked one side to measure 9, 11, 13, 15; other side 12, 10, 14, 16 ft.  
7/16 Rules are marked one side to measure 7, 8, 9, 10, 11; other side 12, 13, 14, 15, 16 ft.

On Nos. 6 and 4, 8/18 marking is supplied unless 12/22 is specified.

On No. 8, 9/16 marking is supplied unless 8/22 is specified.

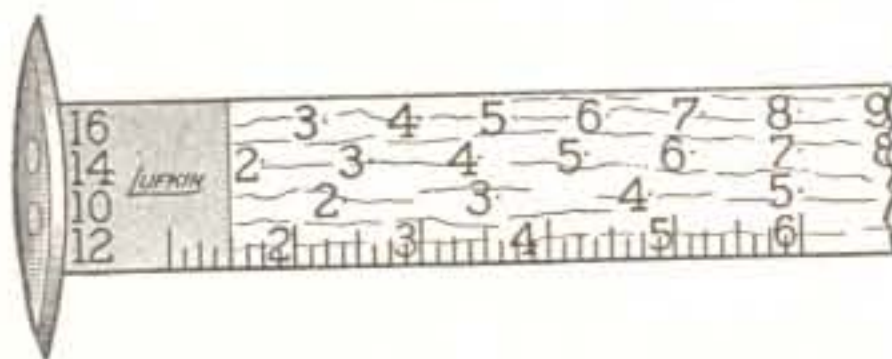


- No. 6** 3-tier. Width, 1 1/8 inch. Full length, 3 ft. Figured 30 inches.  
Marked 8/18 or 12/22, see explanation at top of page.  
With 6-inch brass plate in 8ths, as illustrated.  
Heavy brazed head (steel cap and 2-inch brass shoulders).  
Weight per doz., 6 3/4 lbs.

Per Doz.  
\$33.60

- 4** Board Rule, With Socket Steel Square Head Only.  
3-tier. Width, 1 1/8 inch. Full length, 3 ft. Figured 30 inches.  
Marked 8/18 or 12/22, see explanation at top of page.  
Weight per doz., 6 lbs. A low-priced, yet serviceable Rule.

\$26.40



- 8** 4-tier. Width, 1 1/2 inch. Full length, 3 ft. Figured 30 inches.  
Marked 9/16 or 8/22, see explanation at top of page.  
Heavy brazed head (steel cap and 1 1/2-inch brass shoulders).  
Weight per doz., 6 1/4 lbs. This rule can be furnished in 9/16 marking, left-hand, without extra charge.

\$31.20

- 10** 5-tier. Width, 1 1/2 inch. Full length, 3 ft. Figured 30 inches.  
Marked 7/16, see explanation at top of page.  
Heavy brazed head (steel cap and 1 1/2-inch brass shoulders).  
Weight per doz., 7 1/2 lbs.

\$37.80

- 50** Export Rule. Marked both sides in inches and half-inches only.  
1-tier. Width, 1 inch. Full length, 3 ft. Figured 30 inches.  
Heavy brazed head (steel cap and 2-inch brass shoulders).  
Weight per doz., 5 1/4 lbs.

\$31.20

NOTE—For general description of Board Rules, see top of page 150.  
For these rules with markings other than as listed above an extra charge is made.

## SPRING STEEL BOARD RULES

Dull Nickel Plated Finish.

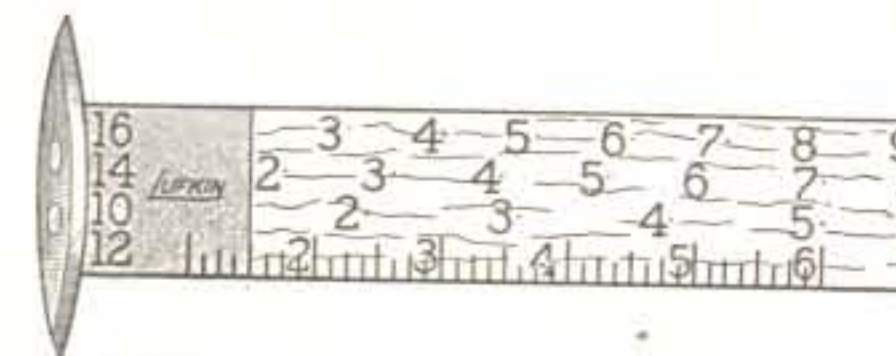


Extra durable yet of medium weight. Being made of best quality spring tempered steel, these rules readily bend to the board, yet return straight and hold their shape well. All regularly have oval head, exactly same as our Hickory Board Rules. Lines and figures are sunken and black and are easily read against the dull nickel plated finish of the rule, which finish also resists rust. All have 6-inch round wood handle and leather slide for handling the blade.

- | No. |  | Per Doz. |
|-----|--|----------|
| 51  | 3-tier. Width, 1 inch. Full length, 3 1/2 ft. Figured 36 inches.<br>Made in 8/18 and 12/22 marking; regularly furnished in 8/18. | \$96.00  |
| 52  | 3-tier. Width, 1 inch. Full length, 3 ft. Figured 30 inches.<br>Made in 8/18 and 12/22 marking; regularly furnished in 8/18.     | \$84.00  |
| 58  | 4-tier. Width, 1 1/4 inch. Full length, 3 ft. Figured 30 inches.<br>Made in 9/16 and 8/22 marking; regularly furnished in 9/16.  | \$90.00  |

Weights per doz.: Nos. 51 and 52, 15 lbs.; No. 58, 18 lbs.

