



Catalogue

OF

**DRAWING.**

**MATERIALS.**



TRADE MARK.



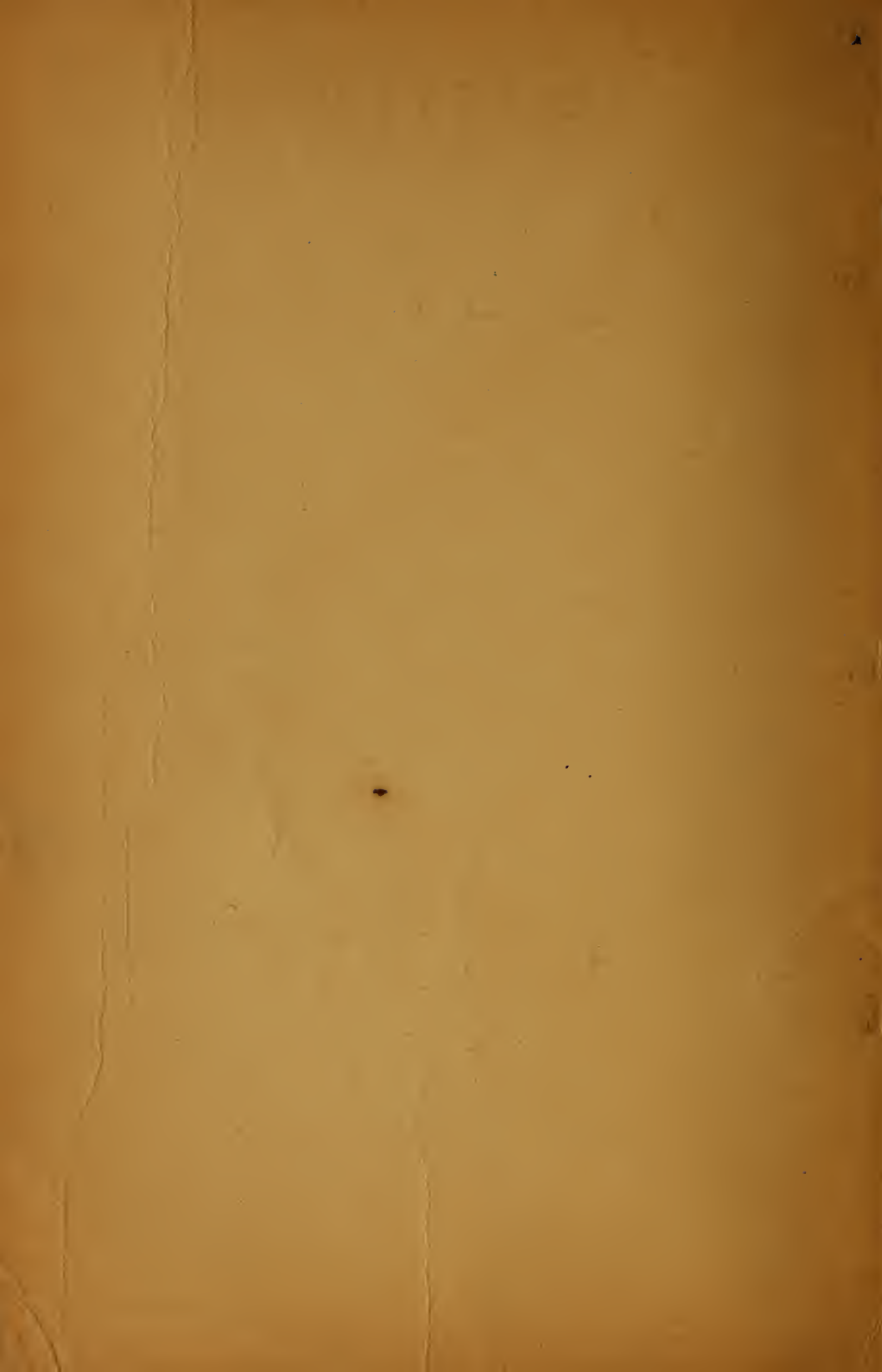
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✱ **E. G. SOLTMANN,** ✱

**119 FULTON ST., NEW YORK.**

— ESTABLISHED 1880. —



PRICE LIST  
OF  
DRAWING MATERIALS,  
ARCHITECTS & ENGINEERS'  
SUPPLIES,  
BLUE PROCESS PAPERS, ETC.

**E. G. SOLTSMANN,**

119 Fulton Street,

New York.

Established 1880.



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FOURTH EDITION.

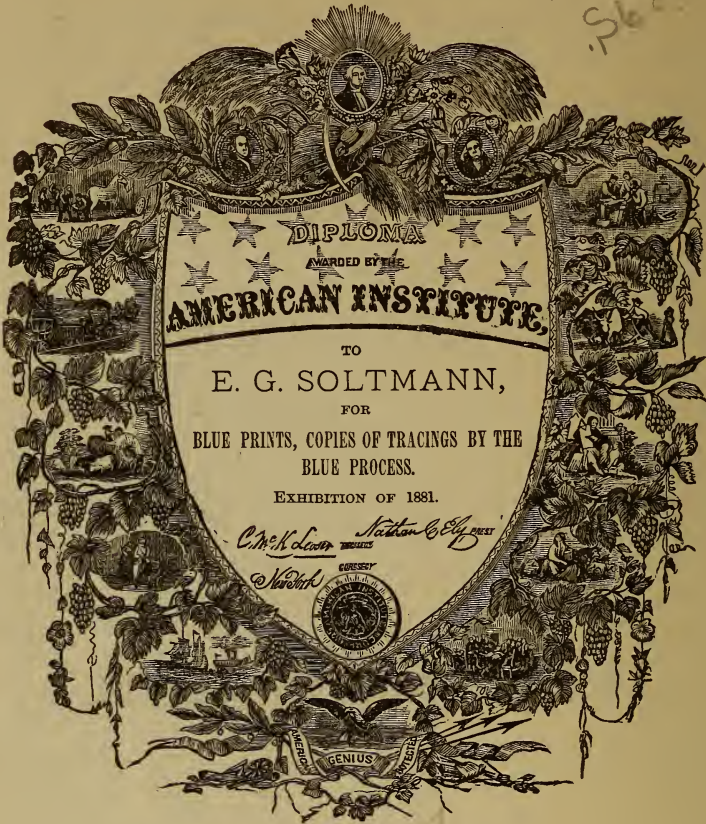
TELEPHONE CALL:  
"Nassau" 660.

NEW YORK:  
HOLT BROTHERS, CATALOGUE PRINTERS,  
No. 119 & 121 NASSAU STREET.

*2062 J1*



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Entered according to Act of Congress, in the year 1887, by EDWARD G. SOLTSMANN,  
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## NOTICE.

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THE numbers and prices will generally explain each article, and are sufficient description when ordering.

Goods ordered to be sent by mail should be registered, and are mailed at buyer's risk.

Postage is added to the cost of goods.

The Post-Office accepts no liquids of any kind.

Cash on delivery orders will be sent by express, with privilege of examining before paying if desired; a moderate sum, about equal to cost of expressage back and forth is requested with the order. The express charges for return of money to be added to bill.

Every care is observed in the packing of goods and no responsibility is assumed by the shipper for breakages or loss in transit.

Rolls of drawing paper should be ordered to be boxed; the damage done by twine marks and other injuries frequently amounts to more than the cost of a box.

Packing boxes and cartages are charged at cost.

Owing to the miscellaneous nature of goods, in this line of business, many of which are of foreign make, variations in values of materials, etc., may cause alterations in prices, which are subject to change without notice.

Terms are Cash, payable by Bank Draft, Post-Office or Express Money Order or otherwise, in New York City. Bank Notes are less liable to go astray if sent by registered mail.

To satisfy the purchaser has been, and always shall be, the aim.

E. G. SOLTMANN.

## CONDENSED CLASSIFIED INDEX.

			PAGES.
No. 100 to	226.	Drawing Papers, Bristol Boards, Mounting Boards.....	5-14
“ 250 “	296.	Drawing Papers, Mounted on Muslin.....	15
“ 302 “	368.	Tracing Cloth and Tracing Papers.....	16-18
“ 370 “	396d.	Profile and Cross Section Papers.....	18-22
“ — “	—	Blue Prints, copies of Tracings by the “Blue Process”.....	23
“ 400 “	450.	Blue Process Papers Prepared ready for use.....	24, 25
“ 500 “	560.	Blue Print Papers not Prepared. ....	26-28
“ 650 “	730.	Blue Printing Apparatus, Baths, Heavy Felt, etc.....	28-30
“ 780 “	822.	Engineers' Note, Section, Field, Level and Transit Books... ..	31-33
“ 900 “	904.	Sounding, Tide and Angle Books for Hydrographic Surveys. .	34, 35
“ 920 “	938.	Pocket Profile Books.....	36
“ 1000 “	1494.	Swiss Instruments, extra fine, with and without Pivot Joints	37-48
“ 1500 “	1670.	Swiss Instruments of heavier construction.....	49-53
“ 1700 “	1790.	English “ with Bayonet Slides and Sector Joints... ..	54, 55
“ 2000 “	2636.	German “ Separate and in Cases.....	56-72
“ 2800 “	2830.	Wooden Cases for Instruments, with Tray, Lock and Key. .	72
“ 2902 “	3316.	French Instruments, Separate and in Cases.....	73-83
“ 3495 “	3616.	Thumb Tacks of German Silver, Brass & Steel; Horn Centres	84, 85
“ 3700 “	3954.	Protractors of German Silver, Brass, Ivory, Boxwood, etc..	86-89
“ 4000 “	5220.	Scales for Drawing of Boxwood, Ivory and Steel.....	89-95
“ 5300 “	5676.	Rules, Measuring, Ceiling, Gauging and Wantage Rods.....	95-99
“ 5700 “	5780.	Parallel Rulers of Metal, Ivory and Ebony.....	100
“ 5800 “	6964.	T Squares, Straight Edges and Triangles.....	101-105
“ 7000 “	7670.	Ship, Irregular and Railroad Curves of Rubber & Hard Wood..	106-112
“ 7800 “	8120.	Drawing Boards and Tables, Horses for Boards, Easels, etc..	112-116
“ 8300 “	8320.	Soltmann's Section Liner and Positive Section Liners.....	116, 117
“ 8400 “	8660.	Dotting Instrument, Pantographs, Perspective Lineads, Planimeter and Eccentro-Linead.....	118-119
“ 8700 “	8830.	Ellipsograph, Odontographs, Measuring Instrument, Curve Rulers, Trammel Heads, Paper Cutter, etc.....	120-122
“ 8900 “	9760.	Tapes, Chains, Tape Chains, Arrows, Plumb Bobs, Rods, etc.	123-130
“ 9800 “	10420.	Eng. Instruments, Compasses, Aneroids & Eng. Supplies. .	131-139
“ 10500 “	10888.	Field Glasses, Telescopes, Reading and Magnifying Glasses.	140-142
“ 11150 “	11458.	India or Chinese Ink, Black and Colored; Japanese Ink . .	142-145
“ 11500 “	11696.	Slate and China India Ink and Color Slabs, Water Glasses..	146-148
“ 11820 “	11892.	Crystalline Ink, Liquid Drawing Inks and Colors.....	149, 150
“ 11920 “	11986.	Gold and Silver Shells and Cups, Gold & Silver Paint, etc..	151
“ 12200 “	12904.	Water Colors and Color Boxes, Jap. Water Bottles.....	152-159
“ 13100 “	13710.	Brushes for Water Col., Gum & Prep. Blue Process Paper..	159-163
“ 13900 “	14600.	Sketching Blocks and Books, Easel Boards, etc.....	164-167
“ 14700 “	14720.	Portfolios with and without Flaps.....	167
“ 14780 “	15200.	“Waffle” & other Rubbers, Ink Erasers & Sponge Rubbers..	168-170
“ 16100 “	17136.	Faber's, Dixon's, Gilbert's and other Pencils, Leads, etc..	171-178
“ 17250 “	17264.	Pocket and other Lead Pencil Pointers.....	178
“ 17300 “	17320.	Automatic Shading Pens and Colored Inks .....	179, 180
“ 17324 “	17622.	Steel Lettering and Writing Pens, Penholders, etc.....	180-182
“ 17750 “	18870.	Crayons, Stumps, Charcoal and Crayon Material.....	183-186
“ 19000 “	19030.	Oilstones for Sharpening Instruments, Cutlery, etc.....	187
“ 19110 “	19128.	“Par Excellence” Gum, Gum Pots, Gum Brushes, etc.....	188, 189
“ 19150 “	19770.	Drawing Office Stationery, incl. Bl'k Boards, Hektographs,&c.	189-198
“ 19850 “	19996.	Rubber Hand Stamps .....	199-202
“ 20102 “	20152.	Alphabets, Plain and Ornamental, Scrolls, Ornaments, etc..	203
“ 20210 “	20820.	Studies of various kinds, Drawing and Painting Copies, etc..	203-206
“ 22200 “	22300.	Winsor & Newton's and Rowney's Hand Books on Art....	207
— —	—	I dex of Classification of Scientific Books.....	208

☞ SAMPLES of Drawing Papers mailed on application.

## DRAWING PAPERS

In Sheets.

### 100. Whatman's Drawing Papers.

**Medium grain surface**, known as "C. P.," "Cold Pressed," "N." and "Not" is best suited for general drawing and coloring.

**Smooth surface**, known as "H. P.," "Hot Pressed" and "Smooth" is generally used for mechanical and fine line drawing.

**Very rough surface**, known as "R.," "Rough" and "Extra Rough" has too coarse and open a grain for general drawing and is extensively used for bold water color sketches. The surface desired, whether "Cold Pressed," "Hot Pressed" or "Extra Rough" should be stated when ordering.

### SELECTED BEST OR FIRST QUALITY.

Double Elephant.....	27 × 40 inches	"C. P." and "H. P."	.....	quire,	\$5.50
Atlas.....	26 × 34	" "	" "	" "	4.75
Imperial.....	22 × 30	" "	" "	" "	3.00
Super Royal.....	19 × 27	" "	" "	" "	2.20
Royal.....	19 × 24	" "	" "	" "	1.75
Medium.....	17 × 22	" "	" "	" "	1.40
Demy.....	15 × 20	" "	" "	" "	1.00
Cap.....	13 × 17	" "	" "	" "	.75
Antiquarian.....	31 × 53	" "	" "	" "	27.50
"	31 × 53	" "	" "	.....sheet,	1.50
Double Elephant.....	27 × 40	" "Extra Rough"	.....	quire,	6.00
Imperial.....	22 × 30	" "	" "	" "	3.50
Royal.....	19 × 24	" "	" "	" "	2.00
Griffin Antiquarian.....	31 × 53	" "C. P."	.....	sheet,	2.70

101. Whatman's Antiquarian. Quire. Sheet.  
 31 × 53 inches, Retree or Second Quality, "C. P.," "H. P.".....\$16.00 .75  
 (Whatman's Paper mounted on Muslin, see No. 295.)

### 102. Whatman's Heavy Drawing Papers.

Imperial.....	22 × 30 inch., Ex. Heavy, "C. P.," "H. P."		
	and "Extra Rough".....	8.00	.40
"	.....22 × 30 "Extra Extra Heavy, "C. P."....	16.50	.70
"	.....22 × 30 "Heaviest (as heavy as Bristol Board,) "C. P.".....	24.45	1.10
Double Elephant.....	27 × 40 "Extra Heavy, "C. P.".....	13.25	.60

### 103. Imitation Creswick Drawing Papers.

Imperial.....	22 × 30 inches, "C. P.".....	6.25	.30
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### 105. "NEW LEONA" Drawing Papers, Cold Pressed, Rough Surface.

Will bear severe rubbing and erasing; is tough and well adapted for general drawing and painting.

Mammoth.....	42 × 62 inches.....	\$12.00	.55
Extra Large Dbl. Elephant	31 × 42 ".....	4.25	.22
" " Imperial.....	24 × 32 ".....	2.75	.13
" " Royal.....	20 × 25 ".....	1.60	.08
Medium.....	15½ × 21 ".....	1.25	.06

("New Leona," mounted on Muslin, see No. 296.)



106. **Harding's Drawing Papers.**

Imperial.....	22 × 30 inches, EXTRA THICK.....	quire, \$7.20
“ .....	22 × 30 “ .....	“ 3.60

107. **“FALCON” Drawing Papers, Hot Pressed, Smooth Surface.**

For Mechanical and other fine line drawing.

Extra Large Dbl. Elephant	31 × 42 inches. ....	quire, \$4.25	sheet, .22
“ “ Imperial.....	24 × 32 “ .....	“ 2.75	“ .13
“ “ Royal.....	20 × 25 “ .....	“ 1.60	“ .08

108. **“EMPIRE” Drawing Papers.**

Double Elephant (heavy).....	27 × 40 inches .....	quire, 2.50
Imperial. ....	22 × 30 “ .....	“ 1.50
Royal .....	19 × 24 “ .....	“ 1.00
Medium.....	17 × 22 “ .....	“ .70
Demy.....	15 × 20 “ .....	“ .55
Cap.....	14 × 17 “ .....	“ .35

112. **“QUEEN” Tinted Drawing Papers, for Water Color, Crayon, etc.**

Imperial.....	22 × 30 inches, various tints.....	“ 2.70
Double Elephant.....	.27 × 40 “ “ “ .....	“ 4.25

113. **“CROWN” Tinted Water Color Papers, hand made.**

Imperial.....	22 × 30 inches, various tints, quire, \$5.00	sheet, .22
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114. **“ROMAN” Tinted Crayon Papers, Rough Surface.**

Royal.....	18 × 24 inches, various tints..... (List Price, \$1.12)	quire, 1.00
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116. **“JULLIEN” Tinted Crayon Papers, fine grain**

Royal.....	19 × 24 inches, various tints.....	“ 1.10
Atlas .....	.24 × 34 “ “ “ .....	“ 3.25

118. **“ANTLER” (formerly “Favorite”) Tinted Charcoal Papers.**

Royal ..	19 × 25 inches, various tints.....	“ .70
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120. **Reynolds' English White Bristol Boards.**

Royal .....	18¼ × 22¼ inches. ....	dozen, \$3.15	4 sheet. 2.35	3 sheet. 1.60	2 sheet.
Medium .....	16½ × 20¼ “ .....	“ 2.25	1.60	1.20	
Demy.....	14½ × 18½ “ .....	“ 1.60	1.35	.90	
Cap .....	12½ × 15¼ “ .....	“ 1.20	.90	.60	

121. **“TRIUMPH” White Bristol Boards.**

A fair blue print can be made from an ink drawing on the two-ply board.

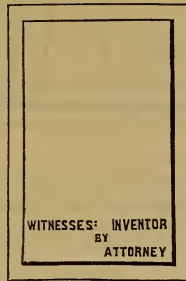
Imperial.....	20½ × 32 inches.....	dozen, \$3.60	4 ply. 3.00	3 ply. 2.20	2 ply.
Medium.....	16 × 20½ “ .....	“ 1.85	1.55	1.10	
Cap .....	10¼ × 16 “ .....	“ .95	.80	.55	
Half Cap.....	8 × 10¼ “ .....	“ .50	.40	.30	

122. **“PATENT OFFICE” Bristol Boards, cut to the required size.**

American Patent Size, THIN.....	gross, \$6.40	dozen, .60
“ “ “ MEDIUM THICK.....	“ 8.50	“ .85
English “ “ THIN.....	“	1.20
“ “ “ MEDIUM THICK.....	“	1.50

122½. **English Patent Office Smooth Imperial Paper, cut to the required**

size, same as the Bristol Board.....quire, \$ .90 dozen, .50



No. 123.

**Printed Patent Office Bristol Boards, with the wording or ruling as required by the Patent Offices.**

123. American Patent Size, THIN.....	gross, \$8.00	dozen, .80
"    "    "    MEDIUM THICK.....	"    10.00	"    1.00
123½. English Patent Size, THIN.....		"    1.50
MEDIUM THICK.....		"    1.75

Patent Office Bristol Boards, as required by other countries, furnished to order.

**124. Turnbull's Bristol Boards, with rough surface for Water Color Painting.**

		4-ply.	3-ply.	2-ply.
Royal .....	17½ × 22 inches.....dozen,	\$9.00	7.75	5.25
Medium.....	15½ × 20½ " .....	7.50	6.00	4.20
Demy.....	14 × 18 " .....	5.75	4.50	3.00
Cap.....	12 × 15 " .....	3.90	2.90	1.90

**125. French White Bristol Boards.**

Double Elephant.....	28 × 41 inches, 4 ply.....dozen,	\$8.00	sheet, .70
Atlas.....	24 × 34 " 4 " .....	5.75	" .50
Imperial.....	21 × 27½ inches.....dozen,	\$2.50	2-ply. 1.60
Royal.....	19 × 24¾ " .....	2.25	1.80 1.35
Medium.....	17 × 21 " .....	1.70	1.35 1.10
Demy.....	15½ × 19½ " .....	1.50	1.15 .90
Cap.....	12 × 16½ " .....	.90	.70 .60

**126. French Tinted Bristol Boards.**

Imperial.....	22 × 28 inches, THICK, Various Tints.....dozen,	2.50
Royal.....	19 × 24 " MEDIUM THICK, " .....	" 1.25

**127. "FLORENCE" Cream Tinted Bristol Boards.**

The rich cream tint gives pen and ink sketches a warm hue.

		4-ply.	3-ply.	2-ply.
Imperial.....	20½ × 32 inches.....dozen,	\$3.90	3.25	2.50
Medium.....	16 × 20½ " .....	2.15	1.75	1.35
Cap.....	10¼ × 16 " .....	1.15	.90	.70
Half Cap.....	8 × 10¼ " .....	.60	.50	.35

**128. Bond Paper, See New Number, 142.**



No. 128½.

**128½. Mechanical Drawing Cards.**

Made of Extra Heavy and Strong Binders' Boards, covered with white, smooth finish drawing paper on face and edges. Many large machine shops use these cards for drawing and for mounting tracings or blue prints, which, when varnished, can be washed clean at any time, and are easily handled or filed away for future reference. The smaller sizes are ½, ¼ and ⅓ of the largest sheet.

	Imperial. 22×30	Medium. 15×22	Cap. 11×15	Half Cap. 7½×11 inches.
Dozen.....	\$4.20	2.40	1.44	.96
Each.....	.35	.20	.12	.08

Other sizes and grades furnished at short notice.



No. 129.

**129. "SCRATCH or CHALK" BOARDS, with white enameled surface.**

For Black and White work and photographic or process-reproductions. The space to be drawn upon is covered with a solid coating of very black drawing ink; with a steel point, needle, or any sharp instrument, the picture is produced by scratching away the black and exposing the original white color of the board. The reverse side of this board is tinted but not enameled.

Imperial .....	22 × 28 inches.....	dozen,	\$4.00	sheet,	.33
Medium.....	14 × 22 " .....	"	2.00	"	.17
Cap.....	11 × 14 " .....	"	1.06	"	.09

Samples sent on application.

**130. "ORIOLE" Tinted and White Sketching and Mounting Boards,**

EXTRA HEAVY AND STRONG, BEST QUALITY.

Antiquarian...	36 × 50 inches,	WHITE and Gray....	dozen,	\$13.35	sheet,	1.25
Dbl. Elephant.	30 × 40 " .....	WHITE, Gray and Buff	"	8.00	"	.75
Atlas .....	25 × 35 " .....	WHITE, " .....	"	6.00	"	.55
Imperial.....	22 × 28 " .....	" .....	"	3.00	"	.28

White, Light Buff, Mottled Blue, Light Blue, Light French Grey, Light Yellow, Light Olive, Grey.

Medium.....	14 × 22 inches.....	dozen,	\$1.75	sheet,	.15
(Same tints as Imperial.)					
Cap.....	11 × 14 inches.....	"	1.00	"	.09

(Same tints as Imperial.)

Samples sent on application.

**131. "ORIOLE" Tinted and White Sketching and Mounting Boards,**

HEAVY, GOOD QUALITY.

Imperial.....	22 × 28 inches .....	dozen,	\$2.40	sheet,	.22
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White, Mottled Drab, Light Drab, Slate, Grey, Light Olive, Light Buff, Mottled Blue, Buff, Red.

Samples sent on application.



133. **White Mounting Boards** (Formerly No. 138).

Imperial.....	22 × 28 inches,	Extra THICK .....	dozen, \$2.20
“ .....	22 × 28 “	THICK.....	“ 1.60
“ .....	22 × 28 “	MEDIUM.....	“ 1.30
“ .....	22 × 28 “	THIN.....	“ 1.10

134. **Gelatine or Glass Paper.**

Large Cap.....	.13 × 19 inches,	THICK.....	dozen, \$4.20	sheet, .40
“ .....	.13 × 19 “	MEDIUM .....	“ 3.60	“ .35
“ .....	.13 × 19 “	THIN.....	“ 3.00	“ .30

135. **“HONEYCOMB” Cold Pressed, Cream Tinted Mounting Boards, for Mounting Sketches, Tracings, Drawings, etc.**

The surface and thickness vary, but are uniform in general appearance.

	THICK.		MEDIUM.		THIN.	
	Quire.	Sheet.	Quire.	Sheet.	Quire.	Sheet.
18½ × 25½ .....	\$4.45	.20	3.50	.16	2.50	.11
12½ × 25½ .....	3.25	.15	2.50	.12	2.00	.09
12½ × 18½ .....	2.50	.11	2.00	.09	1.50	.07
9¼ × 12½ .....	1.35	.06	1.12	.05	.90	.04

Samples sent on application.

136. **Transfer or Impression Papers.**

Cap...11 × 18 inches, Black, Red, Blue..	quire, \$2.00	dozen, \$1.00	sheet, .12
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Special colors and sizes furnished at short notice.

137. **English Parchment, first quality.**

	23 × 31	21 × 29	18 × 24	16 × 20	14 × 18 inches.
Dozen .....	\$14.00	13.00	9.00	7.20	5.50
Sheet.....	1.40	1.30	.90	.70	.50

138A. **Ross' Stipple or Autographic Papers, various surfaces, from fine to coarse.**

Drawings made with a soft pencil or crayon, have the peculiar appearance of a steel engraving. It is extensively used for photographic and other process reproductions.

Cap.....	11 × 14 inches .....	dozen, \$4.80	sheet, .40
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Other sizes furnished at short notice.

138c. **Printed Tints, on thin paper, for photo-engraving.**

Cap.....	11 × 14 inches, various kinds ...	“ 1.20	“ .12
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139. **Wood's Monochromatic Boards, for pastels, etc.**

Royal.....	18 × 24 inches.....	No. 1, sheet, .50	No. 2, sheet, .40
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139A. **French Monochromatic Boards.**

Imperial .....	22 × 28 inches.....	dozen, \$4.00	sheet, .35
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139c. **Pastel Boards.**

	20 × 24	18 × 22	15 × 18	12½ × 16 inches.
Each.....	.75	.60	.50	.40

139E. **Pastel Papers.**

Royal.....	19 × 25 inches.....	dozen, \$2.85	sheet, .25
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140. **Chargrine or Pebbled Boards. White and various tints for passepartouts.**

Imperial.....	22 × 28 inches. . . . .	quire, \$2.40	sheet, .10
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140½. **Chargrine or Pebbled Papers. White and various tints.**

Imperial.....	22 × 28 inches.....	quire, 1.44	sheet, .06
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141. "KAN-SUNE" India Proof Paper for Wood Engravers.

Sheets.....27 × 53 inches, Bundle of 96 sheets .....\$5.00  
 " .....27 × 53 " ..... quire, \$1.50 dozen, .85

141½. "FOO-CHOW" India Proof Paper for Wood Engravers.

EXTRA THIN, VERY CLEAR.

Sheets.....12½ × 44 inches, Bundle of 96 sheets.....\$4.40  
 " .....12½ × 44 " ..... quire, 1.20

142. Bond Papers (Formerly No. 128), Extra Tough, suitable for tracing.

Can be folded without breaking. Not affected by age. An excellent blue print can be produced from drawings in India Ink made on this paper.

Columbier.....21 × 33 inches..quire, \$1.75 Package of 100 sheets,\$6.00  
 Imperial.....19 × 30 " .. " 1.40 " " 5.00  
 Royal.....19 × 24 " .. " 1.20 " " 4.00  
 Medium.....16 × 21 " .. " 1.10 " " 3.25

Other regular sizes and grades furnished to order.

See Extra Thin and Extra Tough Drawing Papers in Rolls Nos. 194 and 195.

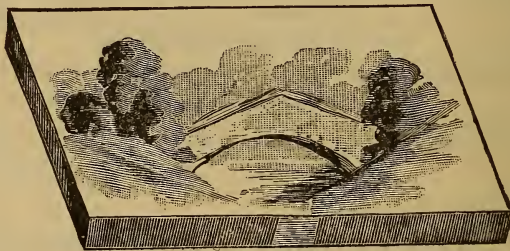
## DETAIL PAPERS

In Rolls.

144. "CRESCENT" Mat Finish Sketching Detail Papers, Extra THIN.

Have a smooth but unpolished surface, and are admirable for pen and ink drawing and sketching. A want has long been felt for a thin, low-priced roll detail paper, strong enough to bear rubbing and folding without tearing or breaking, suitable for sketches to be filed for reference, or for drawings to be mailed, thus saving a considerable amount for postage

100 yard Roll, 48 inches wide ... \$4.00	100 yard Roll, 40 inches wide ... \$3 25
50 " " " " ... 2.20	50 " " " " ... 1.85
25 " " " " ... 1.25	25 " " " " ... 1.00



(Registered "VICTOR" Trade Mark.)

## "VICTOR" SKETCH BLOCKS.

Containing 48 sheets (same as No. 14,000.)

For bold, off-hand sketching, these blocks will be found convenient. The paper is the same as the 147 "Victor."

	24×30	24×24	18×24	12×18	9×12 inches.
Each .....	\$3.50	3.00	2.50	1.50	.85
List Prices.....	(3.90)	(3.35)	(2.80)	(1.70)	(.95)

(See Sketch Block T Squares No. 6,000.)

**“VICTOR” DETAIL PAPERS.**

(Registered Trade Mark.)

146. **“VICTOR” Thin Cold Pressed Detail Papers.**

The “Victor” Detail has a surface similar to white drawing paper; it acts well under the rubber; India Ink and Water Color do not spread, and the cold pressed grain displays Pencil or Crayon to better advantage than any smooth Detail Paper.

100 yard Roll, 48 inches wide... \$7.75	100 yard Roll, 40 inches wide... \$6.90
50 “ “ “ “ ... 4.25	50 “ “ “ “ ... 3.75
25 “ “ “ “ ... 2.20	25 “ “ “ “ ... 2.00

Also sold in rolls weighing from 125 to 150 pounds.—Pound, 15c.

147. **“VICTOR” Thick Cold Pressed Detail Papers.**

100 yard Roll, 48 inches wide... \$8.75	100 yard Roll, 40 inches wide... \$7.85
50 “ “ “ “ ... 4.75	50 “ “ “ “ ... 4.25
25 “ “ “ “ ... 2.50	25 “ “ “ “ ... 2.20

Also sold in rolls weighing from 125 to 150 pounds.—Pound, 15c.

**DETAIL PAPERS—Continued.**

152. **“STANDARD” THIN, Medium Smooth Detail Papers.**

	100 Yard.	50 Yard.	25 Yard Roll.
48 inches wide.....	\$8.25	4.25	2.20
40 “ “ .....	7.25	3.90	2.00
36 “ “ .....	6.75	3.45	1.75

Rolls of about 100 Pounds.—Pound, 14c.

153. **“STANDARD” Medium Thick, Medium Smooth Detail Papers.**

	100 Yard.	50 Yard.	25 Yard Roll.
54 inches wide.....	\$9.90	5.25	2.75
48 “ “ .....	8.75	4.45	2.50
40 “ “ .....	7.75	4.25	2.20
36 “ “ .....	7.00	3.70	1.90

Rolls of about 100 Pounds.—Pound, 14c.

154. **“STANDARD” THICK, Medium Smooth Detail Papers.**

	100 Yard.	50 Yard.	25 Yard Roll.
54 inches wide.....	\$11.75	6.25	3.25
48 “ “ .....	10.00	5.25	2.75
40 “ “ .....	8.75	4.60	2.35
36 “ “ .....	7.75	3.90	2.00

Rolls of about 100 Pounds.—Pound, 14c.

155. **“STANDARD” EXTRA THICK, Medium Smooth Detail Papers.**

	100 Yard.	50 Yard.	25 Yard Roll.
48 inches wide.....	\$11.75	6.25	3.25
40 “ “ .....	9.50	5.00	2.65
36 “ “ .....	8.50	4.45	2.35

Rolls of about 100 Pounds.—Pound, 14c.



# WHITE DRAWING PAPERS

In Rolls.

## “PAR EXCELLENCE” DRAWING PAPERS,

Although similar in grain to the former “Eggshell” have to a great extent taken the place of the latter. The surface is more uniform, and the quality, both for erasing and coloring purposes excellent. The reverse side is smooth, and is well adapted for fine line drawing.

### 156. “PAR EXCELLENCE” THIN, Rough Surface.

	30 Yard.	20 Yard.	10 Yard Roll.	Yard.
58 inches wide.....	\$10.75	7.25	3.75	.40

Rolls of about 35 to 50 Pounds.—Pound, 45c.

### 157½. “PAR EXCELLENCE” Medium THICK, ROUGH SURFACE.

	30 Yard.	20 Yard.	10 Yard Roll.	Yard.
36 inches wide.....	\$8.25	5.60	2.85	.30

Rolls of about 35 to 50 Pounds.—Pound, 45c.

### 157. “PAR EXCELLENCE” Medium THICK, ROUGH SURFACE.

	30 Yard.	20 Yard.	10 Yard Roll.	Yard.
42 inches wide.....	\$9.25	6.25	3.25	.36

Rolls of about 35 to 50 Pounds.—Pound, 45c.

### 158. “PAR EXCELLENCE” Medium Thick, Rough Surface.

	30 Yard.	20 Yard.	10 Yard Roll.	Yard.
58 inches wide.....	\$12.20	8.25	4.20	.45

Rolls of about 35 to 50 Pounds.—Pound, 45c.

### 159. “PAR EXCELLENCE” THICK, Rough Surface.

	30 Yard.	20 Yard.	10 Yard Roll.	Yard.
58 inches wide.....	\$15.85	10.65	5.40	.65

Rolls of about 35 to 50 Pounds.—Pound, 45c.

### 161. “PAR EXCELLENCE” Medium THICK, Medium Smooth Surface.

	30 Yard.	20 Yard.	10 Yard Roll.	Yard.
42 inches wide.....	\$9.25	6.25	3.25	.36

Rolls of about 35 to 50 Pounds.—Pound, 45c.

### 162. “PAR EXCELLENCE” Medium THICK, Medium Smooth Surface.

	30 Yard.	20 Yard.	10 Yard Roll.	Yard.
58 inches wide.....	\$12.20	8.25	4.20	.45

Rolls of about 35 to 50 Pounds.—Pound, 45c.

### 170. “LINNIEN” Medium Thick, Medium Grain.

	30 Yard.	20 Yard.	10 Yard Roll.	Yard.
36 inches wide.....	\$6.00	4.25	2.20	.25

Rolls of about 35 to 50 Pounds.—Pound, 45c.

### 171. “LINNIEN” Medium Thick, Medium Grain.

	30 Yard.	20 Yard.	10 Yard Roll.	Yard.
42 inches wide.....	\$9.25	6.25	3.25	.33

Rolls of about 35 to 50 Pounds.—Pound, 50c.

176. "HERCULES" (Registered Trade Mark,) Medium Thick, Fine Grain.

"Hercules" Drawing Paper surpasses all other roll paper for strength; it will bear any amount of erasing, can be folded without breaking, which is a desirable consideration in drawings subjected to rough usage in Machine Shops, New Buildings, Stone Yards, etc.

	30 Yard.	20 Yard.	10 Yard Roll.	Yard.
62 inches wide.....	\$12 00	8.00	4.25	.45

Rolls of about 50 to 75 Pounds.—Pound, 45c.

177. "HERCULES" (Registered Trade Mark,) Medium Thick, Fine Grain.

	30 Yard.	20 Yard.	10 Yard Roll.	Yard.
31 inches wide.....	\$6.50	4.45	2.35	.25

Rolls of about 50 to 75 Pounds.—Pound, 45c.

182. "VELVETEEN" Medium Thick Smooth Surface.

This paper is recommended for mechanical and other fine line drawing. The quality is good, and the well sized surface allows heavy erasures.

	100 Yard.	50 Yard.	30 Yard.	20 Yard.	10 Yard Roll.	Yard.
42 inches wide.....	\$22.00	11.25	6.90	4.80	2.50	.26
36 " " .....	18.50	9.50	6.00	4.20	2.20	.23
30 " " .....	16.00	8.25	5.00	3.60	1.90	.20
27 " " .....	13.50	7.00	4.35	3.00	1.60	.17

183. "EAGLE" Medium Thick, Rough Surface.

Has a surface suitable for general drawing; takes ink and color readily, and is not easily broken when folded.

	100 Yard.	50 Yard.	30 Yard.	20 Yard.	10 Yard Roll.	Yard.
42 inches wide.....	\$22.00	11.25	6.90	4.80	2.50	.26
36 " " .....	18.50	9.50	6.00	4.20	2.20	.23

184. "LINOLA" Medium Thick, Medium Rough.

Linola Drawing Papers are made of pure selected linen stock; they are very tough and can be folded without breaking; color and ink flow freely and the eraser may be liberally applied without injury to the quality of the surface.

	100 Yard.	50 Yard.	30 Yard.	20 Yard.	10 Yard Roll.	Yard.
36 inches wide.....	\$22.00	11.25	6.90	4.80	2.50	.26
30 " " .....	18.50	9.50	6.00	4.20	2.20	.23
27 " " .....	16.00	8.25	5.00	3.60	1.90	.20

185. "SOVEREIGN" (formerly "Monitor") Medium Thick, Medium Grain.

	30 Yard.	20 Yard.	10 Yard Roll.	Yard.
36 inches wide.....	\$5.00	3.40	1.75	.20

Rolls of about 35 to 50 Pounds.—Pound, 36c.

186. "SOVEREIGN" (formerly "Monitor") Medium Thick, Medium Grain.

	30 Yard.	20 Yard.	10 Yard Roll.	Yard.
42 inches wide.....	\$6.50	4.35	2.20	.25

Rolls of about 35 to 50 Pounds.—Pound, 36c.

187. "SOVEREIGN" (formerly "Monitor") Medium Thick, Medium Grain.

	30 Yard.	20 Yard.	10 Yard Roll.	Yard.
56 inches wide.....	\$7.75	5.25	2.70	.30

Rolls of about 35 to 50 Pounds.—Pound, 36c.

194. "SAXON" Thin, Pliable and Strong.

Can be folded repeatedly without breaking; very thin, tenacious and tough; for map and other drawing and rough tracing. A perfect "Blue Print" can be printed from an ink drawing made on this paper.

	100 Yard.	50 Yard.	30 Yard.	20 Yard.	10 Yard Roll.	Yard.
42 inches wide....	\$17 50	8.75	5.95	4.25	2.20	.23
36 " " ....	15.30	7.65	4.80	3.25	1.85	.20

## 195. "ANCHOR," Extra Thin and Extra Tough.

Is extensively used for map and other drawings which are intended for mailing, or to be folded and frequently handled. A drawing made on this paper can be reproduced by the "Blue Process."

	100 Yard.	50 Yard.	30 Yard.	20 Yard.	10 Yard Roll.	Yard.
42 inches wide....	\$17.50	8.75	5.95	4.25	2.20	.23
36 " " ....	15.30	7.65	4.80	3.25	1.85	.20
30 " " ....	13.00	6.50	4.15	2.85	1.50	.17
27 " " ....	11.50	5.75	3.60	2.50	1.35	.15

## 200. "SATURN" Medium THIN FINE GRAIN.

This paper is frequently used as a substitute for *Steinbach's Paper*. The surface is similar, and for crayon work has been utilized to good advantage. As it is thoroughly sized and made of linen stock, it possesses the qualities of a good drawing paper.

	100 Yard.	50 Yard.	30 Yard.	20 Yard.	10 Yard Roll.	Yard.
54 inches wide....	\$22.70	11.35	7.50	5.00	2.65	.28
42 " " ....	17.50	8.75	6.00	4.25	2.20	.23
36 " " ....	15.30	7.65	5.00	3.25	1.85	.20
30 " " ....	13.00	6.50	4.20	2.85	1.50	.17
27 " " ....	11.50	5.75	3.70	2.50	1.35	.15

## 205. Steinbach's THICK, Chemically Pure.

For Solar printing and Crayon Drawing.

	50 Yard.	30 Yard.	20 Yard.	10 Yard Roll.	Yard.
53 inches wide.....	\$27.50	16.50	11.00	5.50	.55
26 " " .....	14.50	8.70	5.80	2.90	.29

## 206. Steinbach's THIN.

	50 Yard.	30 Yard.	20 Yard.	10 Yard Roll.	Yard.
53 inches wide.....	\$17.50	10.50	7.00	3.50	.35
26 " " .....	9.50	5.70	3.80	1.90	.19

## TINTED ROLL DRAWING PAPERS.

## 220. "ROMAN" Medium Thick, Rough ("Par Excellence") Surface. VARIOUS TINTS.

For drawing, mounting, and mats for pictures.

	30 Yard.	20 Yard.	10 Yard Roll.	Yard.
54 inches wide.....	\$9.90	7.00	3.60	.38

Roll of about 35 to 50 pounds.—Pound, 45c.

## 225. "GRIFFIN" (Registered Trade Mark,) Medium Thick, Medium Grain.

For fine detail and general drawing. It acts well under the rubber, and takes ink and color freely.

	100 Yard.	50 Yard.	30 Yard.	20 Yard.	10 Yard Roll.	Yard.
42 inches wide....	\$15.50	8.25	5.20	3.50	1.80	.19
36 " " ....	12.75	6.60	4.00	2.75	1.50	.17

Rolls of about 35 to 50 pounds.—Pound, 25c.

## 226. "GRIFFIN" (Registered Trade Mark,) THIN, Medium Grain.

	100 Yard.	50 Yard.	30 Yard.	20 Yard.	10 Yard Roll.	Yard.
42 inches wide....	\$12.75	6.60	4.00	2.75	1.50	.17
36 " " ....	10.50	5.35	3.50	2.35	1.20	.14

Rolls of about 35 to 50 pounds.—Pound, 25c.

**BLUE PROCESS PAPERS, PREPARED AND NOT PREPARED.**

(See Nos. 400, etc.)



# WHITE DRAWING PAPERS

In Rolls.

MOUNTED ON MUSLIN.

**“PAR EXCELLENCE” DRAWING PAPERS.**

Although similar in grain to the paper known as Eggshell, have to a great extent taken the place of the latter. The surface is more uniform and the quality, both for erasing and coloring purposes, excellent.

		20 Yard.	10 Yard Roll.	Yard.
250.	36 inches wide, Medium THICK, Rough Surface,	\$16.00	8.00	1.00
251.	42 “ “ “ “ “ “	18.00	9.00	1.10
253.	58 “ “ “ “ “ “	24.00	12.00	1.40
255.	58 “ “ THIN, “ “	22.00	11.00	1.25
256.	58 “ “ THICK, “ “	26.70	13.35	1.60
260.	36 “ “ MEDIUM THICK, Smooth Surface,	16.00	8.00	1.00
261.	42 “ “ “ “ “ “	18.00	9.00	1.10
262.	58 “ “ “ “ “ “	24.00	12.00	1.40

**“HERCULES” VERY STRONG, HARD SURFACE.**

268.	30½ inches wide, MEDIUM THICK, MED. Grain . . . . .	14.50	7.25	.85
269.	54 “ “ “ “ “ “ . . . . .	24.00	12.00	1.40
270.	61 “ “ “ “ “ “ . . . . .	27.00	13.50	1.60

275. **“ANCHOR”** EXTRA Thin and Extra Tough, for Maps, etc., or drawings which are to be mailed, or frequently folded or handled.

	20 Yard.	10 Yard Roll.	Yard.
42 inches wide . . . . .	\$15.00	7.50	.85

**“SOVEREIGN”** (formerly “Monitor”) For general use.

280.	36 inches wide, Medium Thick, Medium Grain . . . . .	\$15.00	7.50	.85
281.	42 “ “ “ “ “ “ . . . . .	17.00	8.50	.95
282.	54 “ “ “ “ “ “ . . . . .	21.00	10.50	1.12

# WHITE DRAWING PAPERS

In Sheets.

MOUNTED ON MUSLIN.

295. **Whatman’s Drawing Papers.**

Antiquarian . . . . .	31 × 53 . . . . .	quire, \$32.40	sheet, 1.35
Double Elephant, 27 × 40 . . . . .	“ “ “ “ . . . . .	18.00	“ .75
Imperial . . . . .	22 × 30 . . . . .	“ 12.00	“ .50
Royal . . . . .	19 × 24 . . . . .	“ 9.60	“ .40

296. **“NEW LEONA”** Medium Thick, Medium Grain.

Mammoth . . . . .	42 × 62 . . . . .	quire, \$36.00	sheet, 1.50
Extra Large Double Elephant, 31 × 42 . . . . .	“ “ “ “ . . . . .	18.00	“ .75
“ “ Imperial . . . . .	24 × 32 . . . . .	“ 10.80	“ .45
“ “ Royal . . . . .	20 × 25 . . . . .	“ 8.40	“ .35
Medium . . . . .	15½ × 21 . . . . .	“ 6.00	“ .25

Sheets and Rolls of other sizes mounted to order. Large sheets for city, county and other maps, mounted on muslin, furnished at short notice.

## TRACING MUSLIN OR CLOTH.

Owing to fluctuations abroad, the prices of Tracing Cloth frequently vary.

Special quotations will be sent on application.

'Dull Back' or "D. B." signifies dull on one side and glazed on the other.

"Glazed" signifies glazed on both sides.

302. "IMPERIAL" Dull Back or Glazed	Rolls of 24 Yards.			
	42 in.	36 in.	30 in.	18 in.
List Price.....	(\$11.00)	(8.25)	(7.50)	(4.25)
Roll.....	\$10.50	7.60	6.90	4.00
Yard.....	.50	.40	.35	.22
303. "IMPERIAL" Tracing Cloth, Dull Back in Sheets.				
Double Elephant, 27 × 40 .....	quire,	\$7.50	sheet,	.33
Imperial.....22 × 30.....	"	4.75	"	.20
Royal.....18 × 24.....	"	2.50	"	.10
Demy.....13 × 20 (English Patents).....	"	1.75	"	.07
Cap.....10 × 15 (American Patents).....	"	1.00	"	.05
308. "RELIANCE" Extra Heavy and Strong, not as transparent as the	"Imperial." Dull Back. Rolls of 24 Yards.			
	42 in.	40 in.	36 in.	30 in. 18 in. Wide.
Roll.....	\$9.30	8.00	6.80	6.00 3.75
Yard.....	.45	.40	.35	.30 20
310. "SAGARS" Dull Back or Glazed. Rolls of 24 Yards.				
	42 in.	36 in.	30 in. Wide.	
Roll.....	\$11.00	8.10	7.40	

## TRACING PAPERS

In Sheets.

320. "CHAMPION" Vegetable, Extra tough; very clear. Does not become brittle with age.				
Double Elephant.....27 × 38 inches.....	quire,	\$8.00		
Imperial.....21 × 27.....	"	3.00		
Royal.....18 × 24.....	"	2.25		
Demy.....15 × 20.....	"	1.35		
Cap.....13 × 17.....	"	1.10		
322. "PRINCESS" Oiled.				
Double Elephant.....30 × 40 inches.....	quire,	\$2.70		
Imperial.....20 × 30.....	"	1.35		

# TRACING PAPERS

In Rolls.

340. **"PREMIUM"** Oiled, thin.  
 Roll 20 yards long, 40 inches wide ..... \$3.00
341. **"MAMMOTH"** Oiled, Extra Heavy.  
 "Mammoth" Tracing Paper is used for Pen and Ink Sketches, which are to be mounted on Card or Mounting board.  
 India Ink or Water Color are easily applied, and pencil marks can be erased without tearing the paper.  
 Roll 20 yards long, 40 inches wide ..... \$4.00
344. **"VICTORIA"** HOT PRESSED, Satinized, Unprepared.  
 "Victoria" Tracing Paper contains no oil or paraffine, and will not become brittle or yellow with age.  
 It can be folded without breaking; India Ink or Water Color do not spread or soak through, and on account of the low price it is preferable to many other Tracing Papers.  
 Roll 44 yards long, 54 inches wide ..... (List Price, \$5.50) \$5.00  
 " 22 " " 54 " " ..... ( " 2.75) 2.50  
 " 44 " " 27 " " ..... ( " 3.10) 2.75
345. **"MONARCH"** (Registered Trade Mark,) Cold Pressed, unglazed, unprepared.  
 "Monarch" Cold Pressed Unprepared Tracing Paper has a slightly rough surface; it contains no oil, will not turn yellow or brittle with age, and is not injured in folding.  
 Water Color and India Ink do not spread or soak through, and the low price has made it a very popular tracing paper.  
 Roll 44 yards long, 54 inches wide ..... (List Price, \$5.50) \$5.00  
 " 22 " " 54 " " ..... ( " 2.75) 2.50  
 " 44 " " 27 " " ..... ( " 3.10) 2.75
346. **"CRYSTAL"** Extra Thin, very transparent.  
 Roll, 20 yards long, 57 inches wide ..... \$5.50  
 " 20 " " 43 " " ..... 3.85  
 " 20 " " 28 " " ..... 2.85
347. **"LEATHERINE"** Strong, very clear.  
 This paper is less liable to wrinkle when Water Color is applied than many other Tracing Papers. India Ink flows freely and pencil marks can be erased without tearing the paper.  
 Roll, 20 yards long, 54 inches wide ..... \$6.85  
 " 20 " " 40 " " ..... 5.00  
 " 20 " " 27 " " ..... 3.50
350. **"LION"** Parchment, very tough and transparent.  
 Is an excellent substitute for tracing cloth; it can be folded, takes India Ink and Color freely, and may be stretched like Drawing Paper, by gumming down the edges first, and when it adheres thoroughly, moistening the surface with a sponge or brush.  
 Roll, 20 yards long, 37 inches wide ..... (List Price, \$5.50) \$5.00
352. **"ELEPHANT VELLUM"** Extra Heavy, Extra Strong.  
 "Elephant Vellum" is strong enough to be used like a drawing paper. Drawings, constructed in pencil, on it, can be easily erased without tearing. A fine "Blue Print" is produced from an ink drawing made on this paper, which saves the expense of tracing the original. To stretch it, gum down the edges, and when it adheres, moisten the surface with a sponge or brush.  
 Roll, 20 yards long, 37 inches wide ..... \$6.00



TRACING PAPERS IN ROLLS.—*Continued.*

360. "IVORINE" White Smooth Finish, not prepared.

Will not break in folding. It is of fair strength, remains white, does not become brittle with age, and Color and Ink flow freely.

Roll, 44 yards long, 54 inches wide.....	\$4.75
" 44 " " 42 " " .....	3.75
" 22 " " 54 " " .....	2.75
" 22 " " 42 " " .....	2.00
" 44 " " 27 " " .....	2.50

361. "CANARY" (Registered Trade Mark,) AMBER TINTED.

The surface of this paper is well suited for tracing with pencil. It is strong enough to bear erasing; takes India Ink and Water Color; can be folded without breaking; has a fair amount of strength, and on account of the moderate price it is recommended for general use and TRACINGS OF DETAILS.

Roll, 44 yards long, 48 inches wide.....	\$2.00
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362. "ARCADIA" Detail Tracing Paper.

A low priced paper for general Rough Tracing, where no great transparency is required.

Roll, 50 yards long, 40 inches wide.....	\$1.25
------------------------------------------	--------

368. "SILK" Pencil Tracing Paper.

Will answer the purpose for Tracing where no strength or durability is required. This paper does not take Ink.

Roll, 50 yards long, 48 inches wide.....	\$1.50
------------------------------------------	--------

PROFILE PAPERS

Printed in Orange or Green.



PROFILE PAPER, PLATE A.

PLATE A. Horizontal divisions, 4 to the inch. Vertical divisions, 20 to the inch; every tenth horizontal and each fiftieth vertical division line heavier than the rest.

370. PLATE A. Sheets, 15 × 42 inches.....	quire, \$6.50	sheet, .40
371. " A. Rolls, 50 yards long, 22 inches wide.....	roll, 15.00	yard, .30
372. " A. Mounted on Muslin. In Rolls.....	"	.75

**PROFILE PAPERS—Continued.**



PLATE B. Horizontal divisions, 4 to the inch. Vertical divisions, 30 to the inch; each tenth horizontal and every twenty-fifth vertical division line heavier than the rest.

- 375. PLATE B. Sheets, 13 × 42 inches.....quire, \$8.50 sheet, .40
- 376. “ B. Rolls, 50 yards long, 22 inches wide .....roll, 15.00 yard, 30
- 377. “ B. Mounted on Muslin. In Rolls..... “ 75

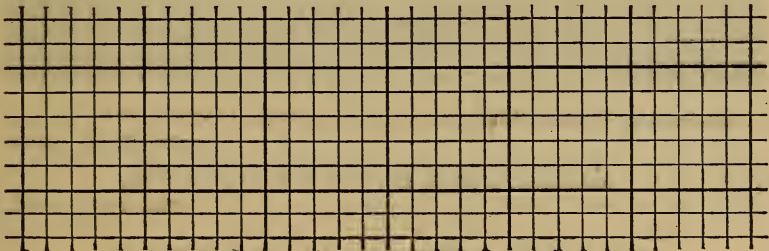
PLATE C. Horizontal divisions, 5 to the inch. Vertical divisions, 25 to the inch; each fifth horizontal, and every twenty-fifth vertical division line heavier than the rest.

- 380. PLATE C. Sheets, 15 × 42.....quire, \$8.50 sheet, .40

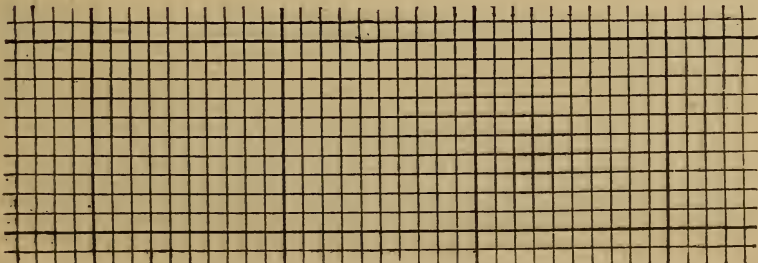
Profile Books, see Nos. 920 to 938.

**CROSS SECTION PAPERS**

Printed in Orange or Green.



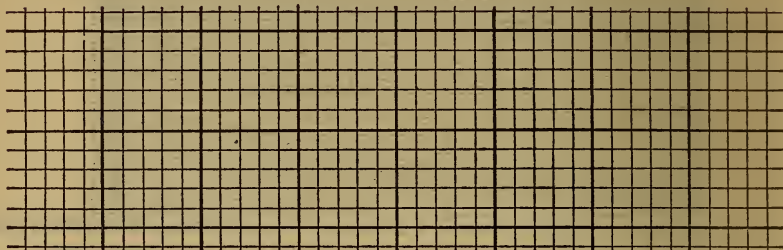
- 385. Cross Section, Printed, 8 × 8 to inch, size of Engraving, 16 × 22 inches,  
quire, \$5.00 sheet, .25



- 386. Cross Section, Printed, 10 × 10 to inch, size of Engraving, 16 × 20 inches,  
quire, \$5.00 sheet, 25

CROSS SECTION PAPERS—*Continued.*

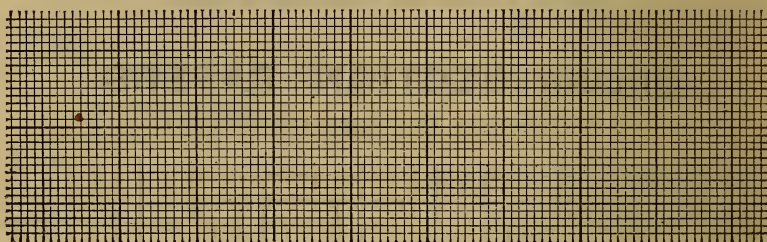
Printed in Orange or Green.



387. Cross Section, Printed,  $5 \times 5$  to  $\frac{1}{2}$  inch, size of Engraving,  $16 \times 20$  inches,  
 quire, \$5.00 sheet, .25

## METRIC CROSS SECTION PAPER

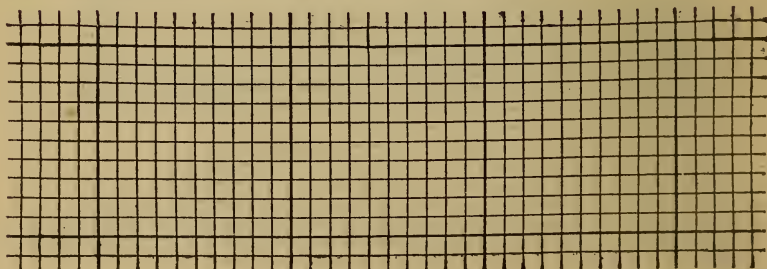
Printed in Orange.



389. Cross Section, Printed, Millimeter, size of Engraving,  $18 \times 24$  inches,  
 quire, \$5.00 sheet, .25
- 389 $\frac{1}{2}$ . “ “ Millimeter, in Rolls, 27 inches wide, 11 yards Long,  
 roll, \$4.00 yard, .40

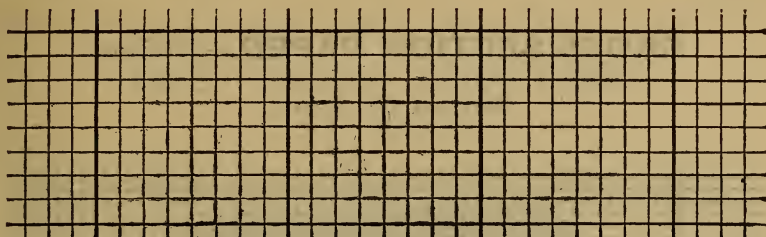
## CROSS SECTION PAPERS

Ruled in Blue.



390. Cross Section, Ruled,  $10 \times 10$  to inch, sheets,  $17 \times 22$  inch., quire, \$1.50 sheet, .08
- 390 $\frac{1}{2}$ . “ “ “  $10 \times 10$  “ “  $24 \times 38$  “ “ 4.45 “ .22

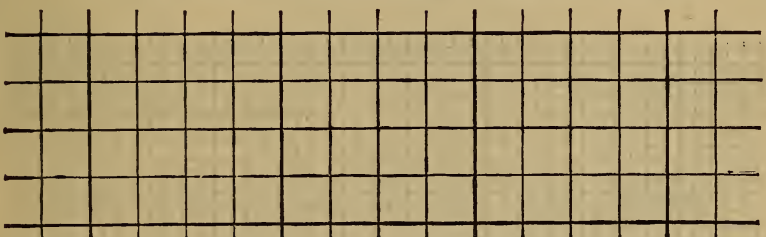




391. Cross Section, Ruled 8×8 to inch, sheets, 17×22 inches... quire, \$1.50 sheet, .08  
 391½. " " " 8×8 " " 24×38 " ... " 4.45 " .22

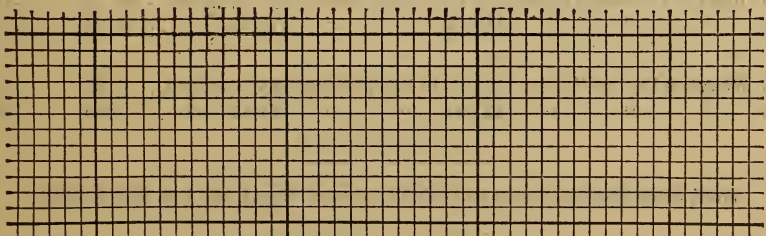


392. Cross Section, Ruled 5×5 to inch, sheets, 17×22 inches... quire, \$1.50 sheet, .08  
 392½. " " " 5×5 " " 24×38 " ... " 4.45 " .22



393. Cross Section, Ruled 4×4 to inch, sheets, 17×22 inches... quire, \$1.50 sheet, .08  
 393½. " " " 4×4 " " 24×38 " ... " 4.45 " .22

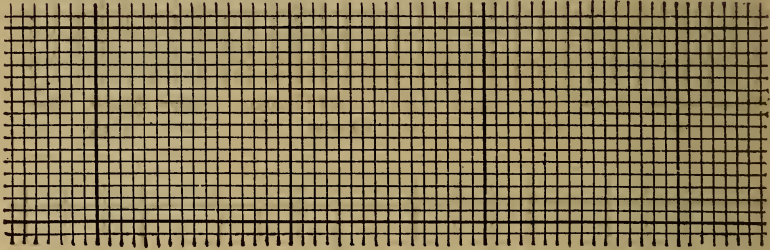
Also used for topographical drawing, reading 400 feet to the inch.  
 The inch lines are BLUE, other lines RED.



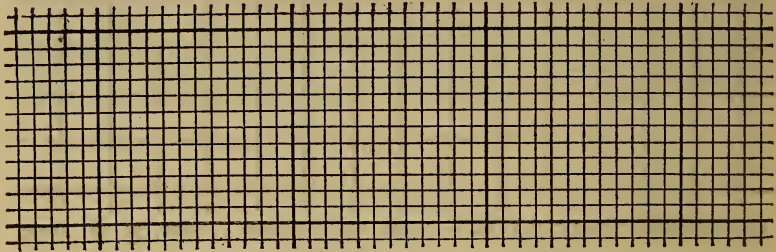
394. Cross Section, Ruled 12×12 to inch, sheets, 19×24 inches. quire, \$2.00 sheet, .10  
 394½. " " " 12×12 " " 23×36 " . " 4.45 " .22

**CROSS SECTION PAPER.**—*Continued.*

Ruled in Blue.



395. Cross Section, Ruled 16×16 to inch, sheets, 19×24 inches, quire, \$2.00 sheet, .10  
 395½. “ “ “ 16×16 “ “ 24×38 “ “ 4.45 “ .22


**WEAVER'S DESIGN PAPERS.**

Designs are in black lines.

				quire.	sheet.
396A.	Weaver's Design Papers,	12×12 to inch,	sheets, 23×36 inches..	\$4 45	.22
396B.	“ “ “	12×12 “ “	17×22 “ ..	2.00	.10
396C.	Weaver's Design Papers,	12×14 to inch,	sheets, 23×36 inches..	4.45	.22
396D.	“ “ “	12×14 “ “	17×22 “ ..	2.00	.10

*Field, Cross Section, Profile and other Engineers' Books, see Nos. 800 to 938.*

**CROSS SECTION SKETCHING BLOCKS, see No. 14,340.**

 SAMPLE BOOK of Blue Process Papers mailed on application

# THE "BLUE PROCESS."

ALSO KNOWN AS

FERRO-PRUSSIAN AND HELIOGRAPHIC PROCESS.

For producing Copies of Tracings in *White Lines* on a *Blue Ground*.

This design is printed from a wood cut and represents the general appearance of a "Blue Print."



All Lines Drawn with Black India Ink on Tracing Cloth will show distinctly in white on a blue ground.

Within the past few years the use of "Blue Prints" (copies of tracings by the Blue Process) has steadily increased. The *Low Price*, the *Rapidity with which they can be Produced*, and the *positive knowledge of having a fac-simile of the original* are but a few of the many advantages gained by using these copies. Iron Workers, Bridge Builders, Machinists, etc., use them extensively. At a comparatively small outlay copies of every part of the work can be freely distributed among the men, thus overcoming the disadvantage of compelling a number of persons to work and measure from one drawing. Architects acknowledge it to be economical and convenient to furnish sets of "Blue Print" copies to the Builder, Mason, Carpenter, Stone Cutter and others who desire estimating on structures. The necessity of calling at the Architect's office to examine the drawings or to await their turn in taking away the tracings is hereby obviated, and the contractors are enabled to estimate at their leisure.