NOTE—Steel Board Rules are furnished only in the above markings.



## COMBINATION BOARD AND LOG RULES

Burnt Figures. Oval Head.

These, while flexible hickory rules identical in pattern with Board Rules, carry both board and log measurements.

All are marked for 12, 10, 14 and 16 foot lengths on both sides; one side board measure, other side log scale. They are made with Doyle, Scribner, Doyle-Scribner or Decimal C Log Scale Markings, though regularly carried in stock in Doyle Scale and so supplied unless otherwise specified.

- | No.    |   | Per Doz. |
|--------|---|----------|
| 13     | 4-tier. Width, 1 1/4 inch. Full length, 3 ft. Figured 30 inches.<br>Heavy brazed head (steel cap and 1 1/2 inch brass shoulders).     | \$35.40  |
| 13 1/2 | 4-tier. Width, 1 1/4 inch. Full length, 3 1/2 ft. Figured 36 inches.<br>Heavy brazed head (steel cap and 1 1/2-inch brass shoulders). | \$37.80  |

Weights per doz.: No. 13, 6 3/4 lbs.; No. 13 1/2, 7 1/2 lbs.

NOTE—Combination Board and Log Rules can be supplied in special markings.

## SQUARE HEAD BOARD RULES

Must Be Specified If Wanted.

We stock and supply without extra charge any of our Board Rules, hickory or steel, and Combination Board and Log Rules, with square head. The square heads are of same construction as the oval, differing only in that the steel cap is of oblong shape (commonly known as square). The oval head is by far the more popular of the two and is, therefore, always furnished unless the square is specified. (The socket steel square head of No. 4 Board Rule is of different, cheaper, construction than those referred to above.)



## HICKORY LOG RULES

### Burnt Figures.

Used in determining the contents of logs in board measure. These rules are of selected second growth hickory, clear, tough stock. The heads are of good proportions, strong and securely attached. The handles are of the wedge type, nicely formed. The figures are large and markings and figures are burnt, making them permanent and most legible. The rules are well finished.

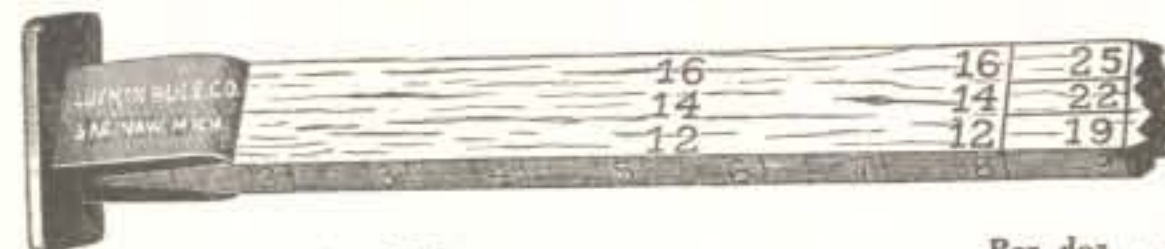
Log Rules are here catalogued in all the various patterns, in the scales and combination of lengths that have become standard through long use. (For further details on Log Rules see page 159.)

Scales And Markings Of Rules On This And Opposite Page (except No. 14X.)

Regular Scales (carried in stock):  
Doyle. Scribner. Doyle-Scribner. Decimal C.  
(Rules made also in Scribner-Doyle, Decimal A and B scales, no extra charge.)

Regular Markings:  
8/20...for scaling 8, 10, 12, 14, 16, 18 and 20 foot logs.  
12/24...for scaling 12, 14, 16, 18, 20, 22 and 24 foot logs.

Always Specify Log Scale and Marking, as  
Doyle 8/20. Doyle 12/24. Scribner 8/20. Scribner 12/24, Etc.



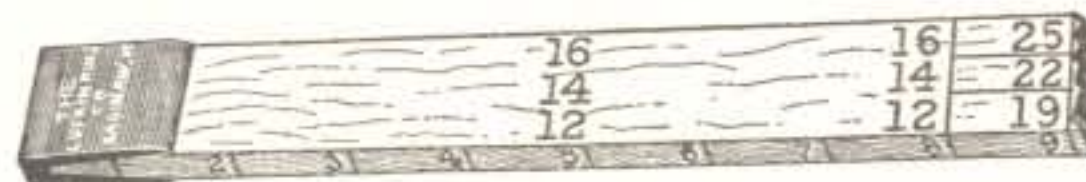
No. 14 Square Head Log Rule. Full length 4 ft. 8 in. Per doz...\$33.60  
Figured 48 inches, 8-inch handle. Weight doz., 10½ lbs.  
Specify scale and marking, see top of page.

No. 15 Square Head Log Rule. Full length 3½ ft. Per doz...\$28.80  
Figured 36 inches, 6-inch handle. Weight doz., 8 lbs.  
Specify scale and marking, see top of page.