The tracings are not injured or defaced, and can at any time be used for producing additional copies.

## PRICE LIST

FOR PRODUCING

### COPIES FROM TRACINGS BY THE "BLUE PROCESS."

TRACINGS IN BOLD BLACK LINES WILL PRODUCE PERFECT COPIES.

If possible, the tracings should be rolled, not folded. Water color causes tracing cloth to wrinkle. If tracings are not colored, the copies are more distinct.


	10 × 15	14 × 18	18 × 22	20 × 28	24 × 32	26	34	28	36 inches
Each Copy..	.15	.20	.25	.30	.35		40		.45
"	27 × 40	34 × 36	36 × 38	32 × 40	36 42	42	42	34	45 inches.
"	.45	.50	.60	.50	.65		.75		.60
"	27 × 48	34 × 48	36 × 48	42 × 48	27 54	34	54	36 × 54 inches.	
"	.60	.70	.80	.90	.85		1.00		1.20
"	42 × 54	27 × 60	34 × 60	36 × 60	42 × 60	27 × 66	32	66 inches.	
"	1.35	1.00	1.25	1.45	1.60		1.20		1.35

### MONSTER SIZES.

	36 × 66	42 × 66	27 × 72	32 × 72	36 × 72	42 × 72 inches.
Each Copy..	1.50	1.80	1.35	1.60	1.85	1.95

Larger sizes at moderate rates.

A fair Blue Print can be made direct from a Patent Office Drawing on two-ply or three-ply Bristol Board.

 See next page.



**TRACINGS COPIED BY THE "BLACK PROCESS" (Dark lines on a light ground).**

Prices same as "Blue Prints."

Architects, Engineers, etc., in any part of the country, who have no facilities for making "Blue Prints" can send their tracings, stating number of copies required, from which the desired prints will be produced and promptly returned to sender.

**"CRYSTALLINE" INK, WHITE AND RED,**

(Same as No. 11,815.)

For Writing and Drawing on "Blue Prints."

It contains no acid injurious to steel pens, has the consistency of India Ink and can be used in a Ruling or Writing Pen.



Neat Polished Partitioned Box, containing 1 doz. bottles....\$1.90

Neat Polished Partitioned Box, containing six bottles..... 1.00

Bottle... (List Price, 17c.) .15

**"BLUE PROCESS" PAPERS.**

Prepared ready for use.

**DIRECTIONS FOR USING.**

All Tracings should be drawn with Black India Ink, and the lines to be as heavy as possible.

A flat drawing or other board is covered with a blanket or any yielding material answering the purpose of a cushion. Place the prepared paper (prepared side up) on the blanket; then lay the tracing (face up) over the prepared paper, and, in order to press paper and tracing closely together, a piece of heavy plate glass is placed over the tracing, thus producing a perfect contact. Expose from five to ten minutes in a bright sun, and longer in cloudy weather or diffused light. No exact time for exposure can be stated. It is advisable to practice with small pieces of the prepared paper, by exposing them various lengths of time, say every consecutive minute from five to ten minutes, and note the relative results. After the paper has been exposed the proper length of time, the sheet is submerged in a shallow dish of clean water; where the light has acted upon the prepared paper, it will change to a rich blue, and where a line on the tracing prevented the action of the light, the chemical with which the paper is covered will wash off and the original white paper re-appears, thus producing a copy in *White Lines on a Blue Ground*. This copy is permanent.

Better results can be obtained with a Blue Printing Frame. See Nos. 650, etc.

## “BLUE PROCESS” PAPERS.

Prepared ready for use.

(SEE DESCRIPTION ON PREVIOUS PAGE.)

The following grades of “Blue Process” Papers are all of own manufacture, and every roll or sheet is freshly prepared when sold.

The daily practice in making Blue Prints greatly adds to the experience of manufacturing Paper of good quality.

### 400. “ATLAS,” Extra Tough, Pliable and Strong Blue Process Papers, Prepared Ready for Use.

Will not tear when saturated with water, and will bear considerable folding without breaking. This Paper was awarded a “Medal of Excellence” by the American Institute Exhibition of 1882.

	54	48	42	36	31	27	20 in. Wide.
Roll 11 yards long	\$7 00	6.25	5.50	4.75	4 00	3.50	3.00
“ 22 “	14.00	12.50	11.00	9.50	8.00	7.00	6.00

Other widths prepared to order.

### 405. “IMPERIAL,” Medium Thick, Blue Process Papers, Prepared Ready for Use.

	42	36	30	27	20 in. Wide.
Roll 10 yards long	\$4.75	4.00	3 25	2.75	2.50
“ 20 “	9.50	8.00	6.50	5.50	5 00

Other widths prepared to order.

### 410. “CONGRESS,” Medium Strong, Blue Process Papers, Prepared Ready for Use.

	48	42	36	30	27	20 in. Wide.
Roll 10 yards long	4.75	4.25	3.50	2.75	2.35	2.15
“ 20 “	9.50	8.50	7.00	5.50	4.70	4.30

Other widths prepared to order.

### 415. “DRAGON,” Extra Thin, Extra Strong, Blue Process Papers, Prepared Ready for Use.

Can be folded repeatedly without breaking, and is a desirable paper for mailing; being a saving on the postage.

	42	36	30	27	20 in. Wide.
Roll 10 yards long	\$4.00	3.25	2.50	2.25	1.85
“ 20 “	8 00	6.50	5.00	4.50	3.70

Other widths prepared to order.

### 450. “STAR,” Blue Process Papers, Prepared Ready for Use.

Antiquarian. 31×53 in., quire, \$13.00	Super Royal, 20×28 in., quire, \$3.00
Dbl. Elephant. 27×40 “ “ 6.50	Royal. . . . . 19×24 “ “ 2.50
Double Royal 24×38 “ “ 4.75	Medium. . . . . 17×22 “ “ 2.00
Columbian. . . . . 23×36 “ “ 4.25	Demy. . . . . 16×21 “ “ 1.50
Imperial. . . . . 23×31 “ “ 3.75	

Other sizes prepared to order.

BLUE PROCESS  
 "PAR EXCELLENCE" GUM.

Specially prepared for  
 mixing with and thickening  
 Blue Process Solution.

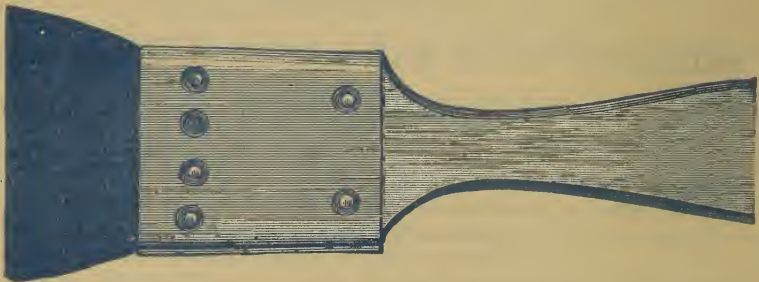
No. 490.



The solution is less liable  
 to soak into the paper, and  
 as more of the liquid re-  
 mains on the surface, the  
 prepared paper keeps longer  
 and the Blue Prints are  
 improved

Large Bottle, (Large Quart).....\$1.00    Medium Bottle, (Large Pint)..... .50

BRUSHES FOR PREPARING  
 BLUE PROCESS PAPERS.



Same as No. 13,710.

Flat Camel Hair Brushes, extra quality, for preparing Blue Process  
 Papers, Stretching Drawing Papers, Letter Press Copies, etc.

	6	5	4	3 inch.
Each	\$2.75	2.20	1.65	1.12

Larger Sizes Made to Order at Short Notice.



## NOT PREPARED BLUE PRINT PAPERS.

To avoid errors the Not Prepared Papers are termed  
**"BLUE PRINT PAPERS."**

All prepared papers are called "BLUE PROCESS" Papers.

500. **"LINOLA"** Extra Hard Surface, Extra Tough. **Not Prepared Blue Print Papers.**

"Linola" is in many respects superior to other Blue Print Papers. It is strong and pliable, and adapted for severe usage in machine shops, buildings, etc. The surface is very hard; it absorbs but little of the chemicals, and consequently will keep in the prepared state for some time.

	100 Yard.	50 Yard.	30 Yard.	20 Yard.	10 Yard Roll.
36 inches wide.....	\$22.00	11.25	6.90	4.80	2.50
30 " " .....	18.50	9.50	6.00	4.20	2.20
27 " " .....	16.00	8.25	5.00	3.60	1.90

503. **"VELVETEEN"** Very Strong, Smooth Surface. **Not Prepared Blue Print Papers.**

	100 Yard.	50 Yard.	30 Yard.	20 Yard.	10 Yard Roll.
42 inches wide.....	\$22.00	11.25	6.90	4.80	2.50
36 " " .....	18.50	9.50	6.00	4.20	2.20
30 " " .....	16.00	8.25	5.00	3.60	1.90
27 " " .....	13.50	7.00	4.35	3.00	1.60

507. **"VULCAN"** Medium Thick. **Not Prepared Blue Print Papers.**

	100 Yard.	50 Yard.	30 Yard.	20 Yard.	10 Yard Roll.
54 inches wide.....	\$22.70	11.35	7.50	5.00	2.65
42 " " .....	17.50	8.75	6.00	4.25	2.20
36 " " .....	15.30	7.65	5.00	3.25	1.85
27 " " .....	11.50	5.75	3.70	2.50	1.35
20 " " .....	9.00	4.50	3.00	2.15	1.15

510. **"CONGRESS"** **Not Prepared Blue Print Papers.**

	100 Yard.	50 Yard.	30 Yard.	20 Yard.	10 Yard Roll.
42 " " .....	17.50	8.75	6.00	4.25	2.20
36 " " .....	15.30	7.65	5.00	3.25	1.85
30 " " .....	13.00	6.50	4.20	2.85	1.50
27 " " .....	11.50	5.75	3.70	2.50	1.35
20 " " .....	9.00	4.50	3.00	2.15	1.15

515. **"DRAGON,"** Extra Thin, Extra Strong, **Not Prepared, Blue Print Papers.**

Can be folded repeatedly without breaking, and is a desirable paper for mailing, causing a saving on postage.

	100 Yard.	50 Yard.	30 Yard.	20 Yard.	10 Yard Roll.
42 inches wide.....	\$17.50	8.75	5.95	4.25	2.20
36 " " .....	15.30	7.65	4.80	3.25	1.85
30 " " .....	13.00	6.50	4.15	2.85	1.50
27 " " .....	11.50	5.75	3.60	2.50	1.35
20 " " .....	9.00	4.50	2.85	2.15	1.15

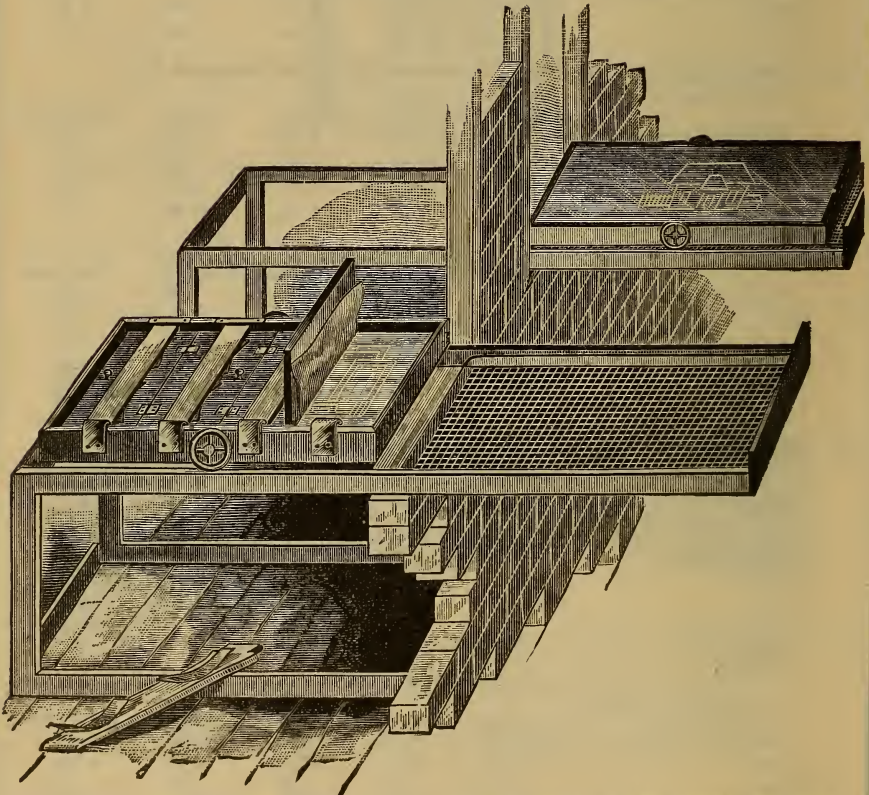
**NOT PREPARED BLUE PRINT PAPERS.**

Continued.

520. **"ALEXIS,"** Medium Strength, Not Prepared, Blue Print Papers.
- |                |          |          |          |          |               |
|----------------|----------|----------|----------|----------|---------------|
|                | 100 Yard | 50 Yard. | 30 Yard. | 20 Yard. | 10 Yard Roll. |
| 36 inches wide | \$11.00  | 5.75     | 3.60     | 2.50     | 1.30          |
525. **"ARGAND,"** Medium THIN, Not Prepared, Blue Print Papers.
- A low-priced paper, which answers all purposes, where no great amount of strength or durability is required.
- |                |           |           |          |          |               |
|----------------|-----------|-----------|----------|----------|---------------|
|                | 200 Yard. | 100 Yard. | 50 Yard. | 30 Yard. | 20 Yard Roll. |
| 36 inches wide | \$15.50   | \$7.75    | 4.00     | 2.50     | 1.75          |
560. **"DIAMOND,"** Not Prepared, Blue Print Papers.
- |           |                     |        |        |                          |    |
|-----------|---------------------|--------|--------|--------------------------|----|
| Columbier | 23×36 inch., quire, | \$1.75 | Medium | .....17×22 inch., quire, | 80 |
| Imperial  | .....23×31 " "      | 1.50   | Demy   | .....16×21 " "           | 60 |
| Royal     | .....19×24 " "      | 1.00   |        |                          |    |

**BLUE PRINTING CASES OR FRAMES.**

For copying Tracings by the "Blue Process."



The above cut represents Frame No. 650, with hollow wheels attached to axes, mounted on a track.

For Description, see next Page.

**BLUE PRINTING****FRAMES OR CASES AND APPARATUS**

FOR COPYING TRACINGS BY THE

**"BLUE PROCESS."**

Blue Printing Frames consist of a shallow frame made of hardwood with a rabbet holding a piece of plate glass ; two or more (hinged) wooden panels (according to size) arranged so as to permit examination of the print without any possibility of changing its position in the case. The springs which press the panels and glass together are attached to cross-bars, held in position by self-acting clamps ; the cushion is of the best quality of felt about  $\frac{1}{4}$  inch thick, which material is very soft and pliable, and assists in producing a perfect, even contact between tracing and the prepared paper.

The following prices are for complete Frames, WITHOUT hollow wheels or tracks, as shown in cut.

Extra Fine Quality : made of hard wood, well finished, with extra powerful springs, numerous panels and crossbars, and in every respect of first-class workmanship.

Inside Measure.	Inside Measure,
650. 38×54 inches, Complete Frame, \$45.00	26×36 inches, Complete Frame, \$24.00
36×48 " " " 38.00	30×30 " " " 20.00
36×42 " " " 35.00	24×30 " " " 17.00
32×44 " " " 30.00	22×28 " " " 15.00
28×42 " " " 27.00	20×24 " " " 12.00

Any size made to order.

Large frames can be furnished with hollow wheels attached to the centre of each side. In this way the frame, if placed on a track, is easily turned and rolled into the light. Orders filled for large frames with side wheels and the complete track (SEE CUT). A frame so arranged can be handled by a small boy without danger of breaking the glass.

The exact available width of window and the measurement from the floor of the highest part of the window sill should be stated.

**PRINTING CASES OR FRAMES**

With Light Cushion.

Inside Measure.	Inside Measure.
680. 26×46 inches, Complete Frame, \$30.00	20×24 inches, Complete Frame, \$10.50
24×30 " " " 15.00	

**690. Printing Cases or Frames, Light Construction, Heavy Glass, Light Cushion**

Inside Measure.	Inside Measure.
20×24 inches, Complete Frame, \$8.75	14×17 inches, Complete Frame, \$4.85
17×20 " " " 5.75	11×14 " " " 3.90



**ZINC LINED BATHS,**  
 FOR WASHING AND DEVELOPING  
 "BLUE PRINTS."



700. Extra quality, heavy zinc. The sizes of baths should be a few inches wider and longer than the Blue Printing Frame or glass.

In washing prints it is advisable to place them in the bath with the face up, and to move them back and forth occasionally.

Inches.	Each.	Inches	Each.
40x5, Inside Measure	\$9.75	27x38, Inside Measure	\$5.75
37x51, " "	8.75	31x32, " "	5.00
37x45, " "	8.00	25x32, " "	4.45
33x47, " "	7.25	23x30, " "	4.00
29x44, " "	6.50	21x26, " "	3.50

**ZINC LINED BATHS.—Lighter Construction.**

Inches.	Each.	Inches.	Each.
715. 37x48, Inside Measure	\$6.50	21x26, Inside Measure	\$3.00
31x42, " "	5.00	18x22, " "	2.50
25x32, " "	3.90	15x18, " "	2.00

**HEAVY FELT**

FOR

**BLUE PRINTING FRAMES.**

730. Felt, about 1/4 inch thick, to use as a cushion in Blue Print Frames, or underneath a plate glass. It is soft and of uniform thickness and gives better satisfaction than a blanket.

36x72	36x66	36x60	36x54	36x48	36x42	36x36	30x36	24x36 inches.
Each, \$8.50	7.80	7.10	6.40	5.70	5.00	4.25	3.55	2.85

**BLOTTING PAPER,**

IN LARGE SHEETS,

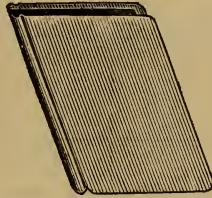
**FOR DRYING "BLUE PRINTS."**

Royal, 19 x 24 inches, Extra Quality . . . . . quire, \$2.00 . . . . . sheet, .10

## ENGINEERS' NOTE BOOKS.

Horizontal Ruling only, similar to Field and Level Books

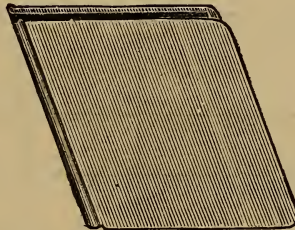
SEE NEXT PAGE.



780.  $4\frac{1}{2} \times 7\frac{1}{2}$  inches, Leather Cover, Round Corners, 60 leaves . . . . .dozen, \$4.50  
 782.  $4 \times 6\frac{1}{2}$  " " " " " 60 " . . . . . " 4.00

## ENGINEERS' CROSS SECTION BOOKS.

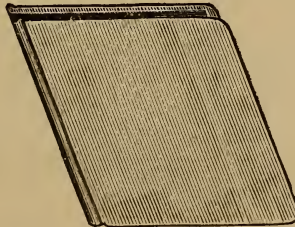
Ruled in Blue, 10 parts to the inch, every inch line heavier than the rest.



786.  $6\frac{1}{2} \times 8\frac{1}{2}$  inches, Leather Cover, Round Corners, 80 leaves . . . . .dozen, \$10.00  
 788.  $4\frac{1}{2} \times 7\frac{1}{2}$  " " " " " 80 " . . . . . " 6.00

## ARCHITECTS' "DIAGRAM BOOKS."

Ruled in squares, convenient for sketching plots of ground, sizes of rooms, etc. Every inch line heavier than the rest.



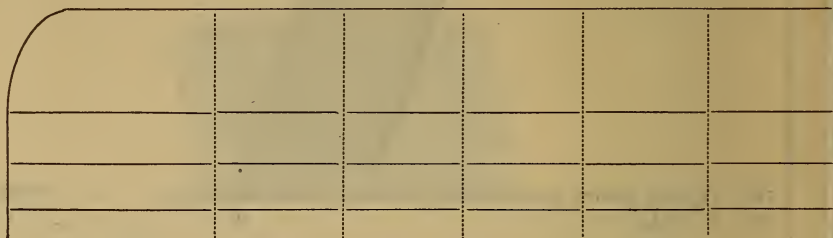
792.  $6\frac{1}{2} \times 8\frac{1}{2}$  inches, Leather Cover, Round Corners, 80 leaves . . . . .dozen, \$10.00  
 794.  $4\frac{1}{2} \times 7\frac{1}{2}$  " " " " " 80 " . . . . . " 6.00

Cross Section Blocks, Same as No. 14,340.

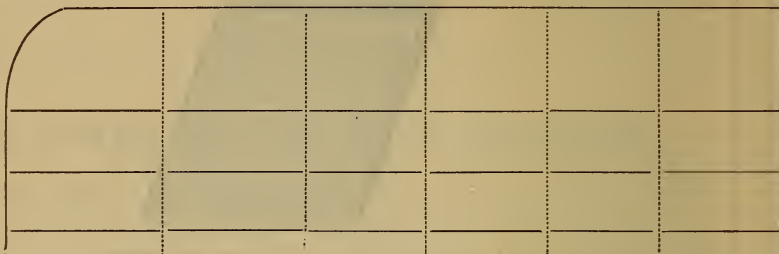
	16×20	10×16	8×10	4×5 inches
Each . . . . .	\$3.00	1.75	1.00	.55

## ENGINEERS' FIELD, LEVEL

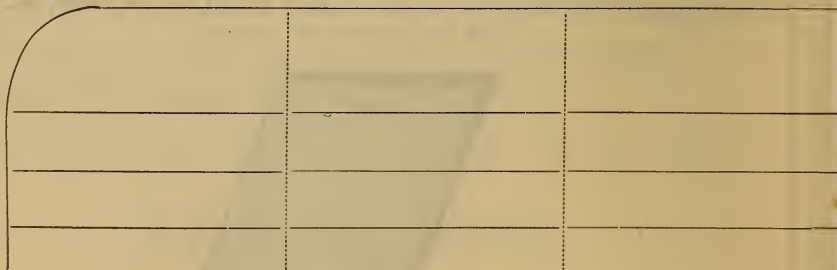
These books have round corners, are well bound, and have



800. "FIELD BOOKS,"  $4\frac{1}{2} \times 7\frac{1}{2}$  inches, Leather Covers,  
802. " " "  $4\frac{1}{2} \times 7\frac{1}{2}$  " " "



810. "LEVEL BOOKS,"  $4 \times 6\frac{1}{2}$  inches, Leather Covers,  
812. " " "  $4 \times 6\frac{1}{2}$  " " "



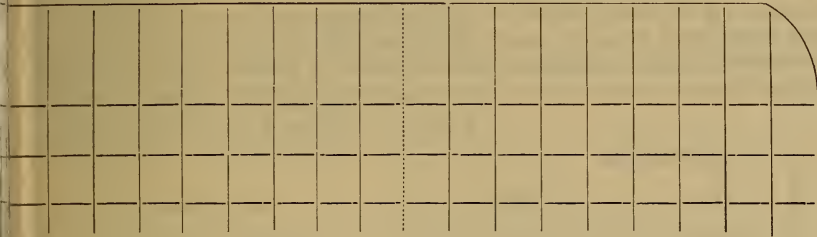
820. "TRANSIT BOOKS,"  $4\frac{1}{2} \times 7\frac{1}{2}$  inches, Leather Covers,  
822. " " "  $4\frac{1}{2} \times 7\frac{1}{2}$  " " "

Any style of Engineers' Books

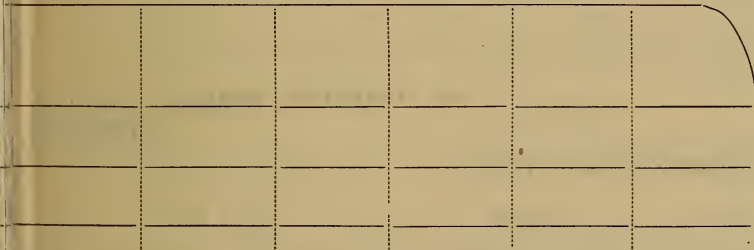


# AND TRANSIT BOOKS.

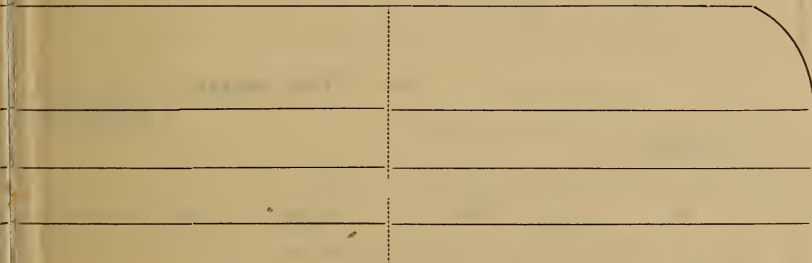
the words "Field Book," etc. printed on the outside of cover.



Round Corners, 80 leaves .....dozen, \$6.00  
 " " 60 " ..... " 4.50



Round Corners, 80 leaves .....dozen, \$5.50  
 " " 60 " ..... " 4.00



Round Corners, 80 leaves .....dozen, \$6.00  
 " " 60 " ..... " 4.50

made to order in any quantity.

## HYDROGRAPHIC

Sounding, Tide and Angle Records, which are fac-similes

A few alterations and additions have been made which will probably be acknowledged. The pages are *numbered consecutively* from 1 to 100. An *index* of four pages is indexes on the fly leaves. The word *locality* is printed at the head of left hand page of the paper is of the best quality which will bear erasing, but it is *not highly glazed*, so These books have been extensively introduced into many of the United States proper columns and printed headings for the classification of reduced Tides and Soundings. The Tidal Records contain space for meteorological data, thereby making the record of

SAMPLE SHEETS OF THESE BOOKS

SOUNDINGS							
Year.....		Month.....		Date of Month.....			
No.	TIME	SOUNDINGS		RED. FOR TIDE.	REDUCED SOUNDINGS		BOTTOM
		Feet	Tenths		Feet	Tenths	
		Fathom	Feet	Feet	Fathom	Feet	

900. "SOUNDING BOOKS," 4 × 13 inches,  
Special rates

OBSERVATIONS OF TIDES at								
Year.....		Month.....		Day of Month.....				
MEAN TIME OF OBSERVATION		READING OF TIDE STAFF		WIND		BAROMETER		REMARKS
Hrs.	Min.	Feet	Dec's	Direc.	Force	Ins.	Dec's	

902. "TIDE BOOKS," 4 × 13 inches,  
Special rates

LOCALITY			
No.	TIME	ANGLES	OBJECTS OBSERVED

904. "ANGLE BOOKS," 4 × 13 inches,  
Special rates

## SURVEYING BOOKS.

of those used by the United States Coast Survey.

as improvements, viz.:

inserted in the fore part of each book, thus saving the labor and inconvenience of marking Angle Books.

as to show the pencil marks to better advantage.

Engineers' Departments in various parts of the country. They are ruled with the to mean low water.

the survey systematic and complete.

MAILED ON APPLICATION.

ANGLES AND RANGES

REMARKS

strong cover, 100 leaves.....dozen, \$10.50  
for quantities.

### OBSERVATIONS OF TIDES at

Year.....Month.....Day of Month.....

MEAN TIME OF OBSERVATION		READING OF TIDE STAFF		WIND		BAROMETER		REMARKS
Hrs.	Min.	Feet	Dec's	Dir.	Force	Ins.	Dec's	

strong cover, 100 leaves.....dozen, \$10.50  
for quantities.

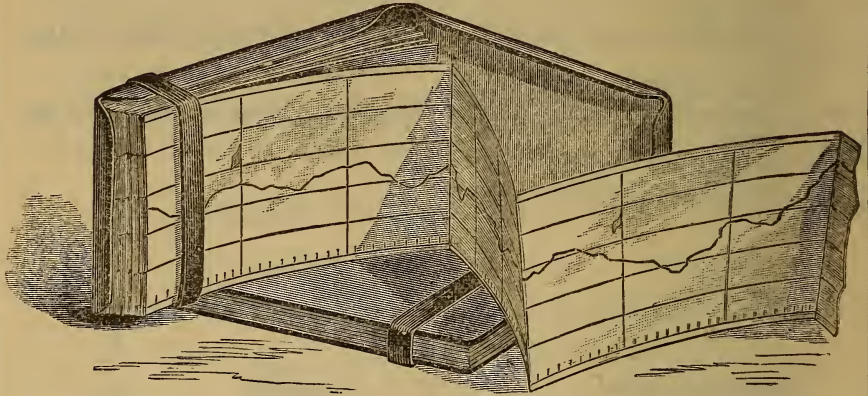
STATION OCCUPIED

REMARKS

strong cover, 100 leaves.....dozen, \$10.50  
for quantities.



## PROFILE BOOKS.



These books are printed upon tough, thin sheets of linen parchment paper, which will take color and stand erasures, and mounted upon a continuous piece of muslin, with close joints evenly matched to present a continuous profile of any desired length and bound in book form, with an index printed on the back of each fold, showing the Station and Section Numbers, thus giving a ready reference to any part of the profile.

The Books of "Plate A" show a profile of 100 feet in width, on a horizontal scale of 4 and vertical of 20 to an inch; size of book is  $5\frac{1}{2} \times 8$  inches.

The Books of "Plate B" show a profile of 125 feet in width, on a horizontal scale of 4 and vertical of 30 to an inch; size of book is  $4\frac{3}{4} \times 8$  inches.

**920. Continuous Profile Books, PLATE A, Bound in Flexible Morocco Cover.**

	100	50	25	15 miles.
Each.....	\$8.00	5.00	3.00	2.50

**926. Continuous Profile Books, PLATE B, Bound in Flexible Morocco Cover.**

	100	50	25	15 miles.
Each.....	\$8.00	5.00	3.00	2.50

## POCKET PROFILE BOOKS.

Every two pages facing, contain six thousand feet, equal to an average section, as laid out for construction of Railroads. The book is convenient for carrying in the pocket, or for office use, and is more easily handled than a long roll of profile paper. Size of book,  $5\frac{3}{8} \times 8\frac{1}{2}$  inches. The paper is strong and heavy, and printed on both sides.

**932. Pocket Profile Books, PLATE A, Bound in Flexible Morocco Cover.**

	100	50	25 leaves.
Each.....	\$5.00	3.50	2.50

**938. Pocket Profile Books, PLATE B, Bound in Flexible Morocco Cover.**

	100	50	25 leaves.
Each.....	\$5 00	3.50	2.50

Profile and Cross Section Papers, See Nos. 370 to 396.

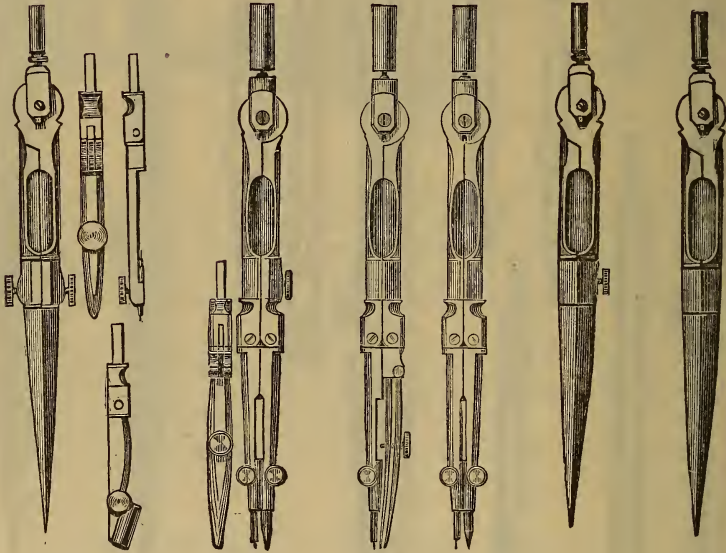


SWISS PIVOT JOINT INSTRUMENTS,

*Continued.*

Made of Selected German Silver and Best English Steel.

ALL PENCIL POINTS ARRANGED TO HOLD FABER'S LEADS.



No. 1012.