No. 22 T-head Log Rule. (Wisconsin Pattern.) Full length 4 ft. 8 in. Per doz...\$33.60  
Figured 48 inches, 8-inch handle. Weight doz., 10½ lbs.  
Specify scale and marking, see top of page.

No. 22½ T-head Log Rule. (Wisconsin Pattern.) Full length 3½ ft. Per doz...\$28.80  
Figured 36 inches, 6-inch handle. Weight doz., 8 lbs.  
Specify scale and marking, see top of page.



No. 19 Plain Head Log Rule (end brass capped). Full length 4 ft. 8 in. Per doz...\$31.20  
Figured 48 inches, 8-inch handle. Weight doz., 8 lbs.  
Specify scale and marking, see top of page.

No. 20 Plain Log Rule, No Head. Full length 4 ft. 8 in. Per doz...\$26.40  
Figured 48 inches, 8-inch handle. Weight doz., 7½ lbs.  
Specify scale and marking, see top of page.

NOTE—For these rules in other log scales than mentioned above, or carrying other lengths than 8/20 or 12/24, an extra charge is made.  
For Tree Tapes, see page 19.

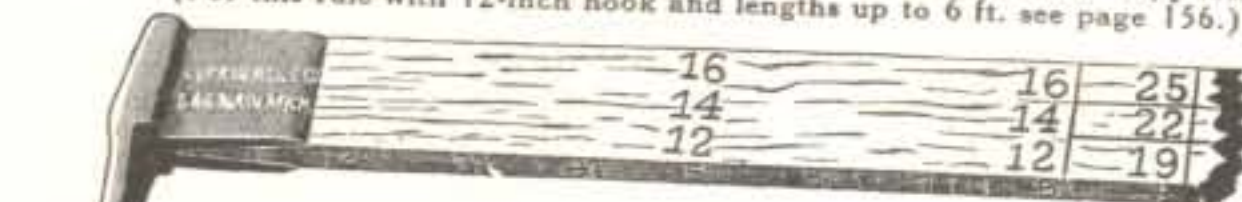
## HICKORY LOG RULES

### Burnt Figures.

For General Description Of These Rules, Their Scales And Markings, See Top Page 154.



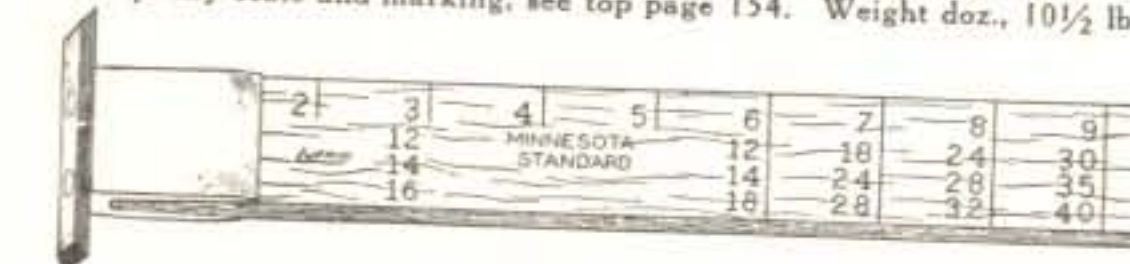
No. 16½ Flat Steel Hook Log Rule. Hook extends 3½ inches. Per doz...\$35.40  
Figured 48 inches, 8-inch handle. Full length 4 ft. 8 in.  
Specify scale and marking, see top page 154. Weight doz., 10½ lbs.  
(For this rule with 12-inch hook and lengths up to 6 ft. see page 156.)



No. 16 Hook Log Rule. Full length 4 ft. 8 in. Per doz...\$33.60  
Figured 48 inches, 8-inch handle. Weight doz., 10 lbs.  
Specify scale and marking, see top page 154.



No. 21 Pick And Hook Head Log Rule. Full length 4 ft. 8 in. Per doz...\$36.00  
Figured 48 inches, 8-inch handle. Weight doz., 10½ lbs.  
Specify scale and marking, see top page 154.



No. 14X Minnesota Standard Log Rule. Full length 4 ft. 8 in. Per doz...\$33.60  
Figured 48 inches; no handle. Square steel head. Handle end brass capped.  
Minnesota Standard Scale.  
Marked one side for 12, 14, 16; other side for 18, 20, 22 ft. lengths.  
One row inches each side. Weight doz., 9 lbs.

NOTE—For rules No. 16½, 16 and 21 in other than our regular log scales, or carrying other lengths than 8/20 or 12/24, extra charge is made.  
United States Forest Service pattern head can also be supplied on our Log Rules. This is a flat steel, double or T hook, extending about ½ inch from each edge of rule. Price, same as No. 21 rule.



## HICKORY LOG RULES

Burnt Figures.