1014.

1016.

1018.

1020.

1022.

1012.	Compasses, 3½ inch, Pen, Pencil, Needle and Divider Points.....	each, \$6.85
1014.	Compasses, 3½ inch, Pen, Pencil and Fixed Needle Point.....	“ 6.00
1016.	Bow Pen, 3½ inch, Fixed Needle Point.....	“ 4.50
1018.	Bow Pencil, 3½ inch, “ “ “ .....	“ 4.25
1020.	Hair Spring Dividers, 3½ inch.....	“ 3.00
1022.	Dividers, 3½ “ .....	“ 2.25

Steel Spring Bows and Ruling Pens to match, see Nos. 1124, etc.

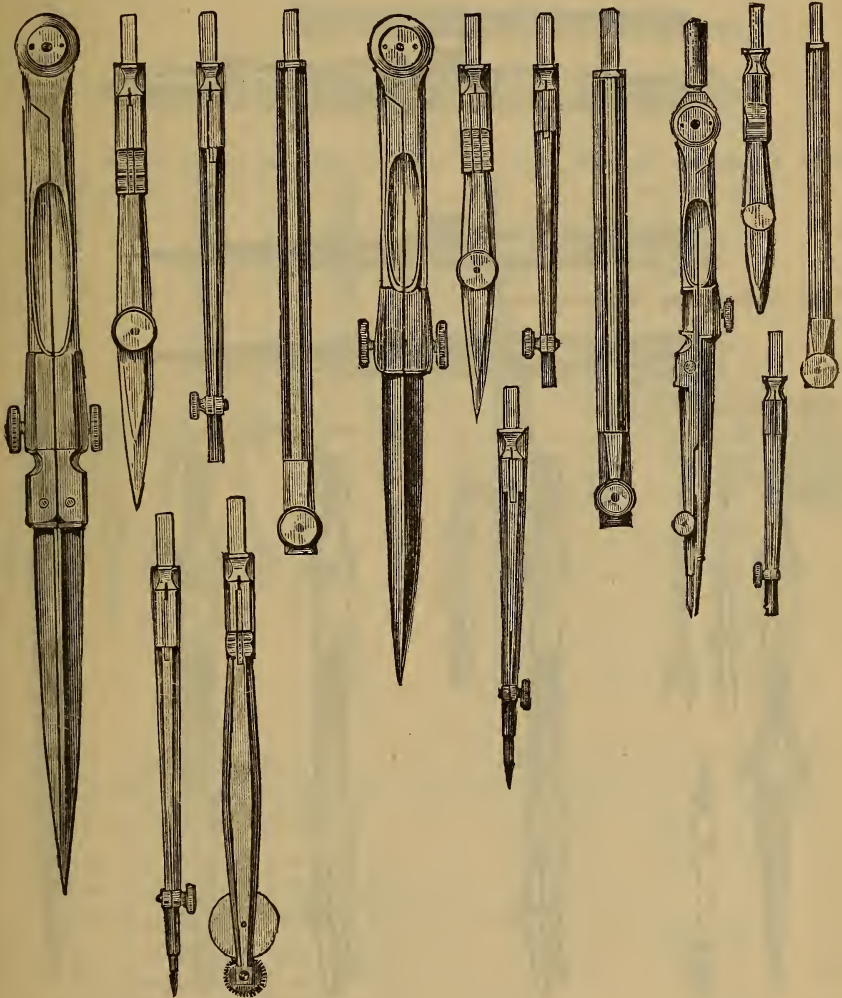
**Instruments Repaired, see Description after No. 2470.**



EXTRA FINE SWISS INSTRUMENTS.

Made of Selected German Silver and Best English Steel.

ALL PENCIL POINTS ARRANGED TO HOLD FABER'S LEADS.



No. 1030.

1034.

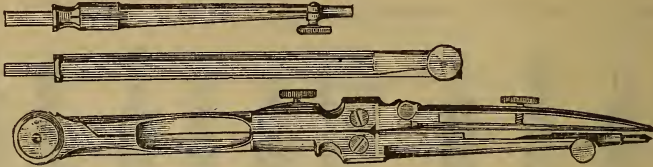
1038.

- 1030. Compasses, 7 inch with Joint in each Divider Point, Pen, Pencil, Needle Point, Lengthening Bar and Dotting Pen.....each, \$10.75
- 1034. Compasses, 6 inch, with Pen, Pencil, Lengthening Bar, Needle and Divider Points..... “ 8.00
- 1038. Compasses, 4½ inch, with Pen, Pencil, Lengthening Bar, Divider and Fixed Needle Point..... “ 7.25

EXTRA FINE SWISS INSTRUMENTS,

*Continued.*

ALL PENCIL POINTS ARRANGED TO HOLD FABER'S LEADS.



No. 1040.

1040. **Compasses**, 5½ inch, with Pen, Pencil, Lengthening Bar and Fixed Needle Point.....each, \$7.00

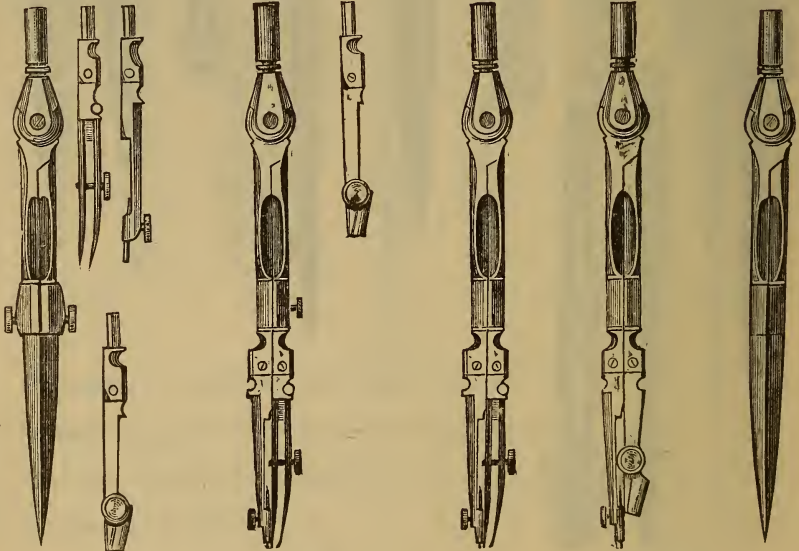


1044. **Hair Spring Dividers**, 5 inch..... “ 3.00



1048. **Dividers**, 6 inch..... “ 2.75

1050. **Dividers**, 5 “..... “ 2.20



No. 1060.

1062.

1066.

1068.

1074.

1060. **Bow Compasses**, 3½ inch, with Handle, Pen, Pencil, Needle and Divider Points..... \$6.00

1062. **Bow Compasses**, 3½ inch, with Handle, Pen, Pencil, fixed Needle Point..... 5.25

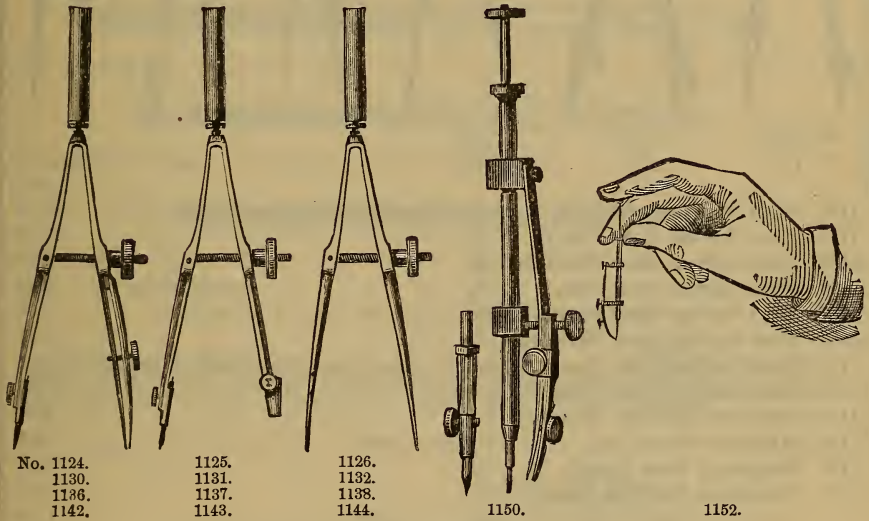
1066. **Bow Pen**, 3½ inch, with Handle and fixed Needle Point..... 3.50

1068. **Bow Pencil**, 3½ “ “ “ “ “..... 3.50

1074. **Dividers**, 3½ “ “ “..... 1.75

EXTRA FINE STEEL SPRING BOW INSTRUMENTS.

ALL PENCIL POINTS ARRANGED TO HOLD FABER'S LEADS.



				Each
1124.	Steel Spring Bow Pen,	5 in.,	German Silver Handle, Needle Point.	\$4.35
1125.	Steel Spring Bow Pencil,	5 "	" " "	4.35
1126.	Steel Spring Bow Dividers,	5 "	" " .....	3.50
1130.	Steel Spring Bow Pen,	4 1/4 "	" " Needle Point.	3.25
1131.	Steel Spring Bow Pencil,	4 1/4 "	" " "	3.25
1132.	Steel Spring Bow Dividers,	4 1/4 "	" " .....	2.75
1136.	Steel Spring Bow Pen,	3 1/2 "	" " Needle Point.	2.85
1137.	Steel Spring Bow Pencil,	3 1/2 "	" " "	2.85
1138.	Steel Spring Bow Dividers,	3 1/2 "	" " .....	2.20
1142.	Steel Spring Bow Pen,	2 1/4 "	" " Needle Point.	2.85
1143.	Steel Spring Bow Pencil,	2 1/4 "	" " "	2.85
1144.	Steel Spring Bow Dividers,	2 1/4 "	" " .....	2.20
1150.	Steel Spring Sliding Pivot Centre Bow Pen and Pencil,	3 1/2 inches...		4.00
1152.	Steel Spring Sliding Pivot Centre Bow Pen,	3 1/2 inches.....		3.25







**RULING PENS WITH SPRING BLADE,  
NO HINGE.**



- 1270. Ruling Pen, with Improved Bent Spring Blade, Ebony Handle, 6 in., each, \$2.00
- 1271. Ruling Pen, “ “ “ “ “ “ “ 5¼ “ “ 1.85
- 1272. Ruling Pen, “ “ “ “ “ “ “ 4½ “ “ 1.70

**RULING PENS WITH EBONY HANDLES.**



- 1280. Ruling Pen, no Hinge, Ebony Handle, 6 inch.....each, 1.85



- 1281. Ruling Pen, no Hinge, Ebony Handle, 5¼ inch. .... “ 1.70



- 1282. Ruling Pen, no Hinge, Ebony Handle, 4½ inch ... .. “ 1.55

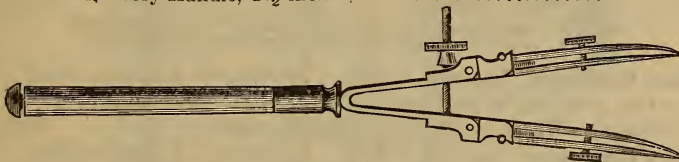
**EXTRA FINE SWISS INSTRUMENTS.**



- 1306. Border Pen for heavy lines, Ivory Handle, 6½ inch.....each, \$3.00



- 1310. Curve Pen, Ivory Handle, 4½ inch ... ..each, 1.25



- 1316. Railroad Pen, new style, Ivory Handle, 5½ inch.....each, 3.75

Both Blades face the same way. The inside blade can be pressed closely to the T Square, Triangle, etc.



- 1334. Dotting Pen, new style, with 6 Wheels, Ivory Handle, 6 inch ... ..each, \$4.25

The lower portion of the pen forms a metal case which is closed by screwing down the upper hinged blade. The case is filled with ink which is carried to the paper by the revolving wheel.

EXTRA FINE SWISS INSTRUMENTS.

*Continued.*

ALL PENCIL POINTS ARRANGED TO HOLD FABER'S LEADS.



No. 1340.

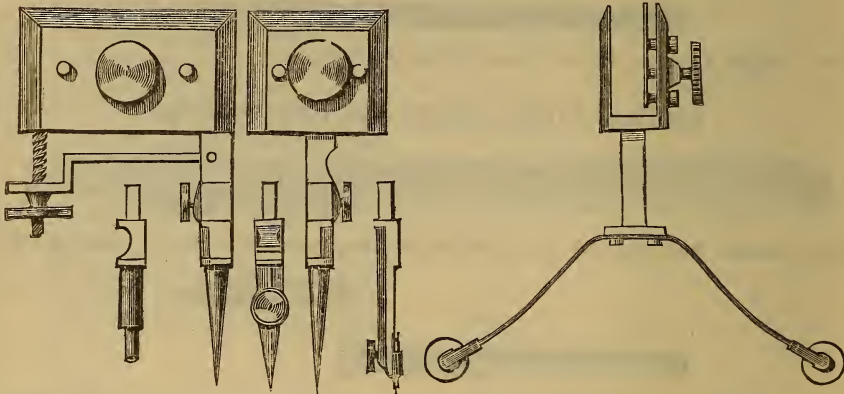
1340. Tracer, Ivory Handle, 5 inches.....each, \$1.35  
 1342. Tracer, made of Ivory, 4 " ..... " 1.00



No. 1344.

1344. Pricker, Ivory Handle, 5 inches.....each 1.75  
 Ruling Pens carefully Sharpened..... " .20

SWISS BEAM COMPASSES WITH TANGENT AND WHEEL ATTACHMENT.



No. 1356-7.

1360.

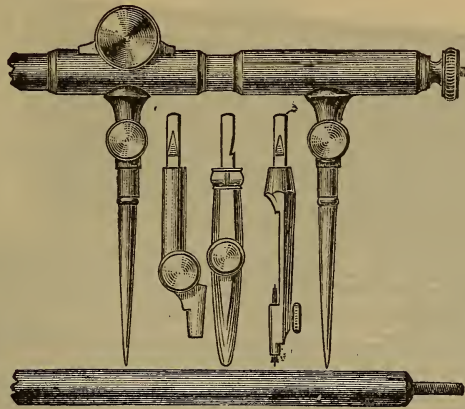
- No. 1350. Case containing Beam Compasses and Wheel Attachment.  
 " 1351. Beam Compass and Wheel Attachment, without Case.

1350. Beam Compasses, Improved Pattern. To fasten to a Straight Edge or Bar, with Tangent Attachment, Pen, Pencil, Needle and two round Points, also Wheel Attachment, complete in case. .... each, \$12.75  
 1351. Beam Compasses, Improved Pattern. To fasten to a Straight Edge or Bar, with Tangent Attachment, Pen, Pencil, Needle and two round Points, also Wheel Attachment, complete without case.....each, 11.25  
 1356. Beam Compasses, in case..... " 10.00  
 1357. Beam Compasses, without case ..... " 9.00  
 1360. Wheel Attachment, to fasten to a Straight Edge or Bar. The instrument overcomes the necessity of placing the Beam Compasses on its side when not in use.....each, 2.25

Wooden Bars for Beam Compasses. Same as 6200.

	72	60	48	42	36	30	24	inch.
Each,	.90	.75	.65	.55	.45	.40	.35	

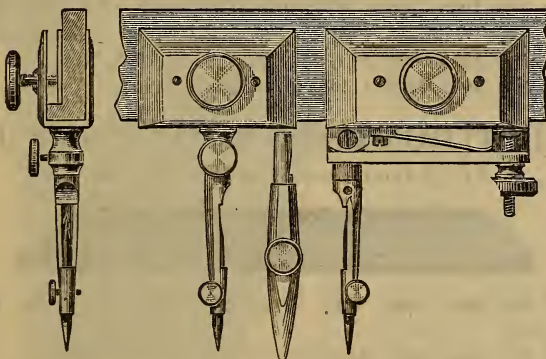
TUBULAR BEAM COMPASSES.



1370-1374.

1370. Tubular Beam Compasses in 4 Sections, 36 inches long, with Pen, Pencil, Needle and 2 round Points .....each, \$17.00  
 1372. Tubular Beam Compasses in 3 Sections, 21 inches long..... “ 11.75  
 1374. Tubular Beam Compasses in 2 Sections, 20 inches long..... “ 10.30
- |                   |        |      |      |
|-------------------|--------|------|------|
| Morocco Cases for | 1370   | 1372 | 1374 |
| Each....          | \$2.50 | 1.75 | 1.50 |

BEAM COMPASSES WITH TANGENT SCREW.

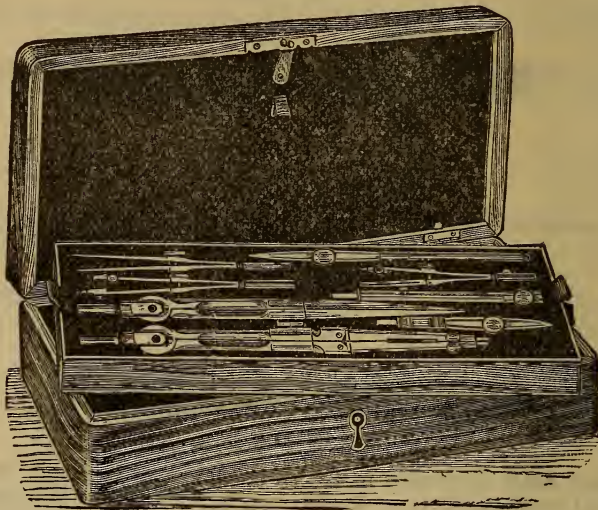


1380. Beam Compasses, to fit a Straight Edge or Bar, with Pen, Pencil and Needle Points ..... each, \$8.75  
 1382. Beam Compasses, Small, with Pen, Pencil and Needle Points..... “ 8.25  
 Morocco Cases for 1380 and 1382. .... “ 1.00

Instruments Repaired, see Description Page 63.



## CASES OF SWISS INSTRUMENTS WITH PIVOT JOINTS



No. 1410.

### IN POLISHED ROSEWOOD BOXES, With Tray, Lock and Key.

	Each.
1400. Contents: Nos. 1000, 1005, 1008, 1016, 1018, 1022, 1124, 1125, 1126, 1136, 1137, 1138, 1250, 1270, 1271, 1272, 1306, 1316, 1340, 1360, 1380.....	\$80.00
1402. Contents: Nos. 1000, 1005, 1016, 1018, 1022, 1130, 1131, 1132, 1142, 1143, 1144, 1250, 1270, 1271, 1272, 1340, 1380.....	65.00
1404. Contents: Nos. 1000, 1005, 1012, 1022, 1136, 1137, 1138, 1250, 1251, 1252, 1253, 1272, 1340, 1380.....	55.00
1406. Contents: Nos. 1000, 1009, 1016, 1018, 1136, 1137, 1138, 1251, 1252, 1254, 1281.....	40.00
1408. Contents: Nos. 1002, 1009, 1014, 1136, 1137, 1138, 1251, 1252.....	33.50
1410. Contents: Nos. 1002, 1009, 1136, 1137, 1138, 1251.....	25.00

### SWISS INSTRUMENTS WITH PIVOT JOINTS. In Morocco Pocket Cases.



	Each.
1414. Contents: Nos. 1000, 1005, 1016, 1018, 1022, 1136, 1137, 1138, 1251, 1252, 1254.....	\$38.50
1416. Contents: Nos. 1000, 1009, 1014, 1136, 1137, 1138, 1251, 1252.....	30.00
1418. " " 1003, 1008, 1012, 1136, 1251, 1253.....	25.00
1420. " " 1002, 1009, 1136, 1137, 1138, 1251.....	22.00
1422. " " 1002, 1009, 1014, 1251.....	20.00
1424. " " 1002, 1009, 251.....	13.50
1426. " " 1016, 1018, 1022, 1142, 1143, 1144, 1252, 1254.....	23.75
1428. " " 1016, 1018, 1022, 1136, 1252.....	17.00
1430. " " 1012, 1142, 1253.....	12.75

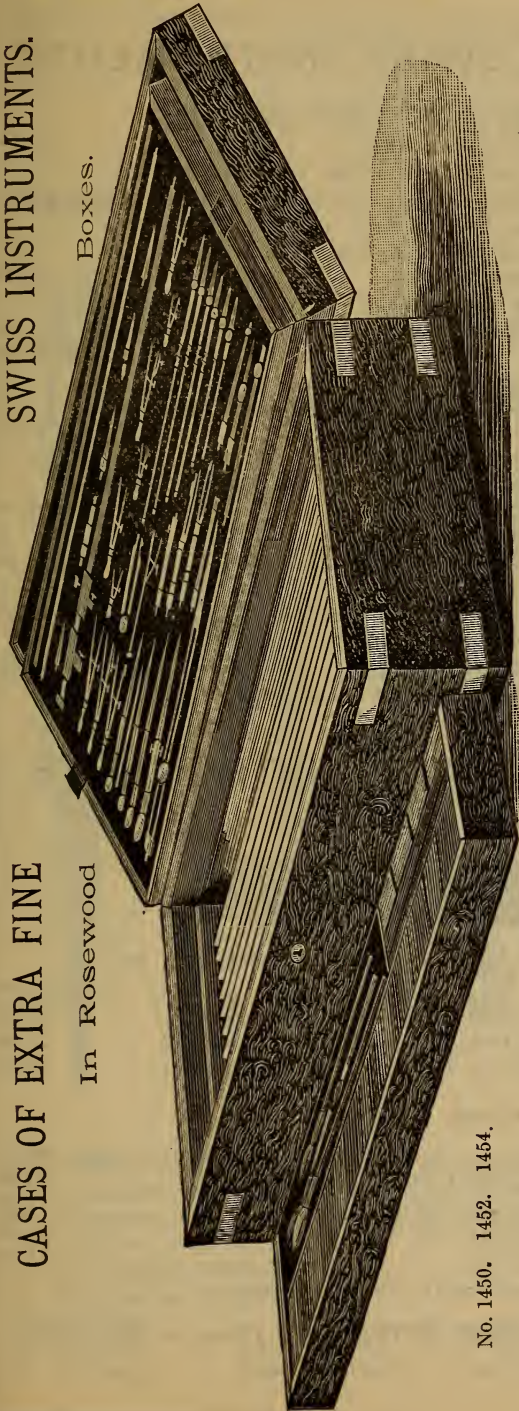


SWISS INSTRUMENTS.

Boxes.

CASES OF EXTRA FINE

In Rosewood



No. 1450. 1452. 1454.

1450. **Fine Rosewood Case**, German Silver Bands and Corners; arranged to hold scales, and having a drawer partitioned for Colors, Brushes, etc. Contents: 8 Architects or Engineer's Scales, Ivory Protractor, German Silver Protractor, German Silver Horn Centre, 2 doz. best Tacks, 12 Winsor & Newton's Colors, 12 Brushes, Cake of fine black India Ink, Ink Slab, Color Saucers, 4 Rubber Triangles, 4 Rubber Curves, 6 Pencils, 3 Rubbers, 2 Ink Erasers, Crayon Holder, Box of Siberian Leads, 2 Artist's Pencils, Red India Ink, Blue India Ink, Tack Lifter, 1 doz. Crow Quill Pens, 2 Pencil Pointers, Pocket Magnifying Glass, and the following Instruments: Nos. 1030, 1038, 1044, 1050, 1066, 1068, 1074, 1124, 1125, 1126, 1136, 1137, 1138, 1150, 1166, 1167, 1168, 1190, 1191, 1192, 1250, 1251, 1252, 1253, 1254, 1270, 1271, 1272, 1306, 1310, 1316, 1334, 1340, 1344, 1370, 1578, 1640, 1660. . . . . each, \$200 00
1452. **Fine Rosewood Case**, German Silver Bands and Corners. Contents same as No. 1450, and the following instruments: Nos. 1030, 1038, 1044, 1050, 1066, 1068, 1074, 1124, 1125, 1126, 1172, 1173, 1174, 1190, 1191, 1192, 1250, 1251, 1252, 1253, 1254, 1255, 1256, 1257, 1258, 1259, 1306, 1310, 1316, 1334, 1340, 1344, 1357, 1360, 1640. . . . . each, 160 00
1454. **Fine Rosewood Case**, German Silver Bands and Corners in style same as No. 1450. Contents: Nos. 1030, 1038, 1044, 1050, 1066, 1068, 1074, 1124, 1125, 1126, 1172, 1173, 1174, 1190, 1191, 1192, 1250, 1251, 1252, 1253, 1254, 1306, 1310, 1316, 1334, 1340, 1344, 1357, 1360, 1640. . . . . each, 125 00

## EXTRA FINE SWISS INSTRUMENTS

In Rosewood Cases (*Continued*).

1460. Rosewood Case, with Tray, Lock and Key.  
 Contents: Nos. 1030, 1038, 1044, 1050, 1066, 1068, 1074, 1172, 1173,  
 1174, 1250, 1251, 1252, 1254, 1306, 1316, 1357, 1360, 1648 ..... each, \$90.00
1462. Rosewood Case, with Tray, Lock and Key.  
 Contents: Nos. 1034, 1038, 1044, 1050, 1062, 1172, 1173, 1174, 1250,  
 1251, 1252, 1254, 1357, 1360, 1648. .... " 70.00
1464. Rosewood Case, with Tray, Lock and Key.  
 Contents: Nos. 1034, 1044, 1062, 1074, 1142, 1160, 1172, 1173, 1174,  
 1250, 1251, 1252, 1254..... " 50.00
1466. Rosewood Case, with Tray, Lock and Key.  
 Contents: Nos. 1034, 1050, 1062, 1172, 1173, 1174, 1251, 1253, 1357,  
 1360..... " 45.00
1468. Rosewood Case, with Tray, Lock and Key.  
 Contents: Nos. 1034, 1044, 1066, 1068, 1074, 1172, 1173, 1174, 1251,  
 1252, 1254..... " 40.00
1470. Rosewood Case, with Tray, Lock and Key.  
 Contents: Nos. 1040, 1050, 1060, 1172, 1173, 1174, 1251..... " 32.00
1472. Rosewood Case, with Tray, Lock and Key.  
 Contents: Nos. 1034, 1050, 1172, 1173, 1174, 1251..... " 25.00
1474. Rosewood Case, with Tray, Lock and Key.  
 Contents: Nos. 1034, 1050, 1172, 1252..... " 18.75

Other Cases made to order at short notice.

## EXTRA FINE SWISS INSTRUMENTS

In Fine Pocket Cases.



1480. Contents: Nos. 1034, 1044, 1066, 1068, 1074, 1172, 1173, 1174, 1251,  
 1252, 1254 ..... each, \$35.00
1482. Contents: Nos. 1034, 1050, 1060, 1172, 1173, 1174, 1251, 1253..... " 30.00
1484. Contents: Nos. 1034, 1050, 1172, 1173, 1174, 1251..... " 22.00
1486. Contents: Nos. 1040, 1050, 1172, 1252..... " 15.50

### VERY SMALL POCKET CASES.

1490. Contents: Nos. 1038, 1044, 1066, 1068, 1172, 1173, 1174, 1252, 1254... each, 30.00
1491. Contents: Nos. 1038, 1050, 1060, 1172, 1252, 1254..... " 23.00
1492. Contents: Nos. 1038, 1050, 1172, 1252..... " 15.50
1493. Contents: Nos. 1066, 1068, 1074, 1172, 1253..... " 14.50
1494. Contents: Nos. 1060, 1172, 1253..... " 11.75

Other Cases made to order at short notice.

### CHAMOIS SKINS FOR CLEANING INSTRUMENTS (*Same as No. 17,910*).

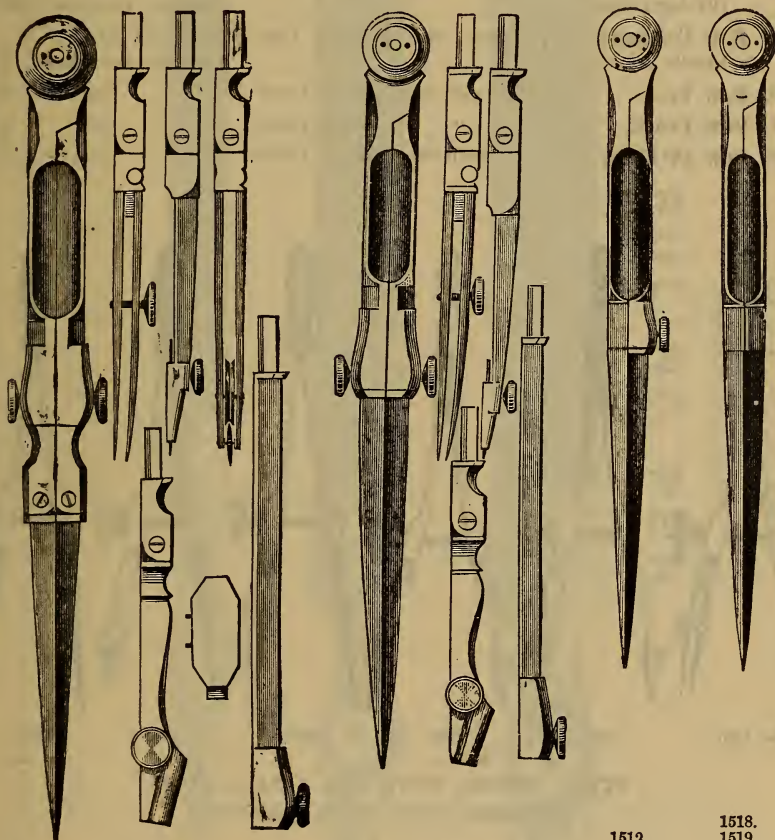
Medium, 30c.      Small, 20c. each.



SWISS INSTRUMENTS of lighter and more delicate construction, with and without Pivot Joints. See Nos. 1000, etc.

## SWISS INSTRUMENTS.

GERMAN SILVER AND ENGLISH STEEL.



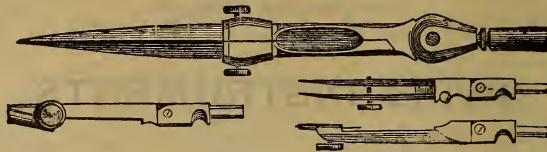
No. 1500.

1504.

1512.  
1513.

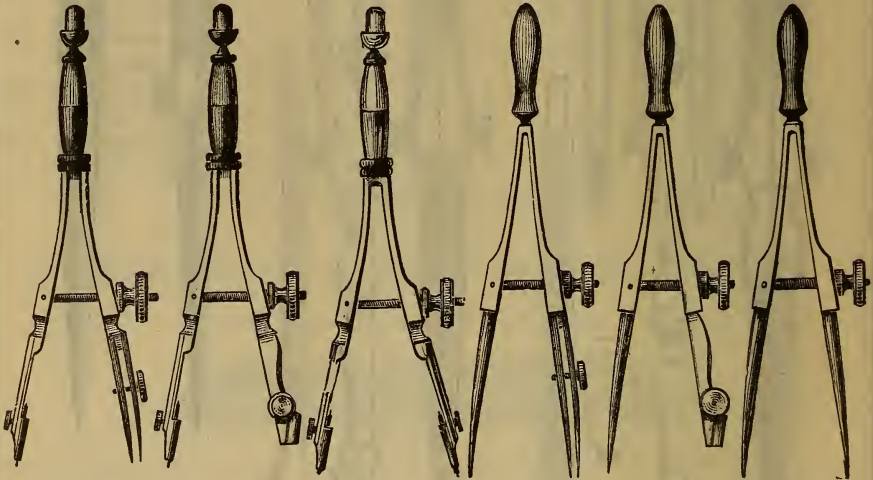
1518.  
1519.  
1520.

1500. Compasses, 6½ inches, with Joint in each Divider Point, Pen, Pencil, Lengthening Bar, Dotting Pen and Needle Point, (List Price, \$10.00) each, \$9.00
1504. Compasses, 6 inches, with Pen, Pencil, Lengthening Bar, Needle and Divider Points..... (List Price, \$7.25) “ 6.50
1512. Hair Spring Dividers, 5 inches..... (“ “ 2.70) “ 2.50
1513. Hair Spring Dividers, 4 “ ..... (“ “ 2.50) “ 2.25
1518. Dividers, 6 “ ..... (“ “ 2.60) “ 2.35
1519. Dividers, 5 “ ..... (“ “ 2.00) “ 1.75
1520. Dividers, 4 “ ..... (“ “ 1.65) “ 1.50



No. 1530.