### FLAT LONG HOOK LOG RULES

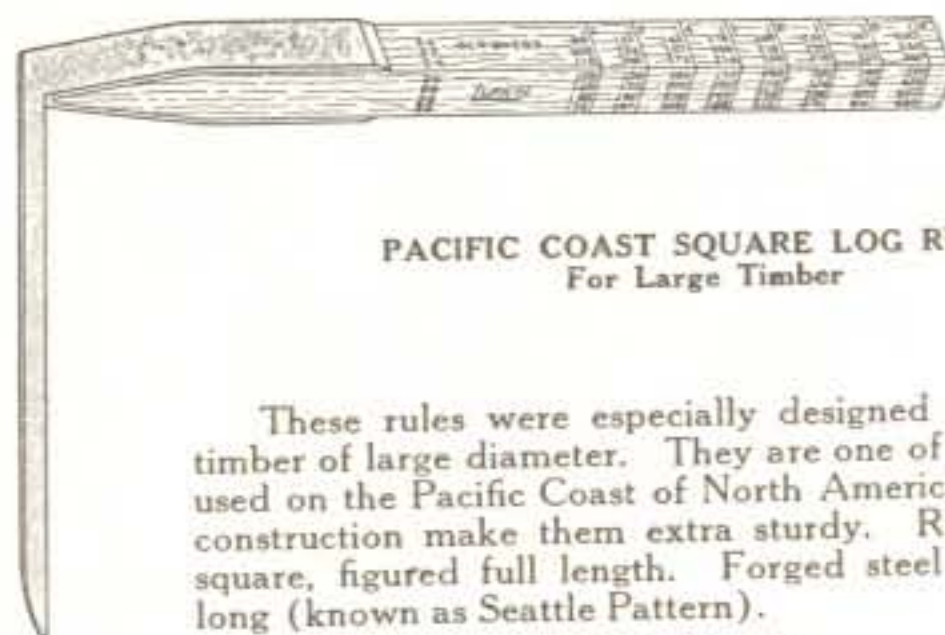
Always Specify  
Log Scale and Marking

These are same pattern as No. 16 1/2, page 155, but with steel hook 12 inches rather than 3 1/2 inches long, and rules having capacity for large diameters (48, 60 and 72 inches, respectively).

Regularly Carried In Stock In The Standard Scales And Markings, i. e., Doyle, Scribner, Doyle-Scribner and Decimal C Scales, and Marked For 8/20 or 12/24 Foot Lengths, Inches One Edge.

No.		Wt. Per Doz.	Per Doz.
1604	Log Rule. Figured 48 inches, 8-inch handle. Full length 4 ft. 8 in. Specify scale and marking, see above.	12 lbs.	\$40.00
1605	Log Rule. Figured 60 inches, 8-inch handle. Full length 5 ft. 8 in. Specify scale and marking, see above.	15 lbs.	\$45.00
1606	Log Rule. Figured 72 inches, 8-inch handle. Full length 6 ft. 8 in. Specify scale and marking, see above.	18 lbs.	\$51.00

NOTE—For above rules in other than our standard log scales, or carrying other lengths than 8/20 or 12/24, an extra charge is made.



### PACIFIC COAST SQUARE LOG RULES For Large Timber

These rules were especially designed for scaling long timber of large diameter. They are one of the types widely used on the Pacific Coast of North America. The size and construction make them extra sturdy. Rules are 7/8 inch square, figured full length. Forged steel hook 12 inches long (known as Seattle Pattern).

Scale And Marking.

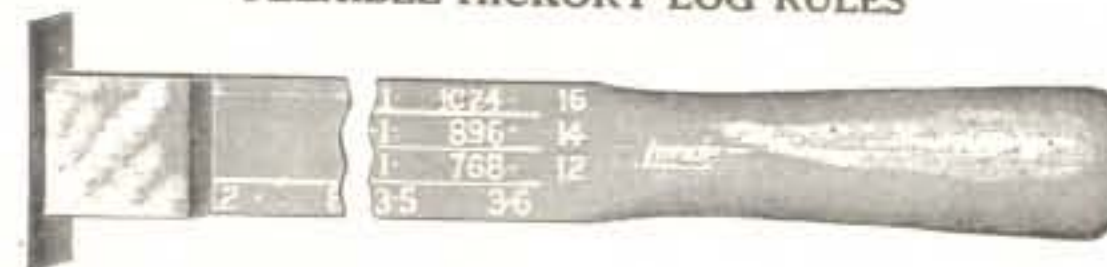
These rules are regularly made only in Scribner Scale, and marked to scale even length logs from 20 to 48 feet inclusive.

(One row of inches. Four tiers on each side.)

No.		Wt. Per Doz.	Per Doz.
1705	5-ft. Log Rule With Seattle Hook	23 lbs.	\$81.00
1706	6-ft. Log Rule With Seattle Hook	26 lbs.	87.60
1715	5-ft. Log Rule Without Hook (plain end)	12 lbs.	62.40
1716	6-ft. Log Rule Without Hook (plain end)	15 lbs.	69.00

NOTE—For Pacific Coast Log Rules marked other than Scribner 20/48, extra charge is made.

## FLEXIBLE HICKORY LOG RULES



These are thin and flexible, like Board Rules, but carry regular log scale markings. Burnt figures. All are 1 1/4 inch wide and have board rule style 6-inch wedge handle.

Nos. 27 and 28 are without head, simply having brass cap over end, extending one inch on each side of rule.

Nos. 29 and 30 regularly have oval head, of same type as Board Rules (steel cap and 1 1/2 inch brass shoulders). These can be furnished with square head at same price.