- 1530. Bow Compasses, 3½ inches, with Handle, Pen, Pencil, Needle and Divider Points.....(List Price \$5.50) each, \$5.00
- 1532. Bow Compasses, 3½ inches, with Handle, Pen, Pencil and fixed Needle Point.....(List Price, \$5.00) each, 4.50
- 1536. Bow Pen, 3½ inches, with fixed Needle Point .. (“ “ 3.25) “ 3.00
- 1537. Bow Pencil, 3½ “ “ Needle Point... (“ “ 3.25) “ 3.00
- 1538. Bow Dividers, 3½ “ with two Needle Points... (“ “ 3.25) “ 3.00



No. 1550.

1551.

1552.

1560.

1561.

1562.

STEEL SPRING BOWS, Nos. 1124 to 1192.

Are of lighter and more delicate construction.

- |                                  |                                       |                           |
|----------------------------------|---------------------------------------|---------------------------|
| 1550. Steel Spring Bow Pen,      | 3 inches, Ivory Handle, Needle Point, | Each.                     |
|                                  | (List Price, \$2.70)                  | \$2.50                    |
| 1551. Steel Spring Bow Pencil,   | 3 inches, Ivory Handle, Needle Point, |                           |
|                                  | (List Price, \$2.70)                  | 2.50                      |
| 1552. Steel Spring Bow Dividers, | 3 “ Ivory Handle, two Needle          |                           |
| Points.....                      | (List Price, \$2.70)                  | 2.50                      |
| 1560. Steel Spring Bow Pen,      | 3 inches, Ivory Handle..              | (List Price, \$2.10) 1.90 |
| 1561. Steel Spring Bow Pencil,   | 3 “ “ “ ..                            | (“ “ 2.10) 1.90           |
| 1562. Steel Spring Bow Dividers, | 3 “ “ “ ..                            | (“ “ 1.65) 1.50           |



E. G. SOLTSMANN.

**"VICTOR"**  
(Registered Trade Mark.)  
**RULING PEN.**



LARGE SIZE.



MEDIUM SIZE.



SMALL SIZE.

FOR DETAIL DRAWING AND GENERAL USE.

Above cuts represent the full size of each Pen. These Pens hold considerable ink, and need not be filled as often as small pens.

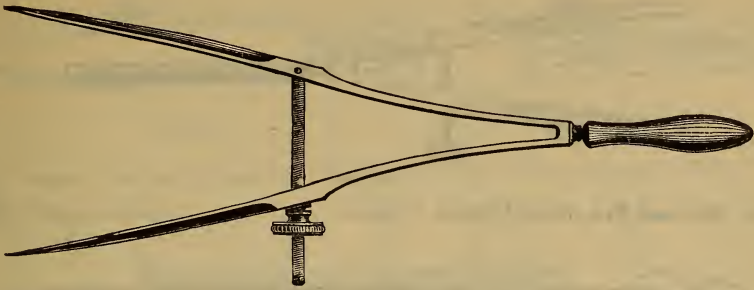
Large.....	each, (List Price, \$1.65),	\$1.50
Medium.....	" " "	1.40 1.25
Small.....	" " "	1.12 1.00

THE UNIVERSITY OF CHICAGO  
LIBRARY



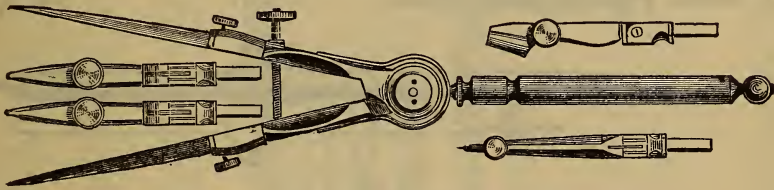
PHILIP HENNING

UNIVERSITY OF CHICAGO



No. 1570.

1570. Large Steel Spring Dividers,  $5\frac{3}{4}$  inches, Ivory Handle (List Price, \$2.70) **Each. \$2.50**

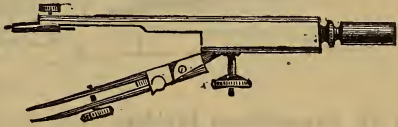


No. 1578.

1578. Spring Bow Compasses, with Detachable long Ivory Handle and Divider Points, two Pen Points, Pencil and Needle Points. . . . . (List Price, \$7.75) **Each. \$7.00**



No. 1582.



No. 1584.

1582. German Silver Spring Bow Pen and Pencil. . . . . (List Price, \$3.30) **Each. \$3.00**

1584. German Silver Spring Bow Pen. . . . . ( " 2.20) **2.00**



1600



1602



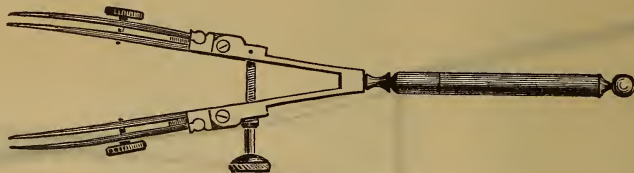
1604

1600. Ruling Pen, with Hinge and Pin, Ivory Handle, 6 inches. . . (List Price, \$1.75) **Each. \$1.60**

1602. Ruling Pen, " " " " 5 " . . . ( " 1.55) **1.40**

1604. Ruling Pen, " " " "  $4\frac{1}{2}$  " . . . ( " 1.35) **1.25**





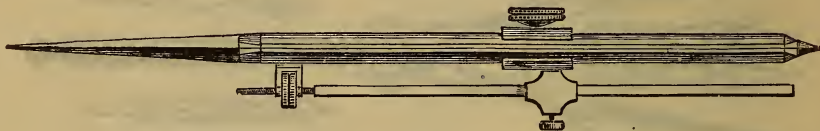
No. 1620.

1620. Railroad Pen, Hinged Blades, 5 inches ..... (List Price, \$3.25) Each.  
\$3.00



No. 1624.

1622. Dotting Pen, with 6 Wheels, Ivory Handle, 6 inches ..... (List Price, \$3.60) Each.  
\$3.25  
 1624. Dotting Pen, Ivory Handle, 6 inches ..... ( " 2.20) 2.00



No. 1640.

1640. Proportional Dividers, with Micrometer Adjustment, 9½ inches, graduated for lines and circles ..... (List Price, \$13.25) Each.  
\$12.00



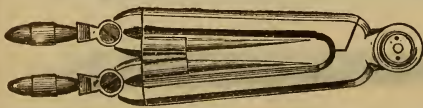
No. 1644.

1644. Proportional Dividers, with Rack Movement, 9 inches, graduated for lines and circles ..... (List Price, \$11.60) Each.  
\$10.50

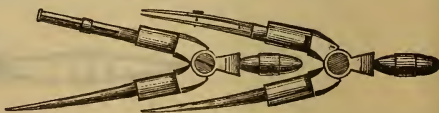


No. 1648.

1648. Proportional Dividers, 9 inches, graduated for lines and circles, (List Price, \$11.00) Each.  
\$10.00



No. 1660.



No. 1660.

1660. Pocket Pillar Compasses, with Handles, Pen and Pencil Points, to draw out and can be used as small bow instruments ..... (List Price, \$8.85) Each.  
\$8.00



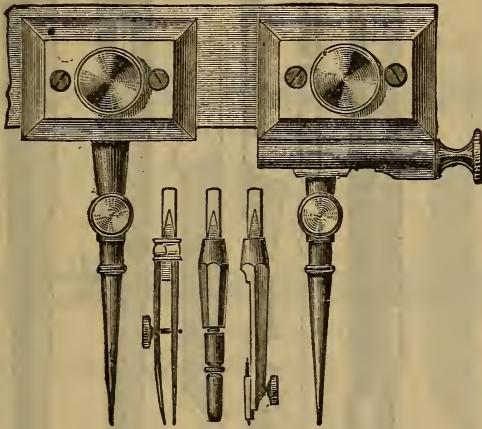
No. 1664.



No. 1664.

Each.

1664. Pocket Folding Compasses, with Pen and Pencil Points ..(List Price, \$8.00) \$7.25



No. 1670.

Each.

1670. Beam Compasses, to fit a Straight Edge or Bar, with Pen, Pencil, Needle and Round Points.....(List Price, \$7.50) \$6.75  
 Morocco Case for do..... 1.00

## WOODEN BARS

### FOR BEAM COMPASSES.

(SAME AS NO. 6200.)

	72	60	48	42	36	30	24 inches.
Each..	.90	.75	.65	.55	.45	.40	35



**CHAMOIS SKINS FOR CLEANING INSTRUMENTS (same as No. 17,910).**

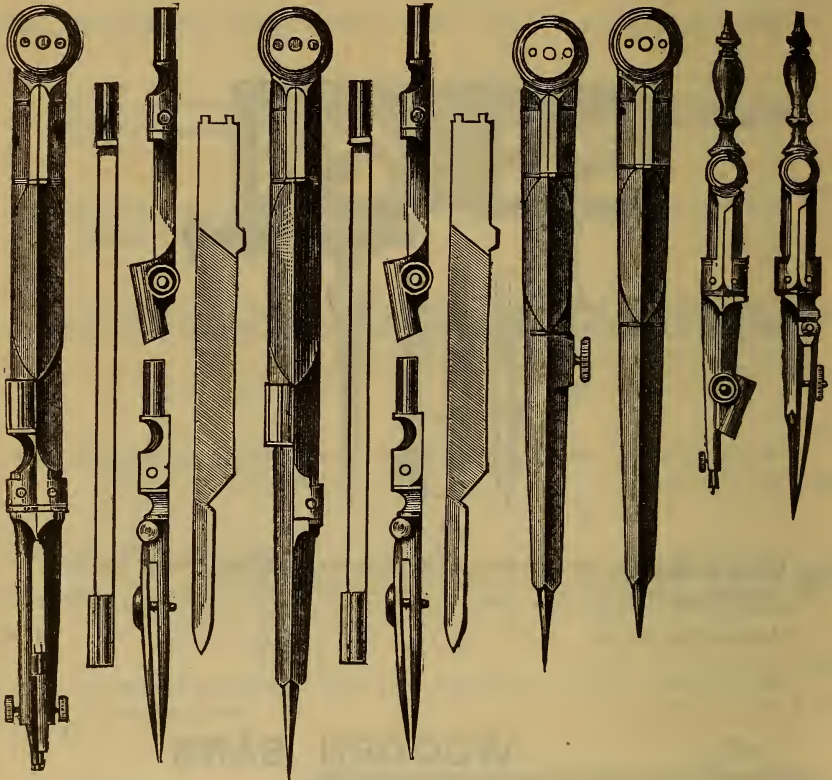
Medium, 30c. Small, 20c. each.

**Repairing Instruments, see page 63.**

ENGLISH INSTRUMENTS,

SUPERIOR QUALITY.

German Silver, Double Sector Joints. All attachments have bayonet slides.



No. 1700.

1704.

1710.

1714.

1721.

1726.

	Each.
1700. Compasses, 6 inches, with joint in each leg, one Needle Point fixed, the other detachable, Pen, Pencil Points, Lengthening Bar and Knife Key.....	\$12.50
1704. Compasses, 6 inches, with Pen, Pencil Points, Lengthening Bar and Knife Key.....	10.00
1706. Compasses, 4½ inches, with fixed Needle Point, Pen and Pencil Point.....	9.75
1710. Hair Spring Dividers, 5 inches.....	3.00
1714. Dividers, 5 inches.....	2.00
1720. Bow Pen, fixed Needle Point, 3½ inches.....	3.90
1721. Bow Pencil, " " 3½ ".....	3.90
1726. Bow Pen, Round Point, 3½ inches.....	3.25
1727. Bow Pencil, " 3½ ".....	3.25



ENGLISH INSTRUMENTS,

*Continued.*



Nos. 1750-1752.

The Square Handle prevents the Pen from rolling off the drawing table.

	Each
1750. Ruling Pen, with Hinge, square Ivory Handle, 6½ inches.....	\$2.25
1751. Ruling Pen, " " " " 5½ " .....	2.00
1752. Ruling Pen, " " " " 4½ " .....	1.75



Nos. 1760-1762.

	Each.
1760. Ruling Pen, with Hinge, Ivory Handle, 6½ inches.....	\$2.00
1761. Ruling Pen, " " " " 5½ " .....	1.75
1762. Ruling Pen, " " " " 4½ " .....	1.50



No. 1770-1772.

	Each.
1770. Ruling Pen, no Hinge, Ivory Handle, 6½ inches. ....	\$1 50
1771. Ruling Pen, " " " " 5½ " .....	1.35
1772. Ruling Pen, " " " " 4½ " .....	1.25



No. 1780.

	Each.
1780. Tracer, Ivory Handle, 5 inches.....	\$1.00



No. 1782.

1782. Pricker, Ivory Handle, 5 inches.....	1.50
--------------------------------------------	------



No. 1790.

1790. Curve Pen, New Pattern.....	each \$2.00
-----------------------------------	-------------

By loosening the screw at end of handle, the bar running through the hollow centre acts as a pivot for the pen, which will follow any curve readily without blotting the edges of the curve ruler.

If the upper screw is fastened, it can be used as a Drawing Pen, and is useful for ruling into corners and for fine work.

Cases of English Instruments put up to Order.

**CHAMOIS SKINS FOR CLEANING INSTRUMENTS (same as No. 17,910).**

Medium, 30c. Small, 20c. each.

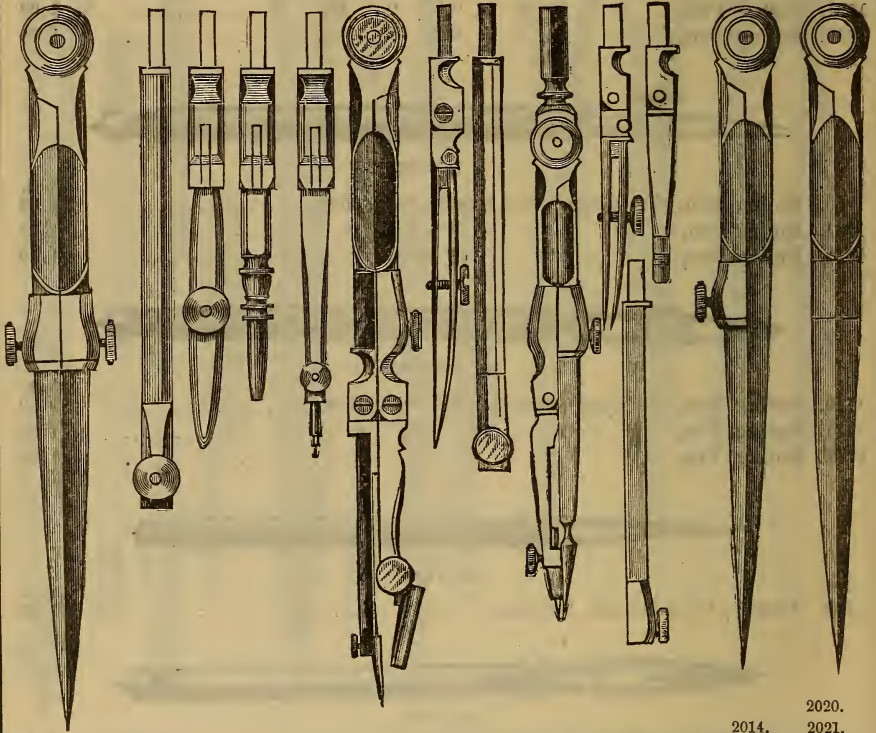
**Repairing Instruments, see page 63.**

EXTRA FINE GERMAN INSTRUMENTS,

Made of Superior German Silver and Steel.

ALL PENCIL POINTS ARE ARRANGED TO HOLD FABER'S LEADS.

(Second quality of German Instruments, see Nos. 2400 to 2470.)

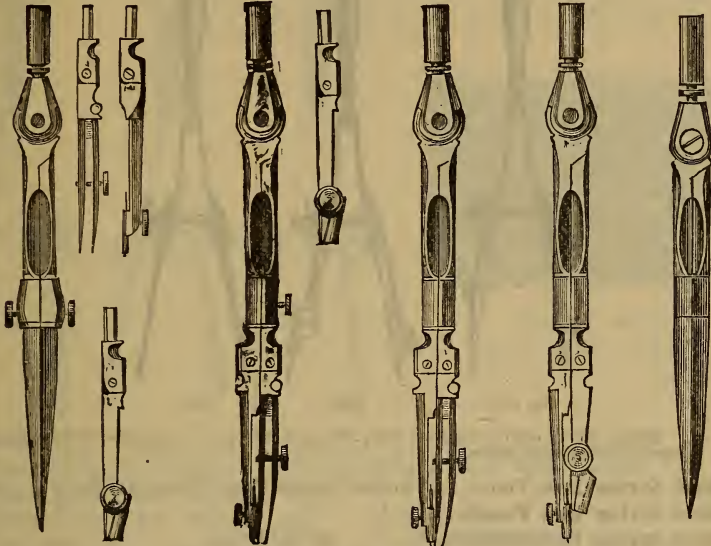


No. 2000.	2006.	2010.	2014. 2021. 2015.	2020. 2021. 2022.	Each.
2000. Compasses, 5½ inches, with Pen, Pencil, Lengthening Bar, Needle and Divider Points.....					\$4.00
2006. Compasses, 5½ inches, with Pen, Pencil, Lengthening Bar and fixed Needle Points.....					3.50
2010. Compasses, 4½ inches, with Handle, Pen, Pencil, Lengthening Bar, Divider and fixed Needle Points.....					3.75
2014. Hair Spring Dividers, 6 inches.....					2.10
2015. Hair Spring Dividers, 5 ".....					1.90
2020. Dividers, 6 inches.....					1.12
2021. Dividers, 5 ".....					1.00
2022. Dividers, 4 ".....					.90

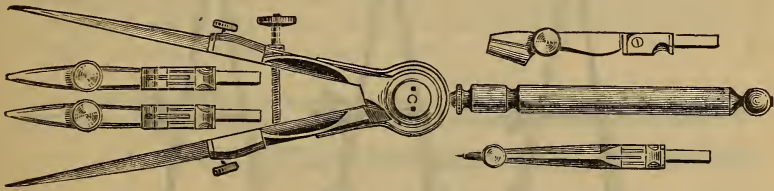
EXTRA FINE GERMAN INSTRUMENTS,

Continued.

ALL PENCIL POINTS ARE ARRANGED TO HOLD FABER'S LEADS.



No. 2030.	2036.	2040.	2042.	2060.	
2030. Bow Compasses, 3½ inches, with Handle, Pen, Pencil, Needle and Divider Points.....					Each. \$3.00
2036. Bow Compasses, 3½ inches, with Handle, Pen, Pencil and fixed Needle Point.....					2.65
2040. Bow Pen, 3½ inches, with Handle and fixed Needle Point.....					2.20
2042. Bow Pencil, 3½ " " " " " " " ".....					2.20
2060. Bow Dividers, 3½ " " " " " " " ".....					1.00



No. 2070.		
2070. Spring Bow Compasses, with detachable long Ivory Handle, two Pen Points, Pencil, Needle and Divider Points.....		Each. \$4.75



No. 2074.	2075.	Each.
2074. German Silver Spring Bow Pen and Pencil, 3 inches.....		\$2.75
2075. German Silver Spring Bow Pen, 3 inches.....		1.80



EXTRA FINE GERMAN INSTRUMENTS,

*Continued.*

ALL PENCIL POINTS ARE ARRANGED TO HOLD FABER'S LEADS.



No. 2080.



2082.



2084.

Spring Bow Instruments Nos. 2080, 2082 and 2084 are of extra fine German make, and shaped like the Swiss Bows.

2080. Steel Spring Bow Pen.....	3 inches, Needle Point, White Handle.....	Each. \$2.00
2082. Steel Spring Bow Pencil...3	“ “ “ “ “ “ .....	2.00
2084. Steel Spring Bow Dividers..3	“ “ Round Points, “ “ .....	1.55



No. 2090.  
2100.



2092.  
2102.



2094.  
2104.

2090. Steel Spring Bow Pen.....	3 inches, Needle Point, White Handle.....	\$1.60
2092. Steel Spring Bow Pencil...3	“ “ “ “ “ “ .....	1.60
2094. Steel Spring Bow Dividers..3	“ “ “ “ “ “ .....	1.25
2100. Steel Spring Bow Pen ....	3½ “ Needle Point, White Handle.....	1.60
2102. Steel Spring Bow Pencil...3½	“ “ “ “ “ “ .....	1.60
2104. Steel Spring Bow Dividers..3½	“ “ “ “ “ “ .....	1.25



**EXTRA FINE GERMAN INSTRUMENTS,**  
*Continued.*



No. 2180.

- |                                                                                               |                 |
|-----------------------------------------------------------------------------------------------|-----------------|
| 2180. Cluster Hatching Pen, with 3 Blades, for one Ebony Handle, Pushing Screw, 6 inches..... | Each.<br>\$2.25 |
| 2182. Cluster Hatching Pen, with 1 Blade, for one Ebony Handle, Pushing Screw, 6 inches.....  | 1.50            |



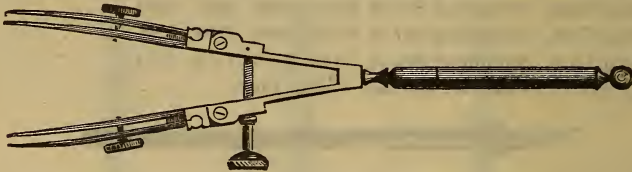
No. 2190.

- |                                                                                                   |        |
|---------------------------------------------------------------------------------------------------|--------|
| 2190. Ruling Pen, German Silver Blades, for Colored Inks, with Hinge, White Handle, 5 inches..... | \$1.12 |
| 2192. Ruling Pen, German Silver Blades, White Handle, 5 inches.....                               | .80    |



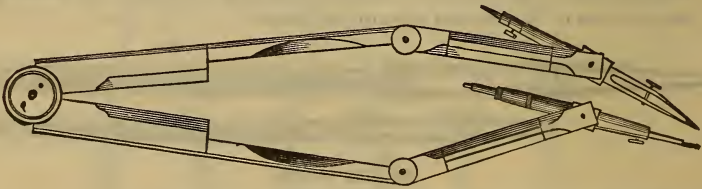
No. 2196.

- |                                        |        |
|----------------------------------------|--------|
| 2196. Dotting Wheel, White Handle..... | \$1.00 |
|----------------------------------------|--------|



No. 2198.

- |                                                  |        |
|--------------------------------------------------|--------|
| 2198. Railroad Pen, 5½ inches, White Handle..... | \$2.75 |
|--------------------------------------------------|--------|



No. 2206.

- |                                                                                    |        |
|------------------------------------------------------------------------------------|--------|
| 2206. Pocket Folding Compasses, with Reversible Pen, Pencil and Needle Points..... | \$5.50 |
|------------------------------------------------------------------------------------|--------|



No. 2210.

- |                                                    |        |
|----------------------------------------------------|--------|
| 2210. Pocket Dividers, with detachable Sheath..... | \$2.20 |
|----------------------------------------------------|--------|



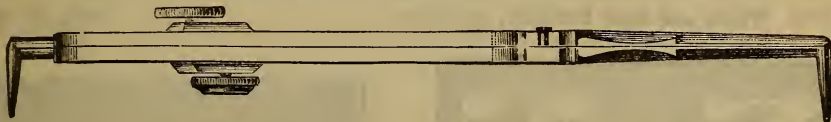
## PROPORTIONAL DIVIDERS.



No. 2220.

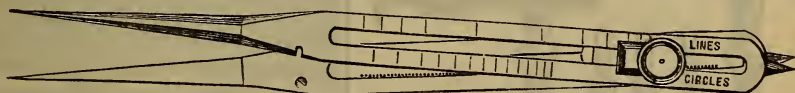
2220. Proportional Dividers, 6½ inches, graduated for lines and circles... each, \$7.00

The following Proportional Dividers are of French make.



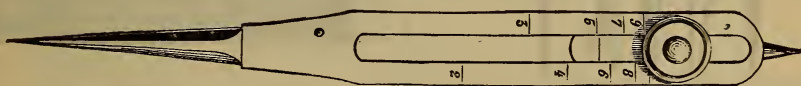
No. 2226.

2226. Proportional Dividers, 7 inches, graduated for lines and circles, with Rectangular Bent Points, same as 3020 ..... each, \$7.00



No. 2230.

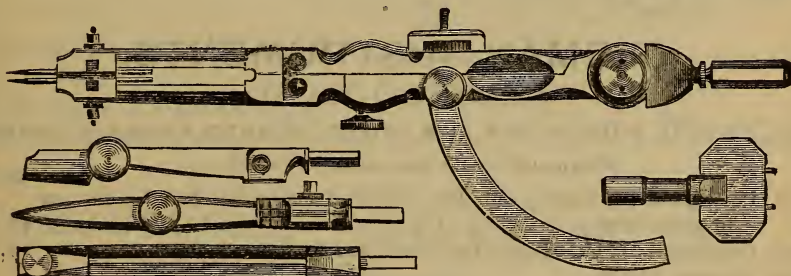
2230. Proportional Dividers, 7 inches, graduated for lines and circles, with rack adjusting movement, in Case, same as 3028 ..... each, \$6.00



No. 2238.

2238. Proportional Dividers, 6½ inches, graduated for lines and circles, in Case, same as 3036..... each, \$2.50

## LITHOGRAPHERS' COMPASSES.

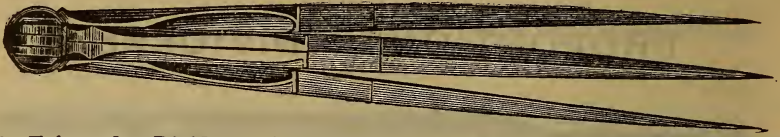


Nos. 2246-2250.

Each.

2246. Lithographers' Compasses, heavy and substantial make, with Metal Arc, fixed Needle Point, Pen, Pencil, Lengthening Bar and powerful Key, in MOROCCO CASE..... \$13.00

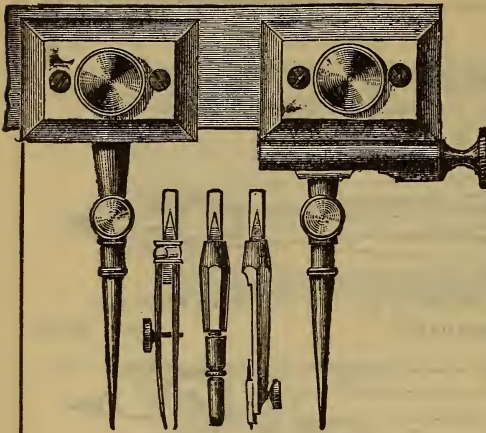
2250. Lithographers' Compasses (same as above). Without Morocco Case... 12.00



2260. **Triangular Dividers**, 5 inches, can be set to any 3 points, within the limit of its size ..... each, \$3.50

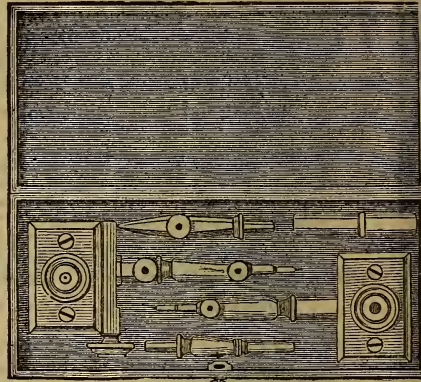


2262. **Whole and Half Dividers**, 6½ inches..... each, \$2.80



Nos. 2280, 2281.

2284.



2280. **Beam Compasses**, to fasten to a Straight Edge or Bar, with Pen, Pencil, Needle and Round Points, in case..... \$7.50
2281. **Beam Compasses**, to fasten to a Straight Edge or Bar, with Pen, Pencil, Needle and Round Points, without case..... 6.50
2284. **Beam Compasses**, (French Make, same as 3050). with Pen, Pencil and Needle Points, in case..... 5.00

## GERMAN INSTRUMENTS, SECOND GRADE.

ALL PENCIL POINTS ARE ARRANGED TO HOLD FABER'S LEADS.

(First quality German Instruments, see Nos. 2000, etc.)

- |                                                                                               | Each.  |
|-----------------------------------------------------------------------------------------------|--------|
| 2400. Compasses, 5½ inches, with Pen, Pencil, Lengthening Bar, Needle and Divider Points..... | \$3.00 |
| 2406. Compasses, 5½ inches, with Pen, Pencil and fixed Needle Point.....                      | 2.50   |
| 2422. Dividers, 5 inches.....                                                                 | .75    |
| 2430. Bow Compasses, 3½ inches, with Handle, Pen, Pencil, Needle and Divider Points.....      | 2.50   |
| 2460. Ruling Pen, with Hinge, 5½ inches.....                                                  | .75    |
| 2464. Ruling Pen, " " 4 ".....                                                                | .65    |
| 2470. Ruling Pen, without " 5 ".....                                                          | .40    |

## REPAIRING DRAWING INSTRUMENTS.

The following are the approximate prices for repairs, which are of frequent occurrence. For complicated repairs, special estimates will be furnished, or the charges made according to the amount of labor.

Sharpening worn off Ruling Pens.....	Each. .20
Sharpening and Cleaning, Ruling Pens.....	.35

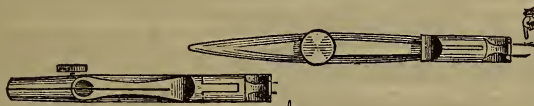


Grinding, Tempering, Sharpening and Cleaning broken off Pens.....	.50
-------------------------------------------------------------------	-----

(A pen broken off by a fall, often would be too blunt if only sharpened, in which case it is necessary to repair it as mentioned above.)

New Ebony Handle, for Ruling Pen.....	Each. .22
New White Bone Handle, for Ruling Pen .....	.30
Inserting the original broken Handle in Ruling Pens.....	.15
New Screws for Ruling Pens, Compasses, etc., made to order.....	.25
New Thread and Nut for Steel Spring Bow Instruments.....	35

## VARIOUS REPAIRS.



Broken Shank.

The above break is of frequent occurrence, and often renders a complete compass and attachments useless, if the broken part remains in the socket.

Repaired equal to new .....	Each. 75 to \$1.00
Polishing 6 inch Compasses, and attachments .....	\$1.00 to 1.50
Polishing 3½ inch Compasses and attachments.....	.85 to 1.25



Proportional Dividers, with broken Points carefully repaired.....	1.00 to 3.00
-------------------------------------------------------------------	--------------

Parts of Sets of Instruments furnished at reasonable prices.

Needle Points with shoulder Small.....	each, .10 to .15
Needle Points, special sizes made to order.....	“ .15 to .25

## ADJUSTABLE INSTRUMENT KEY.



No. 2480.

2480. Adjustable Instrument Key and Screw Driver ..	each, .50
-----------------------------------------------------	-----------



POLISHED WALNUT CASES  
 OF EXTRA FINE  
 GERMAN DRAWING INSTRUMENTS,

Best Quality German Silver. Lined with fine Velvet.

ALL PENCIL POINTS ARE ARRANGED TO HOLD FABER'S LEADS.



No. 2500.

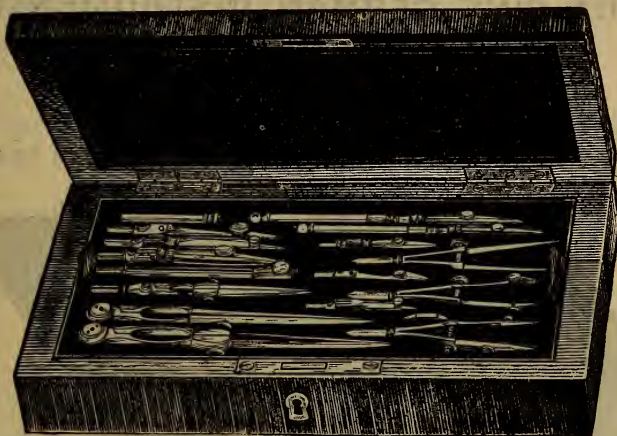
2500. Polished Walnut Case, with Tray, Lock and Key.

Contents:  $6\frac{1}{2}$  inch Proportional Dividers,  $5\frac{1}{2}$  inch Compasses with Pen, Pencil, Needle Points and Lengthening Bar, 5 inch Hair Spring Dividers, 5 inch Dividers,  $3\frac{1}{2}$  inch Bow Compasses with Pen, Pencil, and Needle Points,  $3\frac{1}{2}$  inch Dividers, with handle, 3 inch Steel Spring Bow Pen, 3 inch Spring Bow Pencil, 3 inch Spring Bow Dividers, Railroad Pen,  $5\frac{1}{2}$  inch Ruling Pen with hinge and pin, 4 inch Ruling Pen, Key, Lead Case, 1 dozen Tacks, 6 inch Ivory Scale, Rubber Triangle, Metal Protractor, and Wooden Curve.....each, \$30.00

2504. Polished Walnut Case, with Tray, Lock and Key.

Contents:  $6\frac{1}{2}$  inch Proportional Dividers,  $5\frac{1}{2}$  inch Compasses with Pen, Pencil, Needle Points and Lengthening Bar,  $3\frac{1}{2}$  inch Bow Compasses with Pen, Pencil and Needle Points, 5 inch Dividers, 3 inch Steel Spring Bow Pen, 3 inch Spring Bow Pencil, 3 inch Spring Bow Dividers,  $5\frac{1}{2}$  inch Ruling Pen with hinge and pin, 4 inch Ruling Pen, Key, Lead Case, 6 inch Ivory Scale, Rubber Triangle, Metal Protractor, Wooden Curve, and 1 dozen Tacks.....each, 26.00

EXTRA FINE  
GERMAN DRAWING INSTRUMENTS (continued).



No. 2508.

2508. Polished Walnut Case, with Tray, Lock and Key.

Contents: 5½ inch Compasses with Pen, Pencil, Needle Points and Lengthening Bar, 5 inch Dividers, 3½ inch Bow Compasses with Pen, Pencil and Needle Points, 3 inch Steel Spring Bow Pen, 3 inch Spring Bow Pencil, 3 inch Spring Bow Dividers, 5½ inch Ruling Pen with hinge and pin, 4 inch Ruling Pen, Lead Case, Key, 6 inch Ivory Scale, Rubber Triangle, Metal Protractor, Wooden Curve, and 1 dozen Tacks . . . . . each, \$19.50



No. 2512.

2512. Polished Walnut Case, with Tray, Lock and Key.

Contents: 5½ inch Compasses with Pen, Pencil, Needle Points and Lengthening Bar, 5 inch Dividers, 3½ inch Bow Compasses with Pen, Pencil and Needle Points, 3 inch Steel Spring Bow Pen, 5½ inch Ruling Pen with hinge and pin, 4 inch Ruling Pen, Lead Case, Key, 6 inch Ivory Scale, Rubber Triangle, Metal Protractor, Wooden Curve, and 1 dozen Tacks . . . . . each, \$16.50



## EXTRA FINE GERMAN INSTRUMENTS,

In Pocket Morocco Cases

Best Quality German Silver.

ALL PENCIL POINTS ARE ARRANGED TO HOLD FABER'S LEADS.

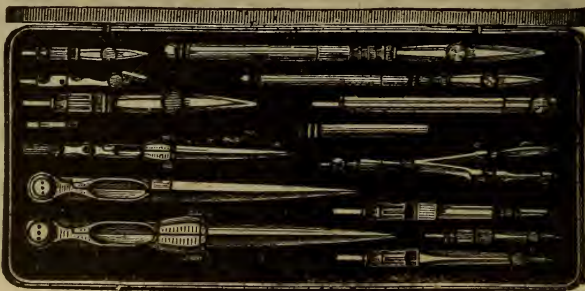


No. 2524.

2524. Contents:  $5\frac{1}{2}$  inch Compasses with Pen, Pencil, Needle Points and Lengthening Bar, 5 inch Hair Spring Dividers,  $3\frac{1}{2}$  inch Bow Compasses with Pen, Pencil and Needle Points, 3 inch Steel Spring Bow Pen, 3 inch Spring Bow Pencil, 3 inch Spring Bow Dividers,  $5\frac{1}{2}$  inch Ruling Pen with hinge and pin, 4 inch Ruling Pen, Lead Case and Key.....

Each.

\$18.00



No. 2528.

2528. Contents:  $5\frac{1}{2}$  inch Compasses with Pen, Pencil, Needle Points and Lengthening Bar, 5 inch Dividers,  $3\frac{1}{2}$  inch Bow Compasses with Pen, Pencil and Needle Points, 3 inch Steel Spring Bow Pen,  $5\frac{1}{2}$  inch Ruling Pen with hinge and pin, 4 inch Ruling Pen, Lead Case and Key.....

\$14.00



EXTRA FINE GERMAN INSTRUMENTS

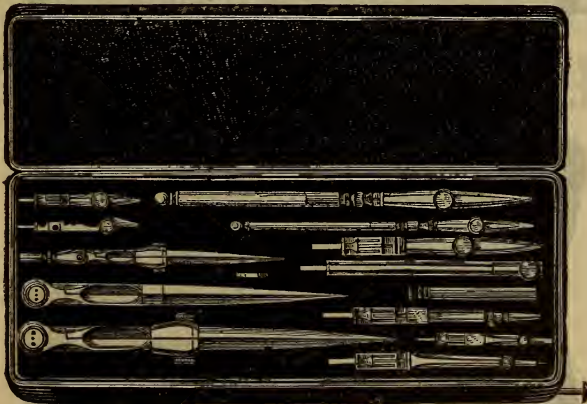
IN CASES (continued).

ALL PENCIL POINTS ARE ARRANGED TO HOLD FABER'S LEADS.



No. 2532

2532. Contents:  $5\frac{1}{2}$  inch Compasses with Pen, Pencil, Needle Points and Lengthening Bar, 5 inch Dividers, 3 inch Spring Bow Pen, 3 inch Spring Bow Pencil, 3 inch Spring Bow Dividers,  $5\frac{1}{2}$  inch Ruling Pen with hinge and pin, 4 inch Ruling Pen, Lead Case and Key.....each, \$13.25



No. 2536.

2536. Contents:  $5\frac{1}{2}$  inch Compasses with Pen, Pencil, Needle Points and Lengthening Bar, 5 inch Dividers,  $3\frac{1}{2}$  inch Bow Compasses with Pen, Pencil and Needle Points,  $5\frac{1}{2}$  inch Ruling Pen with hinge and pin, 4 inch Ruling Pen, Lead Case and Key.....each, 11.50

## EXTRA FINE GERMAN INSTRUMENTS IN CASES *(continued)*.

ALL PENCIL POINTS ARE ARRANGED TO HOLD FABER'S LEADS.



No. 2540.

2540. Contents:  $4\frac{1}{2}$  inch Compasses with handle, Pen, Pencil and Divider Points, Lengthening Bar and fixed Needle Point, 5 inch Dividers,  $3\frac{1}{2}$  inch German Silver Spring Bow Pen, two Ruling Pens, Lead Case and Key.....each, \$10.00



No. 2542.

2542. Contents:  $5\frac{1}{2}$  inch Compasses, with Pen, Pencil, Needle Points and Lengthening Bar, 5 inch Dividers, 3 inch Steel Spring Bow Pen,  $5\frac{1}{2}$  inch Ruling Pen with hinge and pin, Lead Case and Key.....each, \$8.75



No. 2544.

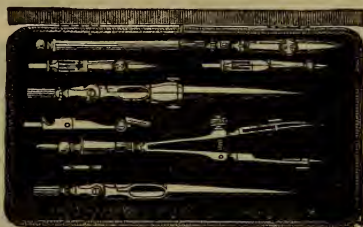
2544. Contents:  $5\frac{1}{2}$  inch Compasses with Pen, Pencil, Needle Points and Lengthening Bar, 5 inch Dividers,  $5\frac{1}{2}$  inch Ruling Pen with hinge and pin, Lead Case and Key.....each, \$7.50

**EXTRA FINE GERMAN INSTRUMENTS,**

*Continued.*

ALL PENCIL POINTS ARE ARRANGED TO HOLD FABER'S LEADS.

**VERY SMALL POCKET CASES.**



No. 2548.

2548. Contents:  $3\frac{1}{2}$  inch Bow Compasses with Handle, Pen, Pencil and Needle Point,  $3\frac{1}{2}$  inch Dividers with Handle, 3 inch Steel Spring Bow Pen, 4 inch Ruling Pen, Lead Case and Key.....each, \$7.50



No. 2552.

2552. Contents:  $3\frac{1}{2}$  inch Spring Bow Compasses with long detachable white Handle, 2 Pen Points, Pencil and Needle Points, 4 inch Ruling Pen, Lead Case and Key.....each, 6.00



No. 2556.

2556. Contents:  $3\frac{1}{2}$  inch Bow Compasses with Handle, Pen, Pencil and Needle Points,  $3\frac{1}{2}$  inch Dividers with Handle, 4 inch Ruling Pen, Lead Case and Key.....each, 5.00



No. 2560.

2560. Contents:  $3\frac{1}{2}$  inch Bow Compasses with Handle, Pen, Pencil and Needle Points, 4 inch Ruling Pen. Lead Case and Key.....each, 4.45



Cases of Extra Fine German Instruments, see Nos. 2500-2560.

## CASES OF GERMAN INSTRUMENTS.

German Silver, Steel Points, Metal Joints.

Morocco Cases lined with Black Velvet.

THESE CASES ARE OF GOOD QUALITY, AND VERY MODERATE IN PRICE.



No. 2600.

2600. Contents:  $5\frac{1}{2}$  inch Compasses with Pen, Pencil, Needle Points and Lengthening Bar, 5 inch Dividers,  $3\frac{1}{2}$  inch Bow Compasses with Pen, Pencil and Needle Points, 3 inch Steel Spring Bow Pen, 3 inch Spring Bow Pencil, 3 inch Spring Bow Dividers,  $5\frac{1}{2}$  inch Ruling Pen with hinge and pin, 4 inch Ruling Pen and Key.....each, \$12.00



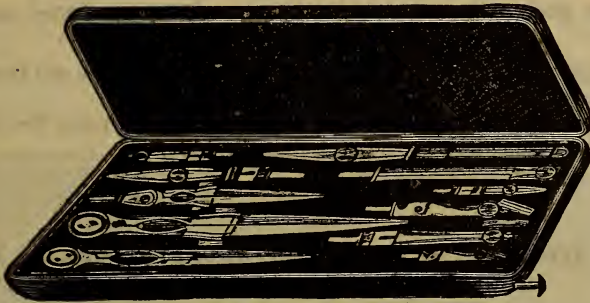
No. 2604, with 1 Ruling Pen.

2604. Contents:  $5\frac{1}{2}$  inch Compasses with Pen, Pencil, Needle Points and Lengthening Bar, 5 inch Dividers, 3 inch Steel Spring Bow Pen, 3 inch Spring Bow Pencil, 3 inch Spring Bow Dividers, Key, and  $5\frac{1}{2}$  inch Ruling Pen with hinge and pin.....each, \$9.00

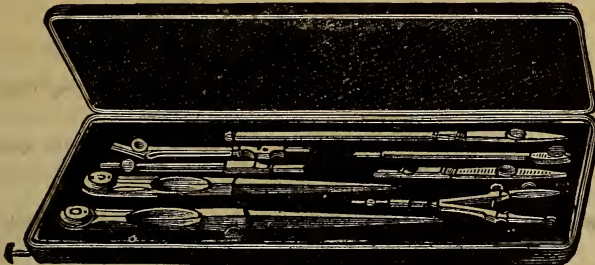
CASES OF GERMAN INSTRUMENTS,

*Continued.*

Cases of Extra Fine German Instruments, see Nos. 2500-2546.



2608. Contents: 5½ inch Compasses with Pen, Pencil, Needle Points and Lengthening Bar, 5 inch Dividers, 3½ inch Bow Compasses with Handle, Pen, Pencil and Needle Points, Key, and 5½ inch Ruling Pen with hinge and pin.....each, \$8.50



2612. Contents: 5½ inch Compasses with Pen, Pencil, Needle Points and Lengthening Bar, 5 inch Dividers, 3 inch Steel Spring Bow Pen, Key, and 5½ inch Ruling Pen with hinge and pin.....each, \$7.00



No. 2616.

2616. Contents: 5½ inch Compasses with Pen, Pencil, Needle Points and Lengthening Bar, 5 inch Dividers, Key, and 5½ inch Ruling Pen with hinge and pin.....each, \$5.55

Continued on next page.

## CASES OF GERMAN INSTRUMENTS,

*Continued.*

**Cases of Extra Fine German Instruments, see Nos. 2500-2560.**

2628. Contents: 5½ inch Compasses with fixed Needle Point, Pen and Pencil Points, 5 inch Dividers, Key, and 5 inch Ruling Pen... ..each, \$4.25
2636. Contents: 5½ inch Compasses with one fixed Divider Point, Pen and Pencil Points, Key, and 5 inch Ruling Pen..... ..each, 3.00

**CHAMOIS SKINS FOR CLEANING INSTRUMENTS (Same as No. 17,910).**

Medium, 30c. Small, 20c. each.

**Repairing Instruments, see page 63.**

## EMPTY CASES

FOR DRAWING INSTRUMENTS.

*Made of well-seasoned wood. Each case has a Tray to lift out, with space underneath the same to hold Triangles, Curves; Pencils, etc.*

**2800. Rosewood veneered and polished. Plated Metal Work, Tray, Lock and Key.**

Inside Measure.	Tray fitted with silk Velvet, to hold the Instruments.	Inside Measure.	Empty Case, Tray not fitted.
10×14 inches.....	each, \$18.00	10×14 inches.....	each, \$12.00
7×13 “ .....	“ 10.75	7×13 “ .....	“ 6.50
5×12½ “ .....	“ 8.50	5×12½ “ .....	“ 5.00
7×11 “ .....	“ 8.50	7×11 “ .....	“ 5.00
6×10 “ .....	“ 7.25	6×10 “ .....	“ 4.25
5×9 “ .....	“ 6.00	5×9 “ .....	“ 3.75
3½×9 “ .....	“ 5.00	3½×9 “ .....	“ 3.00

**2830. Black Walnut oiled, Brass Metal Work, Tray, Lock and Key.**

Inside Measure.	Tray fitted with Cotton Velvet, to hold the Instruments.	Inside Measure.	Empty Case, Tray not fitted.
10×14 inches.....	each, \$12.50	10×14 inches.....	each, \$8.00
7×13 “ .....	“ 7.25	7×13 “ .....	“ 4.00
5×12½ “ .....	“ 5.75	5×12½ “ .....	“ 3.00
7×11 “ .....	“ 5.75	7×11 “ .....	“ 3.00
6×10 “ .....	“ 5.00	6×10 “ .....	“ 2.50
5×9 “ .....	“ 4.00	5×9 “ .....	“ 2.25
3½×9 “ .....	“ 3.25	3½×9 “ .....	“ 1.75

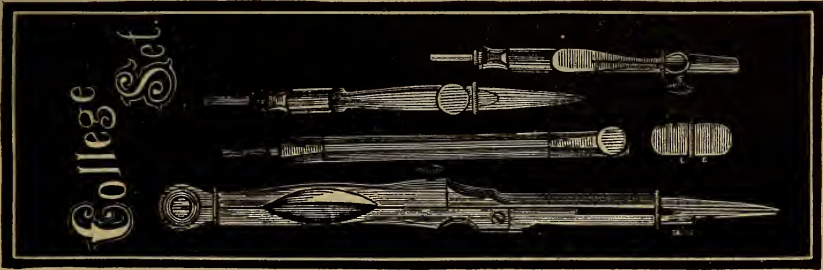
Lined with Silk Velvet, 50c. to \$2.00 extra. Polished Cases, 50c. to \$1.50 extra.

Other Cases made to order at short notice.



FRENCH INSTRUMENTS,

Brass and German Silver, on Cards.



No. 2902.

2902. "COLLEGE SET," Brass.

5½ inch Compasses with fixed Needle Point, Pen, Pencil Point,  
Lengthening Bar and Key.....each, \$1.00

2912. "STUDENT'S SET," German Silver.

5½ inch Compasses with fixed Needle Point, Pen, Pencil Point,  
Lengthening Bar and Key... ..each, 1.75



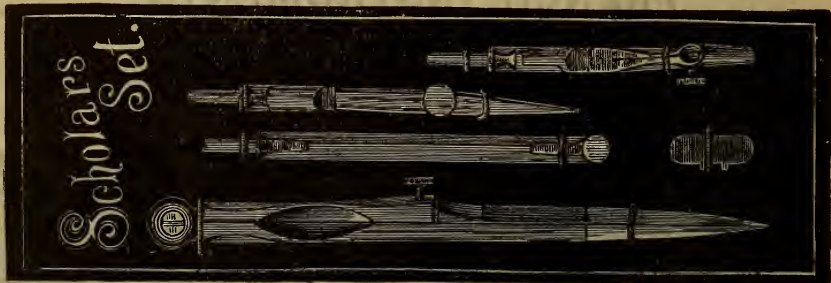
No. 2922.

2922. "GEOMETRY SET," Brass.

5½ inch Compasses with one fixed Divider Point, Pen, Pencil Point,  
Lengthening Bar, Ruling Pen and Key.....each, \$1.00

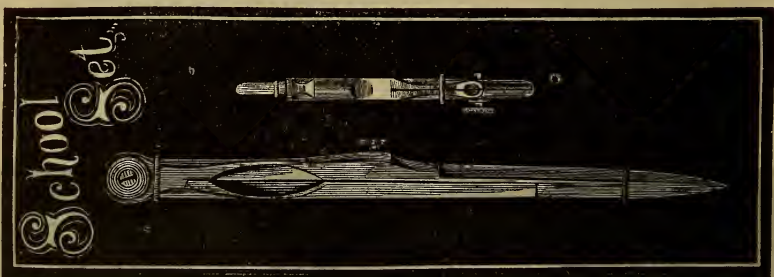
# FRENCH INSTRUMENTS,

Brass, on Cards (continued).



No. 2930. 2932. 2934.

- 2930. "SCHOLAR'S SET," Brass.  
6¼ inch Compasses with one fixed Divider Point, Pen, Pencil Point,  
Lengthening Bar and Key.....each, .85
- 2932. "SCHOLAR'S SET," Brass.  
5½ inch Compasses with one fixed Divider Point, Pen, Pencil Point,  
Lengthening Bar and Key..... " .75
- 2934. "SCHOLAR'S SET," Brass.  
4¾ inch Compasses with one fixed Divider Point, Pen, Pencil Point,  
Lengthening Bar and Key..... " 65



No. 2950. 2952. 2954.

- 2950. "SCHOOL SET," Brass.  
6¼ inch Compasses with one fixed Divider Point, Pencil Point and Key, each, .65
- 2952. "SCHOOL SET," Brass.  
5½ inch Compasses with one fixed Divider Point, Pencil Point and Key, " .55
- 2954. "SCHOOL SET," Brass.  
4¾ inch Compasses with one fixed Divider Point, Pencil Point and Key, " .45



No. 2960. 2962. 2964.

- 2960. Dividers, BRASS, 6¼ inches.....each, .40
- 2962 Dividers, BRASS, 5½ " ..... " .35
- 2964. Dividers, BRASS, 4¾ " ..... " .30

# FRENCH INSTRUMENTS,

*Continued.*



No. 2980.

2980. Bow Compasses, **BRASS**, 3 inches, with Handle, fixed Needle Point, Pen and Pencil Points.....each, .75
2984. Bow Compasses, **GERMAN SILVER**, 3 inches, with Handle, fixed Needle Point, Pen and Pencil Points..... “ \$1.00



No. 2990.

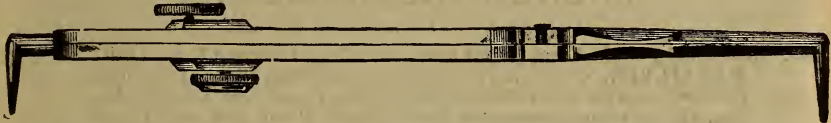
2990. Spring Bow Pen, **BRASS**, fixed Needle Point.....each, .80
2992. Spring Bow Pencil, **BRASS**, “ “ “ ..... “ .80



No. 3000.

(These Pens are of a cheap grade, and intended for ordinary use.)

3000. Ruling Pen, with White Handle.....each, .30
3002. Ruling Pen, “ Black “ ..... “ .20



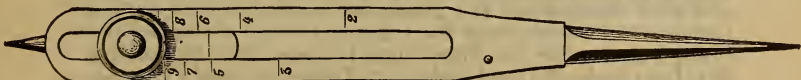
No. 3020.

3020. Proportional Dividers, **GERMAN SILVER**, 7 inches, with rectangular bent points ; graduated for lines and circles, in Case..... each, \$7.00



No. 3028.

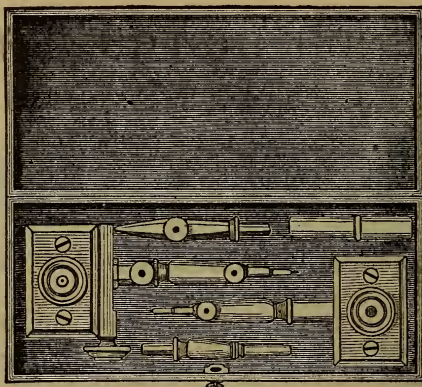
3028. Proportional Dividers, **GERMAN SILVER**, 7 inches, with rack movement ; graduated for lines and circles, in Case.....each, \$6.00



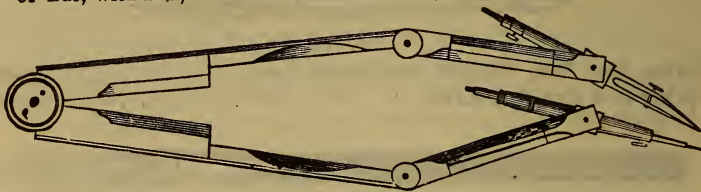
No. 3036. 3038.

3036. Proportional Dividers, **GERMAN SILVER**,  $6\frac{1}{4}$  inches, in Case, (List Price, \$2.75) each, \$2.50
3038. Proportional Dividers, **BRASS**,  $6\frac{1}{4}$  inches, in Case, (List Price, \$1.90) each, \$1.75





3050. **Beam Compasses, GERMAN SILVER**, to fasten to a Straight Edge or Bar, with Pen, Pencil and Needle Points, in Case..... each, \$5.00



No. 3054.

3054. **Pocket Folding Compasses, GERMAN SILVER**, with reversible Pen, Pencil and Needle Points, in Case..... each, \$5.50

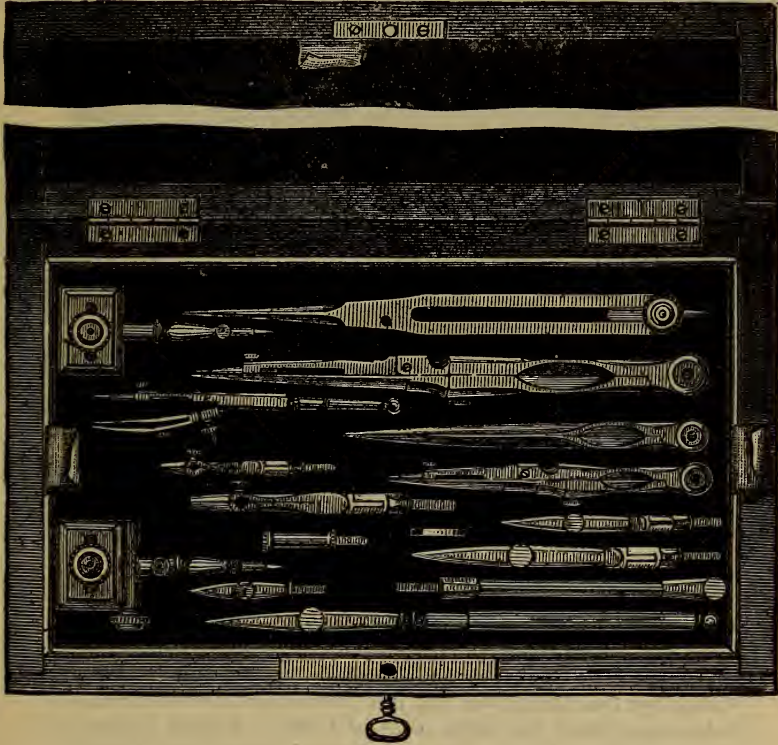
## FRENCH INSTRUMENTS,

In Rosewood Polished Cases.

3200. **Rosewood Polished and Inlaid Case, with Tray, Lock and Key. GERMAN SILVER**, containing a complete outfit of **65 Pieces**:  $6\frac{1}{4}$  inch Compasses with fixed Needle Point, Pen, Pencil and Lengthening Bar,  $4\frac{3}{4}$  inch Compasses with fixed Needle Point, Pen and Pencil Points,  $5\frac{1}{2}$  inch Dividers, Steel Spring Bow Pen with fixed Needle Point, Spring Bow Pencil with fixed Needle Point, Spring Bow Dividers, 3 Ruling Pens Ivory handles,  $6\frac{1}{4}$  inch Proportional Dividers, Beam Compasses with Pen, Pencil and Needle Points, Key, Ivory Scale, Boxwood Scale, Horn Protractor, Metal Protractor, Case of Leads, small Screw Driver,  $45^\circ$  Rubber Triangle,  $30^\circ$  &  $60^\circ$  Rubber Triangle, Wooden Triangle, Horn Centre, Crayon Holder, Rubber Curve, 2 Wooden Curves, 6 German Silver Tacks, Pocket Rule, Cake Red India Ink, Cake Blue India Ink, Ink Dish, Pencil Rubber, Ink Rubber, Oil Stone, small, medium and large Brush, hard, medium and soft Pencil, 2 small Pencils for Instruments, 6 Lettering Pens, 2 Penholders, and Cake of fine Black India Ink..... each, \$32.00
3204. **Rosewood Polished and Inlaid Case, with Tray, Lock and Key. GERMAN SILVER**, containing outfit of **50 Pieces**:  $6\frac{1}{4}$  inch Compasses with fixed Needle Point, Pen, Pencil and Lengthening Bar,  $4\frac{3}{4}$  inch Compasses with fixed Needle Point, Pen and Pencil Points,  $4\frac{3}{4}$  inch Dividers, Spring Bow Pen, Proportional Dividers, Three Ruling Pens, Key, Ivory Scale, Boxwood Scale, Horn Protractor, Metal Protractor, Case of Leads, small Screw Driver,  $45^\circ$  Rubber Triangle,  $30^\circ$  &  $60^\circ$  Rubber Triangle, Wooden Triangle, Horn Centre, Crayon Holder, 2 Wooden Curves, 6 German Silver Tacks, Oil Stone, small, medium and large Brush, hard, medium and soft Pencil, small Pencil for Instruments, 6 Lettering Pens, 2 Penholders, Pencil Rubber, Ink Dish, and Cake of fine Black India Ink..... each, 20.00

## FRENCH INSTRUMENTS,

IN CASES (continued.)



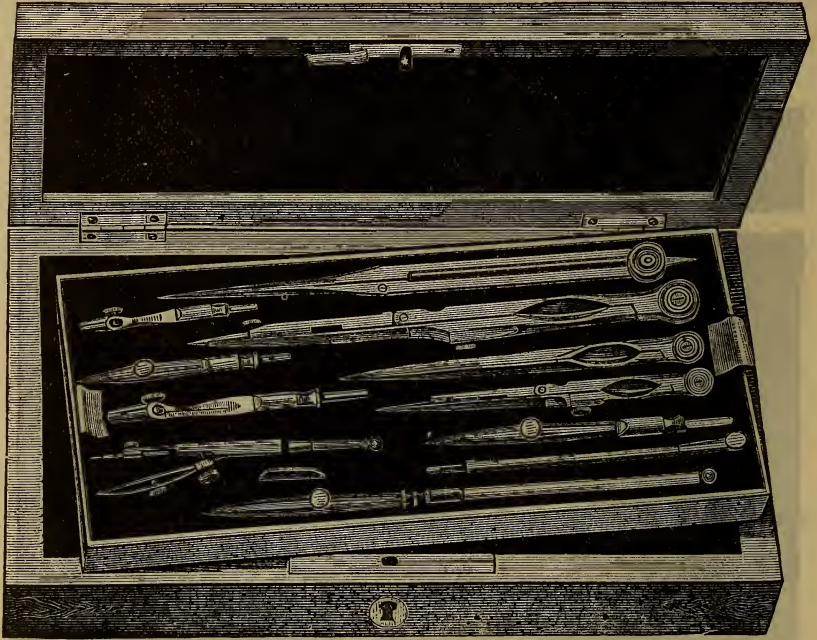
No. 3208.

3208. Rosewood Polished Case, with Tray, Lock and Key. **GERMAN SILVER**, outfit of 40 Pieces:  $6\frac{1}{4}$  inch Compasses with fixed Needle Point, Pen, Pencil Points and Lengthening Bar,  $4\frac{3}{4}$  inch Compasses with fixed Needle Point, Pen and Pencil Points,  $5\frac{1}{2}$  inch Dividers, Spring Bow Pen, Ruling Pen White Handle,  $6\frac{1}{4}$  inch Proportional Dividers, Beam Compasses with Pen, Pencil and Needle Points, Key, Wooden Rule, Scale, Horn Protractor, Metal Protractor, Case of Leads, 2 Wooden Curves, Rubber Triangle, Wooden Triangle, small Screw Driver, Crayon Holder, 6 German Silver Tacks, Pencil Pointer, Pencil Rubber, medium Bru h, hard, medium and soft Pencil, 2 Pencils for instruments, 3 Lettering Pens, Penholder, and Cake of Black India Ink..... each, \$16.00



## FRENCH INSTRUMENTS

IN CASES (continued).



No. 3216. 3220.

3216. Rosewood Polished Case, with Tray, Lock and Key. **GERMAN SILVER**, outfit of 35 Pieces:  $6\frac{1}{4}$  inch Compasses, with fixed Needle Point, Pen, Pencil Points and Lengthening Bar,  $4\frac{1}{4}$  inch Compasses with fixed Needle Point, Pen and Pencil Points,  $4\frac{1}{4}$  inch Dividers, Spring Bow Pen, Ruling Pen,  $6\frac{1}{4}$  inch Proportional Dividers, Key, Rule, Scale, Horn Protractor, Case of Leads, 2 Wooden Curves, Wooden Triangle, Crayon Holder, 6 German Silver Tacks, Pencil Pointer, Pencil Rubber, Brush, hard, medium and soft Pencil, small Pencil for Instruments, 3 Lettering Pens, Penholder, and Cake of Black India Ink..... each, \$9.75
3220. Rosewood Polished Case, with Tray, Lock and Key. **BRASS**, outfit of 35 Pieces:  $6\frac{1}{4}$  inch Compasses, with fixed Needle Point, Pen, Pencil Points and Lengthening Bar,  $4\frac{1}{4}$  inch Compasses, with fixed Needle Point, Pen and Pencil Points,  $4\frac{1}{4}$  inch Dividers, Spring Bow Pen, Ruling Pen,  $6\frac{1}{4}$  inch Proportional Dividers, Key, Rule, Scale, Horn Protractor, Case of Leads, 2 Wooden Curves, Wooden Triangle, Crayon Holder, 6 German Silver Tacks, Pencil Pointer, Pencil Rubber, Brush, hard, medium and soft Pencil, small Pencil for Instruments, 3 Lettering Pens, Penholder, and Cake of Black India Ink..... each, 7.00



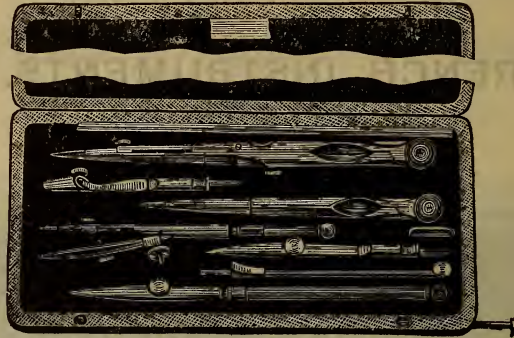
FRENCH INSTRUMENTS,

IN CASES (continued).