### SCALES AND MARKINGS

Flexible Log Rules are carried in stock in the following scales:

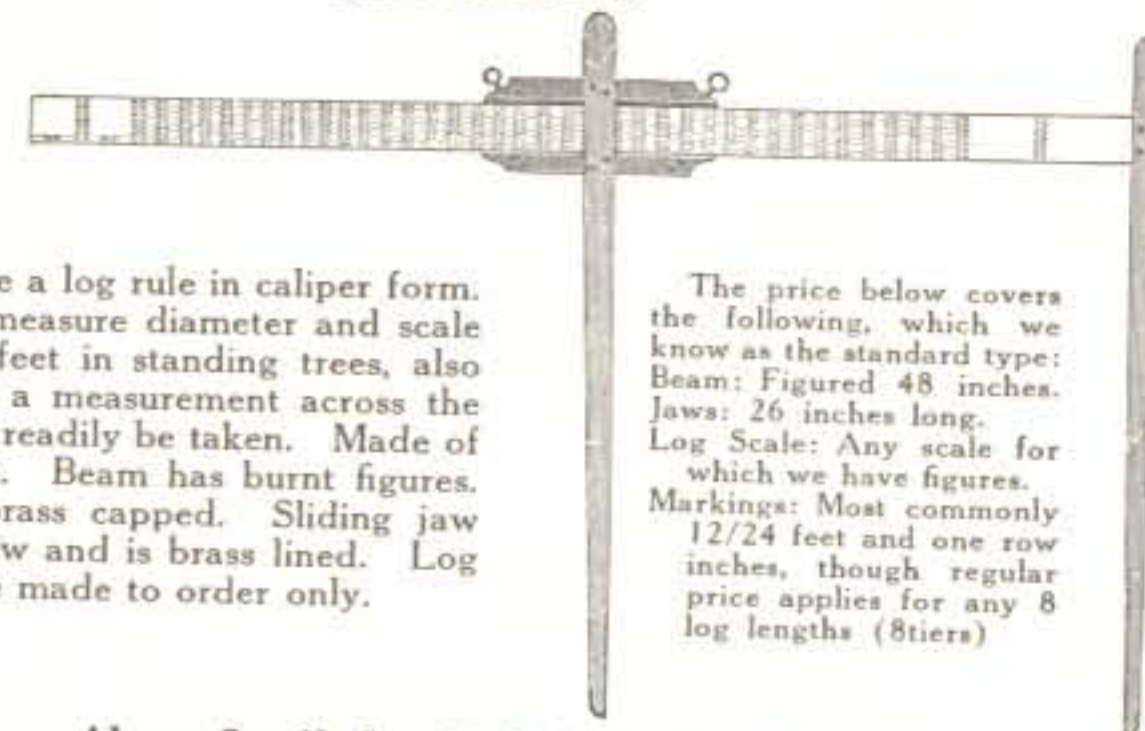
Doyle. Scribner. Doyle-Scribner. Decimal C.  
Flexible Log Rules are regularly marked one side inches and log scale for 12, 14, 16 ft.; other side 18, 20, 22 and 24 ft. lengths.

### Always Specify Log Scale

No.		Weight Per Doz.	Per Doz.
27	Rule Without Head (capped). Length 42 in., figured 36 in.	5 1/4 lbs.	\$46.80
28	Rule Without Head (capped). Length 48 in., figured 42 in.	6 lbs.	48.60
29	Rule with Oval Head. Length 42 in., figured 36 in.	6 3/4 lbs.	\$51.00
30	Rule With Oval Head. Length 48 in., figured 42 in.	7 1/2 lbs.	52.80

NOTE—Flexible Log Rules in other scales and log lengths than mentioned above, but having not more than 8 tiers, no extra charge.

### LOG CALIPERS



These are a log rule in caliper form. They will measure diameter and scale the board feet in standing trees, also logs where a measurement across the end cannot readily be taken. Made of hard maple. Beam has burnt figures. Jaws are brass capped. Sliding jaw has set screw and is brass lined. Log Calipers are made to order only.

The price below covers the following, which we know as the standard type:  
Beam: Figured 48 inches.  
Jaws: 26 inches long.  
Log Scale: Any scale for which we have figures.  
Markings: Most commonly 12/24 feet and one row inches, though regular price applies for any 8 log lengths (8 tiers)

### Always Specify Log Scale And Log Lengths.

No. 25	Log Caliper (standard type)	Weight each, 3 1/4 lbs.	Price, each	\$30.00
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NOTE—Calipers marked inches only, price same as above.

Calipers with more than 8 tiers or with beam over 48 inches long, prices on application.

### BILTMORE OR FOREST CRUISER STICK (Merritt Hypsometer)



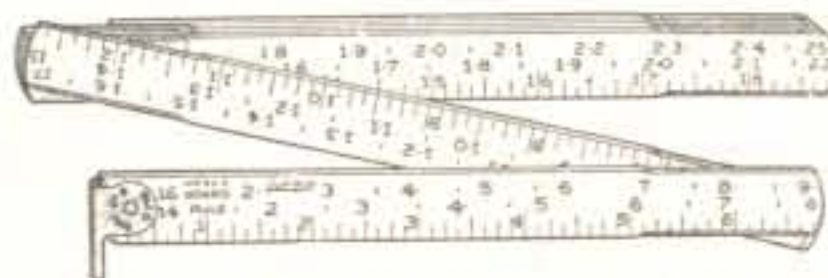
### Gives Height And Diameter Of Standing Trees.