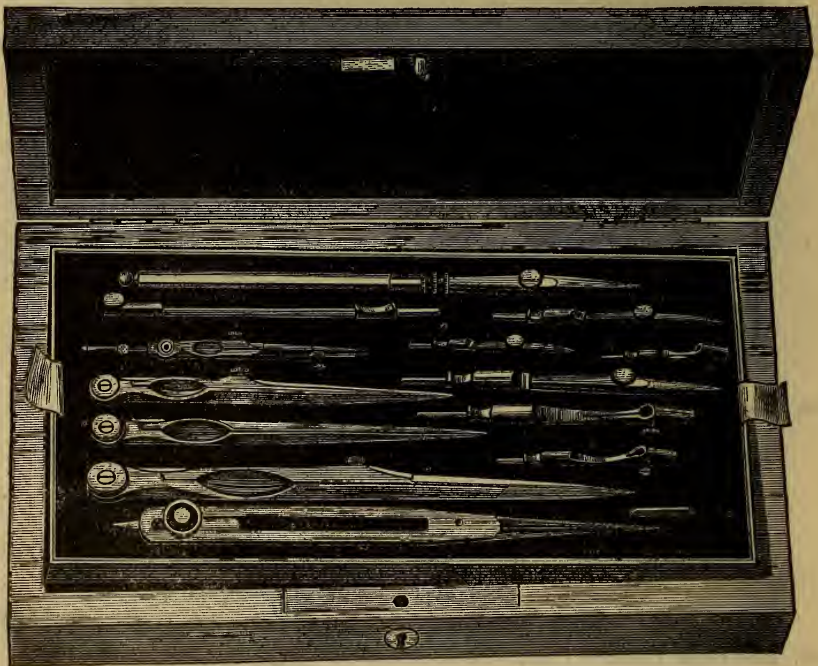
No. 3224. 3228.

3224. Rosewood Polished Case, with Tray, Lock and Key. **GERMAN SILVER**, outfit of 30 Pieces:  $6\frac{1}{4}$  inch Compasses with fixed Needle Point, Pen, Pencil Points and Lengthening Bar,  $4\frac{1}{4}$  inch Compasses with fixed Needle Point, Pen and Pencil Points,  $4\frac{1}{4}$  inch Dividers, Spring Bow Pen, Ruling Pen, Key, Rule, Boxwood Scale, Horn Protractor, Wooden Curve, Wooden Triangle, Crayon Holder, 6 German Silver Tacks, Pencil Pointer, Pencil Rubber, Brush, 3 Lettering Pens, Penholder, small Pencil for Instruments, and Cake of Black India Ink ..... each, \$7.00
3228. Rosewood Polished Case, with Tray, Lock and Key. **BRASS**, outfit of 30 Pieces:  $6\frac{1}{4}$  inch Compasses with fixed Needle Point, Pen, Pencil Points and Lengthening Bar,  $4\frac{1}{4}$  inch Compasses with fixed Needle Point, Pen and Pencil Points,  $4\frac{1}{4}$  inch Dividers, Spring Bow Pen, Ruling Pen, Key, Rule, Boxwood Scale, Horn Protractor, Wooden Curve, Wooden Triangle, Crayon Holder, 6 German Silver Tacks, Pencil Pointer, Pencil Rubber, Brush, 3 Lettering Pens, Penholder, small Pencil for Instruments, and Cake of Black India Ink... each, 4.25



No. 3240.

3240. Pocket Case, covered with Morocco Cloth. **BRASS**, outfit of 9 Pieces:  $5\frac{1}{2}$  inch Compasses with fixed Needle Point, Pen and Pencil Points and Lengthening Bar,  $4\frac{1}{4}$  inch Dividers, Spring Bow Pen, Key, Ruling Pen, Rule and Protractor..... each, \$3.70
3252. Rosewood Polished Case, **BRASS**, outfit of 9 Pieces:  $4\frac{1}{4}$  inch Compasses with fixed Needle Point, Pen and Pencil Points and Lengthening Bar, 4 inch Dividers, Ruling Pen, Key, Rule and Protractor ... “ 1.75



No. 3260.

3260. Rosewood Polished Case, with Tray, Lock and Key. **BRASS**, outfit of 26 Pieces:  $6\frac{1}{4}$  inch Compasses with one fixed Divider Point, Pen and Pencil Points and Lengthening Bar,  $4\frac{1}{4}$  inch Compasses with Pen and Pencil Points,  $4\frac{1}{4}$  inch Dividers, Proportional Dividers, 3 inch Bow Compasses with Handle and fixed Needle Point, Pen and Pencil Points, Ruling Pen, Key, Brass Protractor, Horn Protractor, Rule, Crayon Holder, 6 Tacks, Pencil Rubber, small Pencil for Instruments, and Cake of Black India Ink.....each, \$5 75

## FRENCH INSTRUMENTS

IN CASES (*continued*).

No. 3264.

3264. Rosewood Polished Case, with Tray, Lock and Key. **BRASS**, outfit of 25 Pieces :  $6\frac{1}{4}$  inch Compasses with one fixed Divider Point, Pen, Pencil Points and Lengthening Bar,  $4\frac{1}{4}$  inch Compasses with Pen and Pencil Points,  $4\frac{1}{4}$  inch Dividers, 3 inch Bow Compasses with Handle and fixed Needle Point, Pen and Pencil Points, Ruling Pen, Key, Brass Protractor, Horn Protractor, Rule, Crayon Holder, 6 Tacks, Pencil Rubber, small Pencil for Instruments, and Cake of Black India Ink..... each, \$3.40





No. 3272.

- 3272 Rosewood Polished Case, with Tray, Lock and Key. BRASS, outfit of 20 Pieces :  $5\frac{1}{2}$  inch Compasses with one fixed Divider Point, Pen, Pencil Points and Lengthening Bar,  $4\frac{1}{4}$  inch Dividers, 3 inch Bow Compasses with Handle and fixed Needle Point, Pen and Pencil Points, Ruling Pen, Key, Rule. Crayon Holder, Protractor, small Pencil for Instruments, 6 Tacks, Pencil Rubber, and Cake of Black India Ink, each, \$2.60



No. 3290.

3290. Mahogany Polished Case. BRASS, 12 Pieces :  $4\frac{1}{2}$  inch Compasses with one fixed Divider Point, Pen, Pencil Points and Lengthening Bar,  $3\frac{1}{2}$  inch Dividers,  $3\frac{1}{2}$  inch Bow Compasses with Handle and fixed Needle Point, Pen and Pencil Points, Ruling Pen, Key, Rule, Crayon Holder and Protractor . . . . . each, \$1.50



No. 3300.

3300. **Mahogany Polished Case. BRASS, 10 Pieces:** 4½ inch Compasses with one fixed Divider Point, Pen, Pencil Points and Lengthening Bar, 3½ inch Dividers, Ruling Pen, Key, Rule, Crayon Holder and Protractor.....each, \$1.00



No. 3304.

3304. **Mahogany Polished Case. BRASS, 9 Pieces:** 4½ inch Compasses with one fixed Divider Point, Pen, Pencil Points and Lengthening Bar, Ruling Pen, Key, Rule, Crayon Holder and Protractor.....each, .80
3308. **Mahogany Polished Case. BRASS, 8 Pieces:** 4½ inch Compasses with one fixed Divider Point, Pen, Pencil Points and Lengthening Bar, Key, Rule, Crayon Holder and Protractor ..... “ .70
3312. **Mahogany Polished Case. BRASS, 6 Pieces:** 4½ inch Compasses with one fixed Divider Point, Pen and Pencil Points, Key, Rule, and Crayon Holder..... “ .60
3316. **Mahogany Polished Case. BRASS, 5 Pieces:** 4½ inch Compasses with one detachable Divider Point, Pen and Pencil Points, and Key. “ .50

**CHAMOIS SKINS FOR CLEANING INSTRUMENTS** (same as No. 17,910).

Medium, 30c. Small, 20c. each.

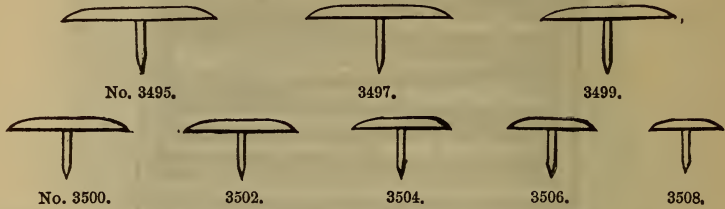
**Instruments Repaired, see Description Page 63.**

# FASTENING PINS OR THUMB TACKS.

German Silver, Best Quality.

## Points Screwed in and Riveted.

HEADS ROUNDED SO AS TO ENABLE THE T SQUARE TO SLIDE OVER WITHOUT HINDRANCE.



Above cuts represent the full size section of each Tack.

### On Cork covered with Black Velvet Paper.

3495.	$\frac{1\frac{3}{8}}$	inch diameter.....	Card of 3 doz. Tacks, \$3.75.....	dozen, \$1.25
3497.	$\frac{1\frac{1}{8}}$	“ “ .....	“ “ “ 3.30.....	“ 1.10
3499.	$\frac{1\frac{1}{8}}$	“ “ .....	“ “ “ 3.00.....	“ 1.00
3500.	$\frac{1\frac{1}{8}}$	“ “ .....	“ “ “ 2.70.....	“ .90
3502.	$\frac{9}{16}$	“ “ .....	“ “ “ 2.40.....	“ .80
3504.	$\frac{9}{16}$	“ “ .....	“ “ “ 2.10.....	“ .70
3506.	$\frac{7}{16}$	“ “ .....	“ “ “ 1.80.....	“ .60
3508.	$\frac{6}{16}$	“ “ .....	“ “ “ 1.65.....	“ .55

## GERMAN SILVER TACKS.

SECOND QUALITY, HEADS ROUNDED, POINTS RIVETED.



### On Cork covered with Blue Paper.

3530.	$\frac{1\frac{1}{8}}$	inch diameter.....	Card of 3 doz. Tacks, \$1.65.....	dozen, .55
3532.	$\frac{9}{16}$	“ “ .....	“ “ “ 1.50.....	“ .50
3534.	$\frac{8}{16}$	“ “ .....	“ “ “ 1.35.....	“ .45
3536.	$\frac{7}{16}$	“ “ .....	“ “ “ 1.20.....	“ .40
3538.	$\frac{6}{16}$	“ “ .....	“ “ “ 1.05.....	“ .35

## BRASS TACKS,

Points Riveted.

### On Cork covered with Blue Paper.

3560.	$\frac{1\frac{1}{8}}$	inch diameter.....	Card of 3 doz. Tacks, \$1.20.....	dozen, .40
3564.	$\frac{8}{16}$	“ “ .....	“ “ “ 1.05.....	“ .35
3566.	$\frac{7}{16}$	“ “ .....	“ “ “ .90.....	“ .30
3568.	$\frac{6}{16}$	“ “ .....	“ “ “ .75.....	“ .25



**BRASS TACKS, for Schools, etc.**



3575.	$\frac{7}{16}$ inch diameter	.....	Gross, \$2.20	.....	dozen,	.20
3577.	$\frac{5}{16}$ " "	.....	" 1.75	.....	"	.16
3579.	$\frac{5}{16}$ " "	.....	" 1.30	.....	"	.14

**"BAYONET" TACKS.**



3583



3585



3587

MADE OF ONE PIECE OF STEEL, A PORTION OF THE HEAD FORMING THE POINT.

On Cards covered with White Paper.

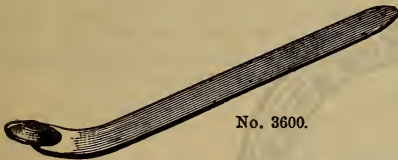
3583.	"BAYONET" TACKS,	$\frac{5}{16}$ inch diameter	.....	Gross, \$2.50	.....	dozen,	.22
3585.	"BAYONET" TACKS,	$\frac{5}{16}$ " "	.....	" 1.75	.....	"	.17
3587.	"BAYONET" TACKS,	$\frac{5}{16}$ " "	.....	" 1.50	.....	"	.15

**SPIRAL WIRE TACKS.**



3590.	SPIRAL TACKS,	$\frac{12}{16}$ inch diameter	.....	dozen,	.35
3591.	" "	$\frac{10}{16}$ " "	.....	"	.30
3592.	" "	$\frac{8}{16}$ " "	.....	"	.25
3593.	" "	$\frac{6}{16}$ " "	.....	"	.20

**TACK LIFTER.**



No. 3600.

Made of metal, and plated. Is convenient for pushing in, as well as extracting Tacks from the drawing board, without injury to the points. The handle can be used as a paper cutter,

and is serviceable for pressing down the edges in stretching paper, and removing sheets which have been gummed to the board.....each, .25

**HORN CENTRES.**



No. 3610.



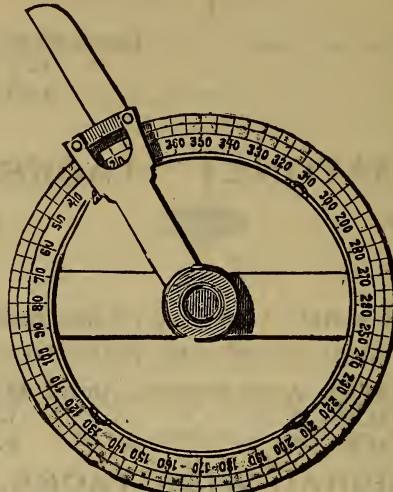
No. 3616.



3610.	Horn Centre, with German Silver Rim	.....	each,	.50
3616.	Horn Centre	.....	"	.15

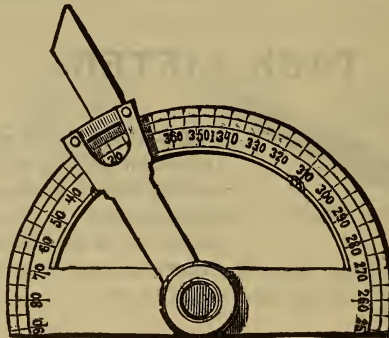
**SWISS PROTRACTORS.**

German Silver. With Arm and Vernier,



Nos. 3700, 3704, 3706.

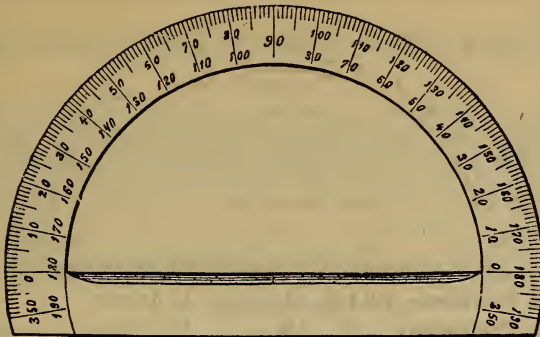
- 3700. **Swiss Full Circle Vernier Protractor**, with Horn Centre, 10 inches,  
 $\frac{1}{4}$  degrees, reading to 1 minute.....each, \$20.00
- 3704. **Swiss Full Circle Vernier Protractor**, with Horn Centre, 8 inches,  
 $\frac{1}{2}$  degrees, reading to 3 minutes..... “ 16.25
- 3706. **Swiss Full Circle Vernier Protractor**, with Horn Centre,  $5\frac{1}{2}$  inches,  
 $\frac{1}{2}$  degrees, reading to 3 minutes..... “ 14.00



Nos. 3720, 3724, 3726.

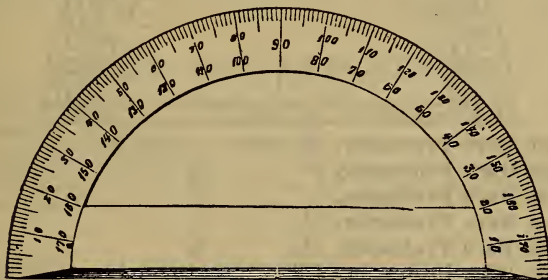
- 3720. **Swiss Half Circle Vernier Protractor**, with Horn Centre, 10 inches,  
 $\frac{1}{4}$  degrees, reading to 1 minute.....each \$18.00
- 3724. **Swiss Half Circle Vernier Protractor**, with Horn Centre, 8 inches,  
 $\frac{1}{2}$  degrees, reading to 3 minutes..... “ 14.50
- 3726. **Swiss Half Circle Vernier Protractor**, with Horn Centre,  $5\frac{1}{2}$  inches,  
 $\frac{1}{2}$  degrees, reading to 3 minutes..... “ 11.00

Morocco Cases for Vernier Protractors, from \$1.50 to \$5 00



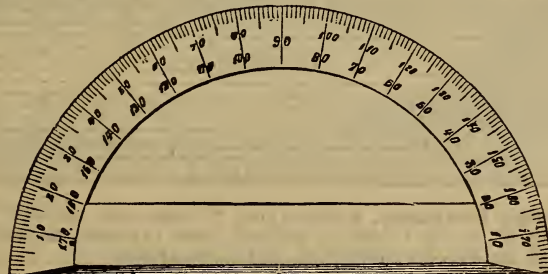
Nos. 3750-3756.

- 3750. Swiss Half Circle Protractor, GERMAN SILVER, Centre on inner edge, 6 inches,  $\frac{1}{4}$  degrees..... each, \$4.50
- 3752. Swiss Half Circle Protractor, GERMAN SILVER, Centre on inner edge, 6 inches,  $\frac{1}{2}$  degrees... .. " 3.75
- 3754. Swiss Half Circle Protractor, GERMAN SILVER, Centre on inner edge, 5 inches,  $\frac{1}{2}$  degrees..... " 3.00
- 3756. Swiss Half Circle Protractor, GERMAN SILVER, Centre on inner edge, 4 inches, degrees..... " 2.50



Nos. 3760-3766.

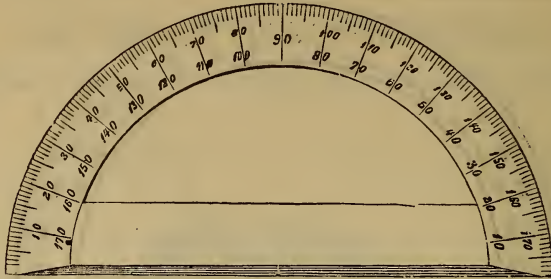
- 3760. Swiss Half Circle Protractor, GERMAN SILVER, Centre on outer edge, 6 inches,  $\frac{1}{4}$  degrees..... each, \$4.00
- 3762. Swiss Half Circle Protractor, GERMAN SILVER, Centre on outer edge, 6 inches,  $\frac{1}{2}$  degrees..... " 3.25
- 3764. Swiss Half Circle Protractor, GERMAN SILVER, Centre on outer edge, 5 inches,  $\frac{1}{2}$  degrees..... " 2.60
- 3766. Swiss Half Circle Protractor, GERMAN SILVER, Centre on outer edge, 4 inches, degrees..... " 2.00



Nos 3780-3788.

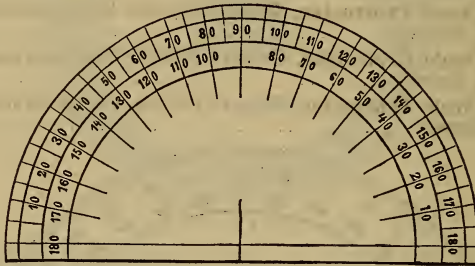
- 3780. Half Circle Protractor, GERMAN SILVER,  $8\frac{1}{2}$  inch,  $\frac{1}{2}$  degrees... each, \$2.00
- 3782. Half Circle Protractor, " "  $7\frac{1}{2}$  "  $\frac{1}{2}$  " .... " 1.50
- 3784. Half Circle Protractor, " "  $6\frac{3}{8}$  "  $\frac{1}{2}$  " ... " 1.25
- 3786. Half Circle Protractor, " "  $5\frac{1}{8}$  "  $\frac{1}{2}$  " .... " 1.00
- 3788. Half Circle Protractor, " "  $4\frac{1}{4}$  "  $\frac{1}{2}$  " .... " .75





Nos. 3804-3808.

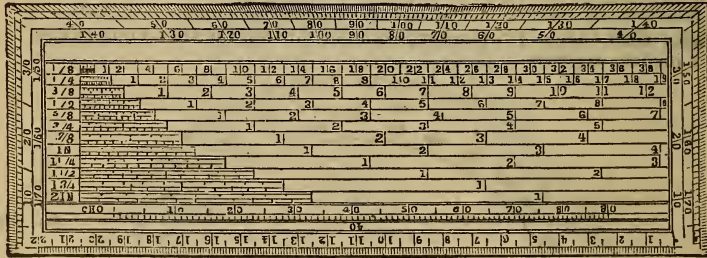
- 3804. Half Circle Protractor, BRASS,  $6\frac{3}{8}$  inches,  $\frac{1}{2}$  degrees . . . . . each, .75
- 3806. Half Circle Protractor, "  $5\frac{1}{8}$  " " $\frac{1}{2}$  " . . . . . " .60
- 3808. Half Circle Protractor, "  $4\frac{1}{4}$  " " $\frac{1}{2}$  " . . . . . " .30
- 3812. Half Circle Protractor, "  $3\frac{3}{4}$  " degrees (common) . . . . . " .15



Nos. 3830-3840.

- 3830. Half Circle Horn Protractor,  $8\frac{3}{4}$  inches,  $\frac{1}{2}$  degrees . . . . . each, \$1.00
- 3832. Half Circle Horn Protractor, 8 " " $\frac{1}{2}$  " . . . . . " .75
- 3834. Half Circle Horn Protractor, 7 " " $\frac{1}{2}$  " . . . . . " .60
- 3836. Half Circle Horn Protractor,  $6\frac{1}{4}$  " " $\frac{1}{2}$  " . . . . . " .40
- 3838. Half Circle Horn Protractor,  $5\frac{1}{4}$  " " $\frac{1}{2}$  " . . . . . " .30
- 3840. Half Circle Horn Protractor,  $4\frac{1}{4}$  " degrees . . . . . " .25
- 3850. Railroad Curve Horn Protractor, 8 inch,  $\frac{1}{2}$  degrees, with circular curves from  $\frac{1}{2}$  to 8 degrees, 400 feet to the inch . . . . . " 1.60

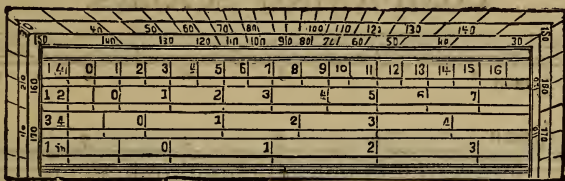
**OBLONG IVORY PROTRACTORS.**



- 3904. Ivory Oblong Protractor, 8 inches long, 2 inches wide, scales of  $\frac{1}{8}$ ,  $\frac{1}{4}$ ,  $\frac{3}{8}$ ,  $\frac{1}{2}$ ,  $\frac{5}{8}$ ,  $\frac{3}{4}$ ,  $\frac{7}{8}$ , 1 inch to the foot, scale of chords, 20, 25, 30, 35, 40, 45, 50, 60 parts to the inch, and diagonal scale . . . . . each, \$5.00
- 3908. Ivory Oblong Protractor, 6 inches long, 2 inches wide, scales of  $\frac{1}{8}$ ,  $\frac{1}{4}$ ,  $\frac{3}{8}$ ,  $\frac{1}{2}$ ,  $\frac{5}{8}$ ,  $\frac{3}{4}$ ,  $\frac{7}{8}$ , 1,  $1\frac{1}{8}$ ,  $1\frac{1}{4}$  inches to the foot, scale of chords, 30, 35, 40, 45, 50, 60 parts to the inch, and diagonal scale . . . . . " 3.25
- 3912. Ivory Oblong Protractor, 6 inches long,  $1\frac{3}{4}$  inches wide, scales of  $\frac{1}{8}$ ,  $\frac{1}{4}$ ,  $\frac{3}{8}$ ,  $\frac{1}{2}$ ,  $\frac{5}{8}$ ,  $\frac{3}{4}$ ,  $\frac{7}{8}$ , and 1 inch to the foot, scale of chords, 30, 35, 40, 45, 50, and 60 parts to the inch, and diagonal scale . . . . . " 2.25

IVORY AND BOXWOOD PROTRACTORS,

Continued.



Nos. 3916-3930,

- 3916. Ivory Oblong Protractor, 6 inches long,  $1\frac{3}{4}$  inches wide, scales of  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$ , 1 inch to the foot, scale of chords, 25, 30, 35, 40, 45 parts to the inch, and diagonal scale..... each, \$1.50
- 3920. Boxwood Oblong Protractor, 6 inches long,  $1\frac{3}{4}$  inches wide, scales of  $\frac{1}{8}$ ,  $\frac{1}{4}$ ,  $\frac{3}{8}$ ,  $\frac{1}{2}$ ,  $\frac{5}{8}$ ,  $\frac{3}{4}$ ,  $\frac{7}{8}$ , 1 inch to the foot, scale of chords, diagonal and decimal scales ..... “ .60
- 3930. Boxwood Oblong Protractor, 6 inches long,  $1\frac{3}{4}$  inches wide, scales of  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$ , 1 inch to foot, scale of chords, diagonal and decimal scales..... “ .40

PAPER PROTRACTORS.

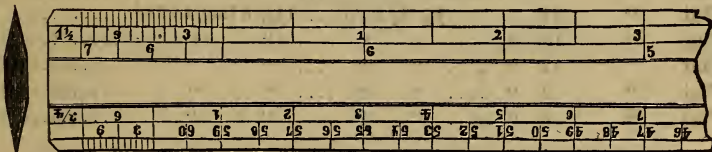
- 3950. Large Bristol Board, Full Circle,  $\frac{1}{4}$  degrees.....each, .40
- 3952. Large Drawing Paper, “ “  $\frac{1}{4}$  “ ..... “ .30
- 3954. Large Fine Tracing Paper, “ “  $\frac{1}{4}$  “ ..... “ .30

The Tracing Paper Protractors are used for topographical drawing in the U. S. Engineers' offices, and have given entire satisfaction.

MACHINE DIVIDED DRAWING SCALES.

Best Quality.

Other Scales made to order at short notice.



Nos. 4000-4009.

- |                                              | One side.                                                     | Other side.                                                     | Each.  |
|----------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|--------|
| 4000. Double Beveled Boxwood, 24 in. . . . . | $\frac{1}{8}$ , $\frac{1}{4}$ , $\frac{1}{2}$ , 1 in. . . . . | $\frac{3}{8}$ , $\frac{3}{4}$ , $1\frac{1}{2}$ , 3 in. to foot, | \$4.00 |
| 4002. Double Beveled “ 18 “ . . . . .        | “ “ “ “ “ “ “ “                                               | “ “ “ “ “ “ “ “                                                 | 3.00   |
| 4004. Double Beveled “ 15 “ . . . . .        | “ “ “ “ “ “ “ “                                               | “ “ “ “ “ “ “ “                                                 | 2.20   |
| 4006. Double Beveled “ 12 “ . . . . .        | “ “ “ “ “ “ “ “                                               | “ “ “ “ “ “ “ “                                                 | 1.50   |
| 4008. Double Beveled “ 9 “ . . . . .         | “ “ “ “ “ “ “ “                                               | “ “ “ “ “ “ “ “                                                 | 1.12   |
| 4009. Double Beveled “ 6 “ . . . . .         | “ “ “ “ “ “ “ “                                               | “ “ “ “ “ “ “ “                                                 | .85    |

Nos. 4020 to 4026 have but one scale on each edge, and are figured to read from left to right, and right to left.

- |                                              | One side.                                    | Other side.                          | Each.  |
|----------------------------------------------|----------------------------------------------|--------------------------------------|--------|
| 4021. Double Beveled Boxwood, 24 in. . . . . | $\frac{1}{8}$ , $\frac{1}{4}$ , in . . . . . | $\frac{1}{4}$ , 1 inch to the foot.. | \$4.00 |
| 4023. Double Beveled “ 18 “ . . . . .        | “ “ “ “ “ “ “ “                              | “ “ “ “ “ “ “ “                      | 3.00   |
| 4027. Double Beveled “ 12 “ . . . . .        | “ “ “ “ “ “ “ “                              | “ “ “ “ “ “ “ “                      | 1.65   |

MACHINE DIVIDED SCALES (continued).

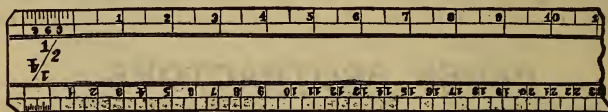
COMPARING SCALES.



Nos. 4030-4036.

Nos. 4030 to 4036 have only *one scale on each edge*; all graduations begin on the same line, which extends across the scale from one edge to the other, and are figured from left to right. At a glance a distance can be measured in any of the four scales. Inches and  $\frac{1}{2}$ ths are easily reduced to inches and  $\frac{1}{8}$ ths, Metric measure to inches, etc.

			One side.	Other side.	Each.
4030.	Double Beveled Boxwood,	24 inch,	$\frac{1}{12}$ and $\frac{1}{16}$ inch,	$\frac{1}{10}$ inch and Metric...	\$4.00
4032.	Double Beveled	18 "	" "	" "	3.00
4036.	Double Beveled	12 "	" "	" "	1.65



Nos. 4050 to 4059½.

			One edge.	Other edge.	Each.
4050.	Flat Boxwood,	24 inch	$\frac{1}{8}$ , $\frac{1}{4}$ inch	$\frac{1}{2}$ , 1 inch to foot.	\$3.00
4052.	Flat	18 "	"	"	2.00
4054.	Flat	15 "	"	"	1.50
4055.	Flat	12½ "	"	"	1.25
4056.	Flat	12 "	"	"	1.00
4058.	Flat	9 "	"	"	.85
4059.	Flat	6 "	"	"	.55
4059½.	Flat	4 "	" Pocket Size,	"	.45
4070.	Flat	24 "	$\frac{3}{8}$ , $\frac{3}{4}$ inch	$1\frac{1}{2}$ , 3 inch to foot.	3.00
4072.	Flat	18 "	"	"	2.00
4076.	Flat	12 "	"	"	1.00
4078.	Flat	9 "	"	"	.85
4079.	Flat	6 "	"	"	.55

ARCHITECTURAL AND MECHANICAL DRAFTING SCALES.

The Scales, which have but *one scale on each edge*, are figured to read from left to right and right to left.

			One edge.	Other edge.	Each.
4090.	Flat Boxwood,	24 inch,	$\frac{1}{4}$ inch	$\frac{3}{4}$ inch to foot.	\$3.00
4092.	Flat	18 "	"	"	2.00
4096.	Flat	12 "	"	"	1.00
4100.	Flat	24 "	Detail Scale, $\frac{1}{4}$ & $\frac{1}{8}$ inch,	$\frac{1}{8}$ inch to foot.	3.00
4102.	Flat	18 "	"	"	2.00
4106.	Flat	12 "	"	"	1.00
4116.	Flat	12 "	$\frac{1}{8}$ inch	$\frac{1}{4}$ inch to foot.	1.00
4126.	Flat	12 "	"	$\frac{3}{4}$ "	1.00
4136.	Flat	12 "	$\frac{1}{4}$ inch	$\frac{1}{2}$ inch to foot.	1.00
4146.	Flat	12 "	$\frac{1}{2}$ "	1 "	1.00

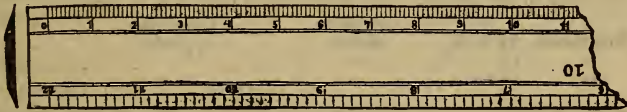


VARIOUS SCALES.

		One edge.	Other edge.	Each.
4156.	Flat Boxwood, 12 inch,	..... $\frac{1}{10}$ inch,	..... $\frac{1}{2}$ inch	\$1.00
4166.	Flat " 12 "	..... $\frac{1}{2}$ "	..... $\frac{1}{8}$ "	1.00
4176.	Flat " 12 "	..... $\frac{1}{16}$ "	..... Metric	1.00

MACHINE DIVIDED ENGINEERS' SCALES.

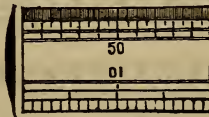
In  $\frac{1}{10}$ ths.



Nos. 4301-4327.