This stick is used by the United States Forest Service, by forestry schools and others in reconnaissance estimates of timber tracts. In addition to diameter and height scales it bears Decimal C Log Scale values for 16-ft. logs and a tier of regular inch markings. Made of hard maple, 37 13/16 inches long, 1/2 inch thick, 1 inch wide, with one sloping face. Heavy cast brass ferrule at each end. Instructions for use accompany each stick.

No. 55	Biltmore Stick.	Weight each, 1 1/2 lbs.	Price, each	\$6.00
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## SPRING JOINT BOARD RULE With Folding Hook.



Just the thing for the man who occasionally scales lumber; takes the place also of a pocket board scale card, and at the same time is just as handy as any rule for common lineal measuring. The folding end hook serves the purpose of board rule head and is handy for all measuring work. The rule is of hardwood,  $\frac{3}{8}$  inch wide, folds to 6 inch length, is light weight and convenient to carry in the pocket. Brass plated trimmings.

### MARKINGS.

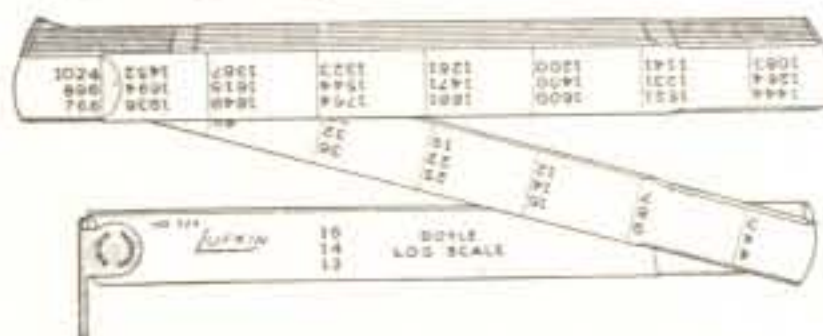
Regular board measure; one side for 8, 10 and 18 foot, other side for 12, 14 and 16 foot lengths. The 12 ft. tier, being regular inch measurement, is subdivided to 8ths of inches for general measuring purposes.

Three-Foot. Yellow Enameled. Concealed Joints.

No. 523 Spring Joint Board Rule.....Per Doz., \$5.40

Packing:  $\frac{1}{2}$  doz. in a box.  
Weight per doz., 1 $\frac{3}{4}$  lbs.

## SPRING JOINT LOG RULE With Doyle Log Scale And Folding Hook.



This rule is particularly adapted for use by traveling scalers or loggers having a limited amount of scaling to do, as it is light and compact, and when folded fits nicely in the pocket. While serving a purpose similar to that of the common hickory log rule, giving the same results in board feet, this is not a substitute for that article or of a style as well adapted to the usual run of log scaling. The folding end hook serves as log rule head and is handy in all measuring. The rule is of hardwood,  $\frac{3}{8}$  inch wide, folding to 6 inch length. Trimmings are brass plated.

### MARKINGS.

Furnished In Doyle Log Scale Only. Will measure diameters up to 48 inches. Marked one side for 12, 14, 16 foot logs; other side for 10 and 18 foot logs, and, on lower edge, one row inches to 16ths for general measuring.

Four-Foot. Yellow Enameled. Concealed Joints.

No. 524 Spring Joint Doyle Log Rule.....Per Doz., \$6.00

Packing:  $\frac{1}{2}$  doz. in a box.  
Weight per doz., 2 lbs.

## MISCELLANEOUS INFORMATION ON LOG RULES, LOG SCALES AND MARKINGS

### 8/20 Log Rules:

Carry on one side scale for 8, 10, 18 ft.; other side 12, 14, 16 ft.; one edge 20 ft.; other edge inch marking.

### 12/24 Log Rules:

Carry on one side scale for 12, 14, 16 ft.; other side 18, 20, 22 ft.; one edge 24 ft.; other edge inch marking.  
(Except Decimal C Rules, which have 18 ft. tier on edge.)

### Dimensions:

Standard type flat log rules are approximately  $\frac{1}{4}$  inch thick,  $1\frac{1}{8}$  inch wide.

### Inches only on Log Rules:

We supply any of our log rules in inch marking only, at regular price of stock rules. Such rules are used to determine log diameters.

### Odd and Unusual Log Lengths:

We are equipped to supply, at an extra charge, rules marked for certain log lengths other than the regular combinations catalogued.

### Special Log Scales:

At an extra charge we supply Log Rules in special scales for which we are equipped. For such scales, of which there are many, there is but a limited demand. Among the more familiar are Favorite, Devant-Herring, British Columbia, Columbia River and Vermont Scales.

### Decimal Log Scales:

The Decimal Scale is based on Scribner. It drops the units and takes the nearest tens, thus: Scribner gives a 12-inch log 16 feet long 79 feet; Decimal Scale makes it 80 feet and is expressed on the rule with the figure 8 only. There are in use three different computations of the Decimal Scale below 12 inches, i. e., Decimal A, B and C. The Decimal C Scale is the only one of the three widely used. It is the official standard of the United States Forest Service and the legal standard in the State of Wisconsin.

### Comparison Of Log Scales:

A printed table giving values of a 16-foot log in twelve different log scales will be sent on application.

### Tree Tapes:

For these, see page 19.

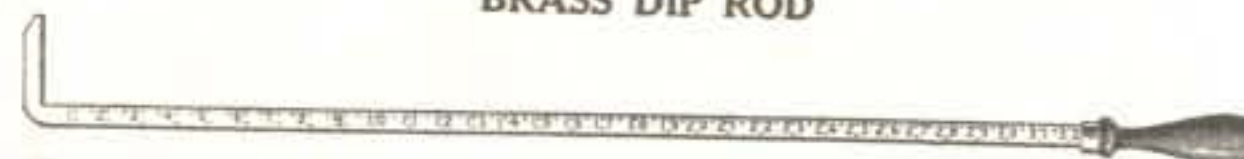
## MARKING STICK FOR LUMBER CRAYONS



A convenient holder adapted to all regular lumber crayons, and made to hold them firmly. Crayon Holder is of brass, nickel plated; handle of wood, well finished.

Marking Stick (crayon holder with handle, 36 in. long) . . . . .	Weight Doz.	Per Doz.
	7 $\frac{1}{2}$ lbs.	\$36.00
Crayon Holder Only (without handle) . . . . .	2 $\frac{1}{4}$ lbs.	24.00

## BRASS DIP ROD



For measuring diameter of logs, especially when logs are lying in water. Made of hard brass,  $\frac{3}{8}$ x3/16 inch, well finished. Has  $1\frac{1}{2}$  inch hook and wood handle. Plainly marked on the two sides 32 inches to half-inches. Overall length, 38 inches.

Weight per doz., 12 lbs. Price per doz. . . . . \$54.00

ROSE TOOLS, INC.



## LUMBER GAGES



For measuring thickness of lumber. Made of brass, nickel plated; a substantial article.

No.	For Measuring Thicknesses	Weight Per Doz.	Price Per Doz.
00	$\frac{3}{8}$ , $\frac{1}{2}$ , $\frac{3}{4}$ , $\frac{7}{8}$ , 1, $1\frac{1}{4}$ , $1\frac{1}{2}$ , $1\frac{3}{4}$ and 2 inch.	18 ozs.	\$7.20
000	$\frac{3}{8}$ , $\frac{1}{2}$ , 1, $1\frac{1}{4}$ , $1\frac{1}{2}$ , 2 and $2\frac{1}{2}$ inch.	24 ozs.	8.40

Packing: One in a box.

## BEADED BOOT CALKS



For log drivers. Forged from best crucible steel.

No.	Approximate Length overall	Weight per 1000	Price per 1000
000	$\frac{5}{8}$ inch	$2\frac{1}{4}$ lbs.	\$5.85
00	$\frac{3}{4}$ inch	$2\frac{3}{4}$ lbs.	5.85
0	$1\frac{3}{16}$ inch	3 lbs.	5.85
1	$1\frac{5}{16}$ inch	$3\frac{3}{4}$ lbs.	5.85
2	$1\frac{11}{16}$ inch	$5\frac{1}{2}$ lbs.	5.85
3	$1\frac{3}{4}$ inch	6 lbs.	5.85

Packing: All sizes except No. 3, 100 in a box, 1000 in a carton; No. 3 calks, 50 in a box, 500 in a carton.

## BOOT CALK SETS



Hexagon in shape and of high grade hardened steel. Length overall,  $4\frac{1}{2}$  inches; diameter,  $\frac{1}{2}$  inch.

No.	For Nos.	Price Per doz.
1	1, 2 & 3 calks	\$8.00
0	0 calks	8.00
00	00 calks	8.00
000	000 & 000L calks	8.00

Weight per doz.,  $3\frac{1}{2}$  lbs.  
Packing:  $\frac{1}{2}$  doz. in a box.

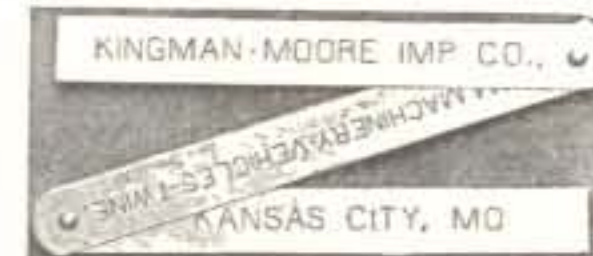
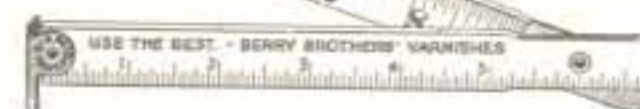
## CALK SET AND PUNCH COMBINED



The combined calk set and punch is round and of tempered steel.

No.	Length	Weight Per doz.	Price Per doz.
7	4 inch	$2\frac{1}{2}$ lbs.	\$8.40

Packing: 1 doz. in a box.



## ADVERTISING SPECIALTIES

Aids To An Increased Business.

If Interested, Send For Advertising Specialty Catalog No. 7.

Quite apart from our regular stock goods, but of the same general patterns and same high quality, we offer a variety of Pocket Tapes, Steel and Wood Rules for advertising purposes, i. e., bearing advertising matter upon them and intended for use as direct publicity mediums.

Pocket Tapes and Rules are most effective articles for this purpose. Their greatest appeal lies in their general usefulness. Further than this, they are a neat, compact article that everyone is pleased to carry, are moderate in price, durable, and bear the advertising attractively. They keep the advertiser's name prominently before the recipient for years. On some of our items trade marks and designs can be reproduced.

In both Tapes and Rules we confine ourselves to the better grades, articles that are really serviceable. We do not turn out tapes with celluloid or similar cases, nor do we manufacture common advertising yard sticks and school rulers.

Above are shown but a few of the items in our line. If you are thinking of distributing a novelty to your trade, or could interest any of your customers in something of this kind, write for particulars.

Catalog No. 7 is a 32-page booklet devoted entirely to this branch of our business.



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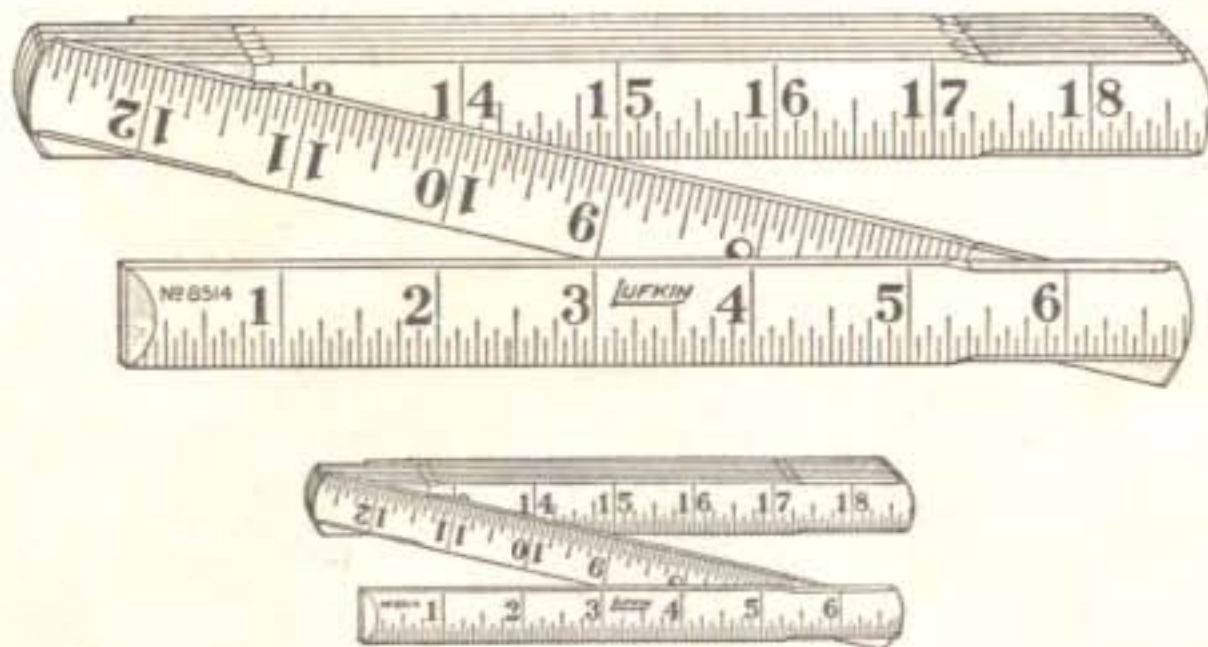
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Electrotypes of our goods, suitable for printing on any grade of paper, are promptly and gladly supplied without charge to jobbers and dealers. We urge upon our trade their liberal use in catalogs, circulars, newspapers and all other forms of advertising.

Our standard large size electrotypes are 3 inches overall, longest way; our reduced size, 1½ inches long; both as shown above. Of most items we have also intermediate sizes.

Ours are faithful reproductions. To insure clear-cut, attractive illustrations we furnish only new electrotypes, and therefore, it is unnecessary to return them.

### COPY SERVICE

For the benefit of those who catalog Lufkin goods, we maintain a catalog copy service. In that department dummies are arranged or complete copy prepared, ready for the printer, supplied with electrotypes numbered so that they can be most readily identified. This expert service insures the most intelligent and attractive showing of the goods.

### TRADE MARKS

Our trade marks and trade names are duly registered in domestic and foreign patent offices.

### PACKING

We use nothing but strong, new shipping boxes, well strapped, so the goods reach the customer in best condition. Most of our items are put up in individual boxes. All of our boxes have been standardized, and, together with their colored labels, also uniform, they make most attractive packages.

### CATALOGS, ETC., ISSUED

In addition to this GENERAL CATALOG No. 11, we issue the following:

#### Small Tool Division Catalog.

(Confined to Mechanical Tools, as Section Three of this Catalog.)

#### Circulars on Display Cases with Assortments.

(Showing attractive Display Cases we offer carrying assortments of various lines of our goods.)

#### Catalog of Tailors Squares, Measuring Sticks, etc.

(Confined to Tailors Squares, Measuring Sticks and Tapes such as are used by the tailoring and clothing trades.)

#### General Catalog in Spanish.

#### Advertising Specialty Catalog.

(Covering such Pocket Tapes, Steel and Wood Rules as we make bearing customer's advertising imprint. Further details, page 161.)