		One edge.	Other edge.	Each.
4301.	Flat Boxwood, 12 inch,	..... 100	..... 80 parts to inch	3.00
4303.	Flat " 12 "	..... 60	..... 30 " "	1.50
4305.	Flat " 12 "	..... 50	..... 10 " "	1.50
4307.	Flat " 12 "	..... 40	..... 20 " "	1.50
4321.	Flat " 6 "	..... 100	..... 80 " "	1.75
4323.	Flat " 6 "	..... 60	..... 30 " "	1.00
4325.	Flat " 6 "	..... 50	..... 10 " "	1.00
4327.	Flat " 6 "	..... 40	..... 20 " "	1.00

OFFSET SCALES.



Nos. 4341-4347.

		One edge.	Other edge.	Each.
4341.	Flat Offset Boxwood, 2 inch,	..... 100	..... 80 parts to inch	.90
4343.	Flat Offset " 2 "	..... 60	..... 30 " "	.50
4345.	Flat Offset " 2 "	..... 50	..... 10 " "	.50
4347.	Flat Offset " 2 "	..... 40	..... 20 " "	.50

See  $\frac{1}{10}$  and  $\frac{1}{2}$  inch, and Metric Comparing Scales, Nos. 4030-4036.

ENGINEERS' DECIMAL SCALES.

$\frac{1}{10}$  and  $\frac{1}{100}$  of a foot.

		One edge.	Other edge.	Each.
4401.	Flat Boxwood, 12 inch,	..... 1000	..... 800 parts to foot	\$3.00
4403.	Flat " 12 "	..... 600	..... 300 " "	1.50
4405.	Flat " 12 "	..... 500	..... 100 " "	1.50
4407.	Flat " 12 "	..... 400	..... 200 " "	1.50
4441.	Flat Offset Boxwood, $\frac{2}{10}$ foot long,	..... 1000	..... 800 " "	1.00
4443.	Flat Offset " " "	..... 600	..... 300 " "	.60
4445.	Flat Offset " " "	..... 500	..... 100 " "	.60
4447.	Flat Offset " " "	..... 400	..... 200 " "	.60

MACHINE DIVIDED SCALES (continued)  
METRIC SCALES.

4501. Flat Boxwood, 50 Centimetres long ..	each, \$1.75
4503. Flat " 30 " " ..	" 1.20
4505. Flat " 20 " " ..	" .90
4507. Flat " 10 " " ..	" .55
Same as 4785, Triangular, 12 inches long ..	" 2.00

METER AND INCH COMPARING SCALES.

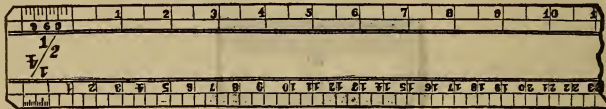
All divisions begin on the same line (which extends across the scale, from one edge to the other). The figures read from left to right.

4520. Flat Boxwood, 24 inch,....	One edge. Metric,.....	Other edge. $\frac{1}{16}$ inch.....	Each. \$3.00
4522. Flat " 18 " .....	" " .....	" " .....	2.00
4526. Flat " 12 " .....	" " .....	" " .....	1.12



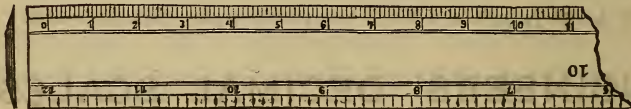
Same as 4030. Double Beveled Boxwood, 24 inch, $\frac{1}{12}$ & $\frac{1}{16}$ inch, $\frac{1}{10}$ & Metric...	One edge. $\frac{1}{12}$ & $\frac{1}{16}$ inch, $\frac{1}{10}$ & Metric...	Other edge. " " .....	4.00
" 4032. Double Beveled " 18 " .....	" " .....	" " .....	3.00
" 4036. Double Beveled " 12 " .....	" " .....	" " .....	1.65

IVORY MACHINE DIVIDED SCALES.  
Best Quality.



4606. Ivory, Flat, 12 inch,	One edge. $\frac{1}{8}$ , $\frac{1}{4}$ inch.	Other edge. $\frac{1}{2}$ , 1 inch to foot.....	Each \$4.00
4609. Ivory, " 6 " .....	" " .....	" " .....	2.25
4616. Ivory, " 12 " .....	$\frac{3}{8}$ , $\frac{3}{4}$ " .....	$1\frac{1}{2}$ , 3 " .....	4.00

ENGINEERS' SCALES.



4631. Ivory, Flat, 12 inch,.....	One edge. 100.....	Other edge. 80 parts to inch.....	\$6.00
4633. Ivory, " 12 " .....	60.....	30 " " .....	4.00
4635. Ivory, " 12 " .....	50.....	10 " " .....	4.00
4637. Ivory, " 12 " .....	40.....	20 " " .....	4.00
4641. Ivory, " 6 " .....	100.....	80 " " .....	4.50
4643. Ivory, " 6 " .....	60.....	30 " " .....	3.00
4645. Ivory, " 6 " .....	50.....	10 " " .....	3.00
4647. Ivory, " 6 " .....	40.....	20 " " .....	3.00
4651. Ivory, " Offset, 2 inch.....	100.....	80 " " .....	1.50
4653. Ivory, " Offset, 2 " .....	60.....	30 " " .....	1.00
4655. Ivory, " Offset, 2 " .....	50.....	10 " " .....	1.00
4657. Ivory, " Offset, 2 " .....	40.....	20 " " .....	1.00

## TRIANGULAR BOXWOOD SCALES.



No. 4700-4709.

4700.	Triangular Boxwood,	24 inch,	div.	$\frac{1}{8}$ , $\frac{1}{4}$ , $\frac{3}{8}$ , $\frac{1}{2}$ , $\frac{3}{4}$ , 1, 1½, 2, 3, 4 in.	to foot,	Each.
					and $\frac{1}{16}$ inch,	\$5.00
4702.	Triangular	“	18 “ “ “ “ “ “ “ “ “ “			3.00
4706.	Triangular	“	12 “ “ “ $\frac{3}{32}$ , $\frac{3}{16}$ , $\frac{1}{8}$ , $\frac{1}{4}$ , $\frac{3}{8}$ , $\frac{1}{2}$ , $\frac{3}{4}$ , 1, 1½, 3 in.	to foot,	and $\frac{1}{16}$ inch,	2.00
4708.	Triangular	“	9 “ “ “ “ “ “ “ “ “ “			1.65
4709.	Triangular	“	6 “ “ “ “ “ “ “ “ “ “			1.25

## COMBINATION TRIANGULAR SCALES.

4726.	Triangular Boxwood,	12 inch,	divided	$\frac{1}{8}$ , $\frac{1}{4}$ , $\frac{1}{2}$ , $\frac{3}{4}$ , and 1 inch	to foot,	$\frac{1}{10}$ , $\frac{1}{12}$ , $\frac{1}{16}$ inch,	Each.
						\$2.00	
4728.	“	“	12 in.,	div.	$\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{1}{8}$ , 1, $\frac{3}{8}$ , $\frac{1}{2}$ , 1½, 3 in.	to ft., $\frac{1}{10}$ , $\frac{1}{16}$ in.,	2.00

## ENGINEERS' TRIANGULAR SCALES.



Nos. 4751-4759.

4751.	Triangular Boxwood,	24 inch,	divided	10, 20, 30, 40, 50, 60 parts	to inch,	\$5.00		
4753.	Triangular	“	18 “ “ “ “ “ “ “ “ “ “			3.00		
4755.	Triangular	“	12 “ “ “ “ “ “ “ “ “ “			2.00		
4757.	Triangular	“	9 “ “ “ “ “ “ “ “ “ “			1.65		
4759.	Triangular	“	6 “ “ “ “ “ “ “ “ “ “			1.25		
4761.	Triangular	“	Offset,	2 inch,	div.	10, 20, 30, 40, 50, 60 parts	to inch,	.75
4775.	Triangular	“	12 inch,	divided	20, 30, 40, 50, 60, 80 parts	to inch..	2.00	
4785.	Triangular Boxwood,	12 inch,	Metric Measure				2.00	

Flat Metric Scales, see Nos. 4501 to 4526, and 4030 to 4036.

## DARLING, BROWN & SHARPE'S NEW METALLIC TRIANGULAR SCALES.

4806.	Metal,	12 inch,	divided	$\frac{3}{32}$ , $\frac{3}{16}$ , $\frac{1}{8}$ , $\frac{1}{4}$ , $\frac{3}{8}$ , $\frac{1}{2}$ , $\frac{3}{4}$ , 1, 1½, 3 inch	and $\frac{1}{16}$ inch,	Each.
					(List Price, \$3.25)	\$3.00
4845.	Metal,	12 inch,	divided	10, 20, 30, 40, 50, 60 parts	to inch,	( “ “ 3.25) 3.00

## TRIANGULAR SCALE GUARDS.



4880.	Triangular Scale Guard or Holder.....	each,	.25
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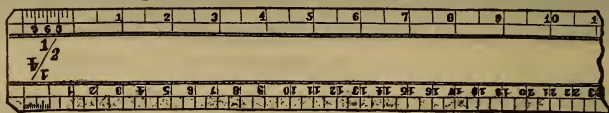
This appliance is made of plated metal. It can be attached to any part of the scale, and overcomes the necessity of searching for the scale in use.



# HAND DIVIDED SCALES.

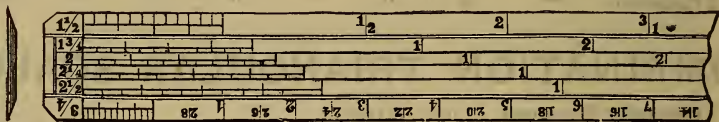
Boxwood and Ivory.

Machine Divided Scales, Best quality, see Nos. 4000, etc.



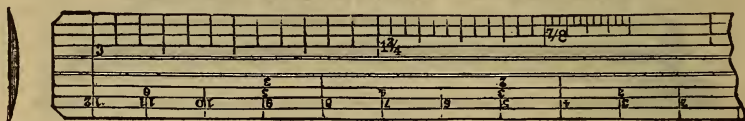
Nos. 5000-5024.

- |       |                                       |                                                 |                     |           |
|-------|---------------------------------------|-------------------------------------------------|---------------------|-----------|
| 5000. | Boxwood, Hand Divided, Flat, 12 inch, | $\frac{1}{8}$ , $\frac{1}{4}$ , $\frac{1}{2}$ , | 1 inch to foot..... | Each. .50 |
| 5004. | Boxwood, Hand Divided,                | “ 6 “ “ “ “ “                                   | .....               | .35       |
| 5020. | Ivory, Hand Divided,                  | “ 12 “ “ “ “ “                                  | .....               | \$3.00    |
| 5024. | Ivory, Hand Divided,                  | “ 6 “ “ “ “ “                                   | .....               | 2.00      |



Nos. 5040. 5054.

- |       |                                                                         |              |
|-------|-------------------------------------------------------------------------|--------------|
| 5040. | Boxwood, Hand Divided, Flat, Universal Scale, 12 inch, cont. 16 scales, | Each. \$1.50 |
| 5054. | Ivory, Hand Divided, “ “ “ 12 “ “ 16 “                                  | 3.00         |



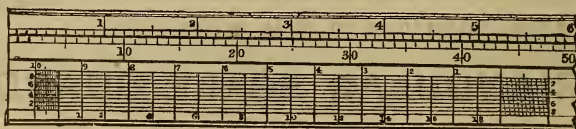
Nos. 5060. 5064.

- |       |                                                                                                           |              |
|-------|-----------------------------------------------------------------------------------------------------------|--------------|
| 5060. | Boxwood, Hand Divided, Flat, Universal Scale, 12 inch, containing 16 scales, all running to the edge..... | Each. \$1.50 |
| 5064. | Ivory, Hand Divided, Flat, Universal Scale, 12 inch, containing 16 scales, all running to the edge.....   | 3.00         |

## ENGINEERS' SCALES.

- |       |                                       |           |                      |        |
|-------|---------------------------------------|-----------|----------------------|--------|
|       |                                       | One edge. | Other edge.          |        |
| 5103. | Boxwood, Hand Divided, Flat, 12 inch, | 60        | 30 parts to inch.... | \$1.00 |
| 5105. | Boxwood, Hand Divided, “ 12 “         | 50        | 10 “ “ ....          | 1.00   |
| 5107. | Boxwood, Hand Divided, “ 12 “         | 40        | 20 “ “ ....          | 1.00   |

## PLOTTING SCALES.



Nos. 5140. 5142.

- |       |                                       |           |
|-------|---------------------------------------|-----------|
| 5140. | Ivory Plotting Scale, 6 inches.....   | each, .75 |
| 5142. | Boxwood Plotting Scale, 6 inches..... | “ .15     |

## GUNTER SCALES.

- |       |                                      |              |
|-------|--------------------------------------|--------------|
| 5160. | Boxwood Gunter Scale, 24 inches..... | each, \$1.50 |
| 5162. | Boxwood Gunter Scale, 12 “.....      | “ 1.00       |

Gunter Scales are also made in a cheaper grade.  
Other Scales furnished at short notice.

**BRISTOL BOARD OR PAPER SCALES.**

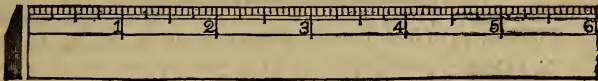
19 inches long.

- 5200. Set F, 18 Scales,  $\frac{3}{32}$ ,  $\frac{1}{8}$ ,  $\frac{3}{16}$ ,  $\frac{1}{4}$ ,  $\frac{5}{16}$ ,  $\frac{3}{8}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$ ,  $\frac{7}{8}$ , 1,  $1\frac{1}{2}$ , 3 inch to foot, 10, 20, 30, 40, 50, 60 parts to inch..... Set, \$3.00
  - 5204. Set E, 12 Scales,  $\frac{3}{32}$ ,  $\frac{1}{8}$ ,  $\frac{3}{16}$ ,  $\frac{1}{4}$ ,  $\frac{5}{16}$ ,  $\frac{3}{8}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$ ,  $\frac{7}{8}$ , 1,  $1\frac{1}{2}$ , 3 in. to foot “ 2.00
  - 5208. Set D, 6 “  $\frac{1}{8}$ ,  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$ , 1,  $1\frac{1}{2}$  inch to foot..... “ 1.00
  - 5212. Set C, 6 “ 10, 20, 30, 40, 50, 60 parts to inch..... “ 1.00
  - 5216. Set B, 6 “  $\frac{3}{32}$ ,  $\frac{1}{8}$ ,  $\frac{3}{16}$ ,  $\frac{5}{16}$ ,  $\frac{3}{8}$ ,  $\frac{7}{8}$  inch to foot..... “ 1.00
  - 5220. Set A, 6 “  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$ , 1,  $1\frac{1}{2}$ , 3 “ “..... “ 1.00
- Separate Scales of any of above..... each, .20

**SHRINKAGE RULES.**

- 5300. Boxwood,  $24\frac{1}{2}$  inches long, Double Shrinkage, with Scales..... Each. \$2.50
- 5304. Boxwood,  $24\frac{1}{4}$  “ “ Single “ “ “..... 2.25
- 5310. Boxwood,  $24\frac{1}{4}$  “ “ “ “  $\frac{1}{8}$  and  $\frac{1}{16}$ ths..... 1.00
- 5320. Boxwood,  $24\frac{1}{4}$  “ “ “ “ jointed to fold to half length  $\frac{1}{8}$  and  $\frac{1}{16}$ ths, 1.50

**SCHOOL RULES.**



No. 5330.

- 5330. Boxwood, 12 inches long,  $\frac{1}{16}$  inches..... each, .10

**BRASS INLAID EDGE RULERS.**

- 5350. Boxwood, divided inches and  $\frac{1}{16}$ ths, 24 inches..... each, \$1.25
- 5352. Boxwood, “ “ “ “ 18 “..... “ 1.00
- 5354. Boxwood, “ “ “ “ 15 “..... “ .90
- 5356. Boxwood, “ “ “ “ 12 “..... “ .65
- 5370. Maple, “ “  $\frac{1}{8}$ ths, 24 “..... “ .55
- 5372. Maple, “ “ “ “ 18 “..... “ .35
- 5374. Maple, “ “ “ “ 15 “..... “ .30
- 5376. Maple, “ “ “ “ 12 “..... “ .25

**BOXWOOD AND IVORY SECTORS.**



Nos. 5380, 5382.

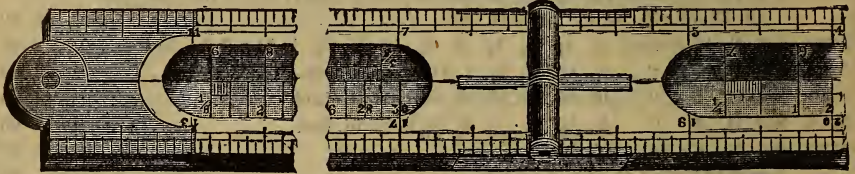
- 5380. Ivory Sector, 1 foot, folds to 6 inches..... each, \$2.25
- 5382. Boxwood Sector, 1 foot, folds to 6 inches..... “ 1.00



# FOLDING SCALE RULES.

Very Best Quality.

INSIDE EDGES BEVELED AND DIVIDED LIKE DRAWING SCALES.

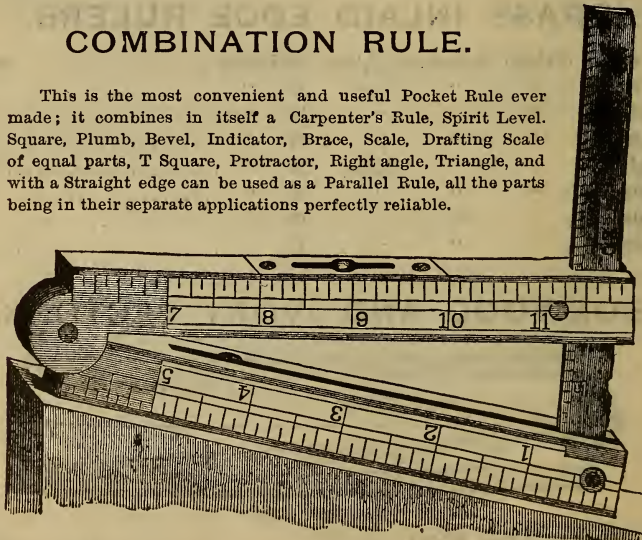


Nos. 5386-5404.

- 5386. Ivory, Beveled Edge, 2 foot, 4 fold, German Silver Mountings, high finish, outside divided into inches and  $\frac{1}{16}$ ths and inches and  $\frac{1}{2}$ ths; the inside, not beveled edge, into inches and  $\frac{1}{10}$ ths. Each beveled edge has but one scale, thus avoiding all confusion, viz.:  $\frac{1}{8}$ ,  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$  inch to foot..... each, \$7.50
- 5388. Ivory, Beveled Edge, 2 foot, 4 fold, German Silver Mountings, high finish, outside divided into inches and  $\frac{1}{16}$ ths and inches and  $\frac{1}{2}$ ths; the inside, not beveled edge, into inches and  $\frac{1}{10}$ ths. Each beveled edge has but one scale, thus avoiding all confusion, viz.:  $\frac{1}{8}$ ,  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$  inch to foot. In neat Morocco Case..... “ 8.50  
*No. 5388 is nicely put up, and has been frequently sold as a holiday present.*
- 5392. Boxwood, Beveled Edge, 2 foot, 4 fold, Brass Mountings, same as No. 5386..... each, 3.00  
Other graduations furnished at short notice.
- 5396. Ivory, Beveled Edge, 2 foot, 4 fold, German Silver Mountings, divided:  $\frac{1}{8}$ ,  $\frac{1}{16}$ ,  $\frac{1}{10}$  inches,  $\frac{1}{10}$  of feet. beveled edges contain  $\frac{1}{2}$ ,  $\frac{3}{8}$ ,  $\frac{1}{8}$ ,  $\frac{1}{4}$  inch scales..... “ 5.50
- 5400. Boxwood, Beveled Edge, 2 foot, 4 fold, Brass Mountings, various scales on beveled edges..... “ 2.00
- 5404. Boxwood, Beveled Edge, 2 foot, 4 fold, stamped, with Drawing Scales on beveled edges..... “ .75

## COMBINATION RULE.

This is the most convenient and useful Pocket Rule ever made; it combines in itself a Carpenter's Rule, Spirit Level, Square, Plumb, Bevel, Indicator, Brace, Scale, Drafting Scale of equal parts, T Square, Protractor, Right angle, Triangle, and with a Straight edge can be used as a Parallel Rule, all the parts being in their separate applications perfectly reliable.



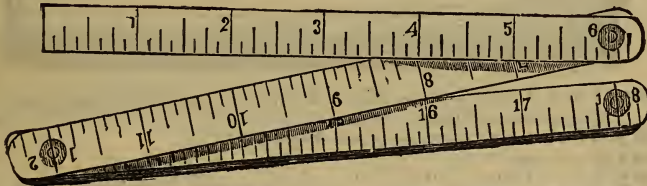
No. 5410.  
5411.

- 5410. Boxwood Combination Rule, 1 foot, 2 fold..... each, \$2.50
- 5411. Boxwood Combination “ 1 “ 2 “ in neat Morocco Case... “ 3.50



## SKELETON POCKET RULE.

Very Light.



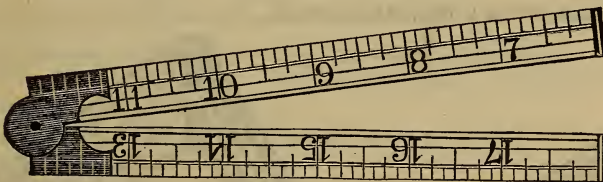
- |                                                                                                          |              |
|----------------------------------------------------------------------------------------------------------|--------------|
| 5420. Skeleton Rule, Ivory, 1 meter, 10 fold, one side inches, and other side Metric.....                | each, \$1.75 |
| 5422. Skeleton Rule, Ivory, ½ meter, 10 fold, one side inches, and other side Metric.....                | “ 1.00       |
| 5428. Skeleton Rule, Boxwood, 1 meter, 10 fold, one side inches, and other side Metric.....              | “ .50        |
| 5430. Skeleton Rule, Boxwood, ½ meter, 10 fold, one side inches, and other side Metric.....              | “ .30        |
| 5440. Skeleton Rule, Boxwood, 4 foot, 8 fold, 1/16 inch on both sides.....                               | “ .50        |
| 5442. Skeleton Rule, Boxwood, 4 “ 8 “ one side 1/16 inches, and other side Metric.....                   | “ .50        |
| 5444. Skeleton Rule, Boxwood, 2 foot, 4 fold, 1/16 inches.....                                           | “ .35        |
| 5450. Skeleton Rule, Boxwood, 4 foot, 8 fold, flexible, one side 1/16 inches, and other side Metric..... | “ 75         |

## BOXWOOD SKELETON RULES,

With Springs.

- |                                                                                                                          |              |
|--------------------------------------------------------------------------------------------------------------------------|--------------|
| 5454. Skeleton Rule, with Self-Acting Springs, to keep the Rule in a straight position, 4 foot, 8 fold, 1/16 inches..... | each, \$1.00 |
| 5456. Skeleton Rule, with Springs, 2 foot, 4 fold, 1/16 inches.....                                                      | “ .60        |

## PRACTICAL POCKET RULES.



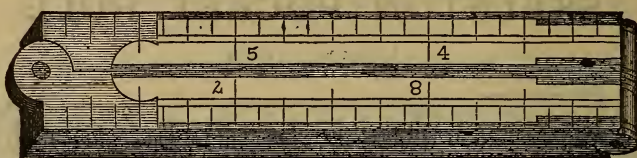
*These Rules are machine-divided, and not stamped with steel dies; the lines are consequently sharp and distinct, and the sub-divisions accurate.*

*All figures are large and prominent, and finish far superior to factory made Rules.*

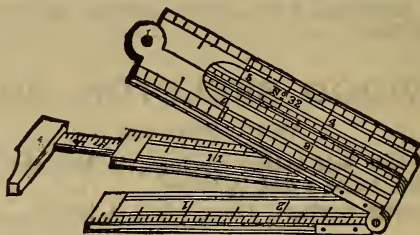
- |                                                                                                                                                                           |        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| 5464. Boxwood, 2 foot, 4 fold, Brass Mountings, <i>having but one scale on each edge.</i> Outside edges, 1/8 & 1/8 inches. Inside edges, 1/2 & 1/10 inches. each, \$1.00  |        |
| 5470. Boxwood, 2 foot, 4 fold, Brass Mountings, with <i>only one scale on each side, and extra large figures.</i> Outside edge, 1/16 inches. Inside edge, 1/8 inches..... | “ 1.00 |

Other divisions furnished at short notice.

POCKET RULES.

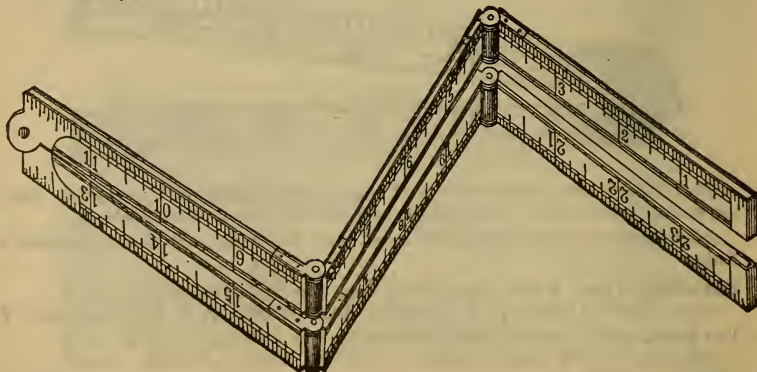


5500.	Ivory,	2 foot, 4 fold,	German Silver Mountings,	and both edges lined with German Silver	.....	each,	\$5.00
5504.	Ivory,	2 foot, 4 fold,	German Silver Mountings	.....		"	4.00
5508.	Ivory,	2 " 4 " "	" " " "	narrow	.....	"	4.00
5520.	Ivory,	1 " 4 " "	" " " "	and both edges lined with German Silver	.....	"	1.75
5524.	Ivory,	1 foot, 4 fold,	German Silver Mountings	.....		"	1.25
5540.	Boxwood,	2 foot, 4 fold,	Brass Mountings,	and both edges lined with Brass	.....	"	1.00
5544.	Boxwood,	2 foot, 4 fold,	Brass Mountings,	and outside edge lined with Brass	.....	"	.80
5550.	Boxwood,	2 foot, 4 fold,	Brass Mountings,	with Drawing Scales	.....	"	.35
5554.	Boxwood,	2 " 4 " "	" " " "	"	.....	"	.25
5560.	Boxwood,	2 " 4 " "	" " " "	narrow	.....	"	.25
5564.	Boxwood,	2 " 4 " "	" " " "	"	.....	"	.20
5570.	Boxwood,	1 " 4 " "	" " " "	and both edges lined with Brass	.....	"	.65
5574.	Boxwood,	1 foot, 4 fold,	Brass Mountings	.....		"	.25
5578.	Boxwood,	1 " 4 " "	" " " "	"	.....	"	.17



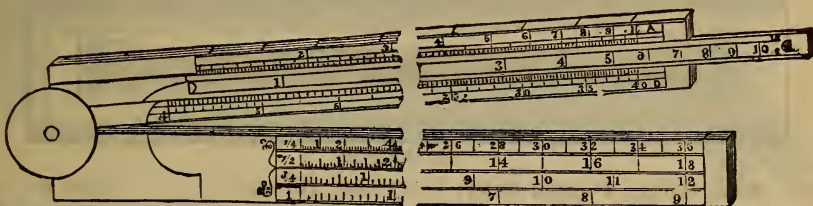
No. 5580.

5580.	Boxwood,	1 foot, 4 fold,	Brass Mountings,	with Caliper	.....	each,	.85
5584.	Boxwood,	6 inch, 2 " "	" " " "	"	.....	"	.40
5590.	Boxwood,	2 foot, 2 fold (folds to 1 foot),	and both edges lined with Brass	.....		"	1.00
5592.	Boxwood,	2 foot, 2 fold (folds to 1 foot).	.....			"	.50



5596.	Boxwood,	3 foot, 6 fold (folds to 6 inch).	.....	each,	\$1.00
5598.	Boxwood,	2 " 6 " ( " 4 " )	.....	"	.60

## SLIDE RULES.



- 5614. Slide Rule, Boxwood, Gunter's Slide,  $\frac{1}{8}$ ,  $\frac{1}{2}$  and  $\frac{1}{16}$  inches,  $\frac{1}{100}$  of a foot, and Drafting Scales..... each, \$1.00
- 5616. Slide Rule, Boxwood, Edges lined with Brass, Gunter's Slide,  $\frac{1}{2}$  and  $\frac{1}{16}$  inches, Drafting and Engineers' Scales..... " 2.00
- Treatise on the use of the Slide Rule (Weale's Series) .. " 1.00
- The Engineers' Slide Rule and its Applications. By William Tonkes " .25

## MEASURING RODS AND YARD STICKS.

- 5630. Six-Foot Measuring Rod, divided  $\frac{1}{8}$  inches, one side figured from left to right, other side from right to left..... each, \$2.50
- 5632. Five-Foot Measuring Rod, divided  $\frac{1}{8}$  inches, one side figured from left to right, other side from right to left..... " 1.75
- 5634. Four-Foot Measuring Rod, divided  $\frac{1}{8}$  inches, one side figured from left to right, other side from right to left..... " 1.00
- 5636. Three-Foot Measuring Rod, divided  $\frac{1}{8}$  inches, one side figured from left to right, other side from right to left..... " .55
- 5640. Yard Stick, Wide and Thin..... " .50
- 5644. Yard Stick, Plain..... " .25

Other sizes made to order.

## CEILING MEASURING RODS.

**For Measuring height of Rooms, sizes of Windows, etc.**

The Rods are in two sections, one of which can be extended and is held in position by self-acting springs. The graduations are so arranged that the measurements are read on the lower rod.

- 5660. Ceiling Measuring Rod, 16 feet, slides and closes to 8 feet..... each, \$8.75
- 5661. Ceiling Measuring Rod, 12 " " " 6 "..... " 6.50
- 5662. Ceiling Measuring Rod, 10 " " " 5 "..... " 5.00
- 5663. Ceiling Measuring Rod, 8 " " " 4 "..... " 4.00
- 5664. Ceiling Measuring Rod, 6 " " " 3 "..... " 3.00
- 5665. Ceiling Measuring Rod, 5 " " " 2 $\frac{1}{2}$  "..... " 2.50

Special sizes made to order.

## GAUGE AND WANTAGE RODS.

For Measuring Liquid contents of Barrels.

- 5674. Boxwood Gauging and Wantage Rods.....Set of 2 Rods, \$3.00
- 5676. Hardwood Gauging and Wantage Rods..... " " 1.12

Other styles and qualities furnished to order.

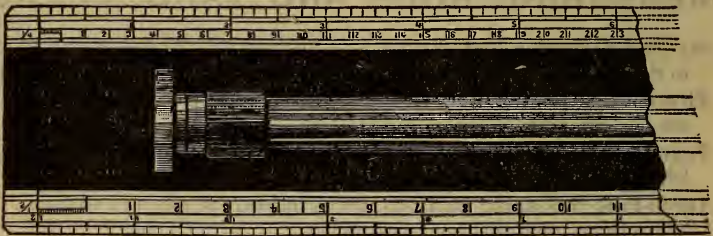


## ROLLING PARALLEL RULERS.



No. 5700-5738.

5700.	Metal Rolling Parallel Ruler,	Fine Finish,	24 inches	.....	each,	\$20.00
5702.	Metal	“	“	“	“	15.00
5704.	Metal	“	“	“	“	12.00
5706.	Metal	“	“	“	“	10.00
5716.	Metal	“	“	“	Good Quality,	12 “ 8 50
5732.	Ebony	“	“	“	.....	18 “ 5.00
5734.	Ebony	“	“	“	.....	15 “ 4.00
5736.	Ebony	“	“	“	.....	12 “ 3.00
5738.	Ebony	“	“	“	.....	9 “ 2.50



No. 5752. 5754.

5752.	Ebony Rolling Parallel Ruler,	with Ivory divided edges,	18 inches	..	each,	\$7.50
5754.	Ebony	“	“	“	“	12 “ .. “ 5.00

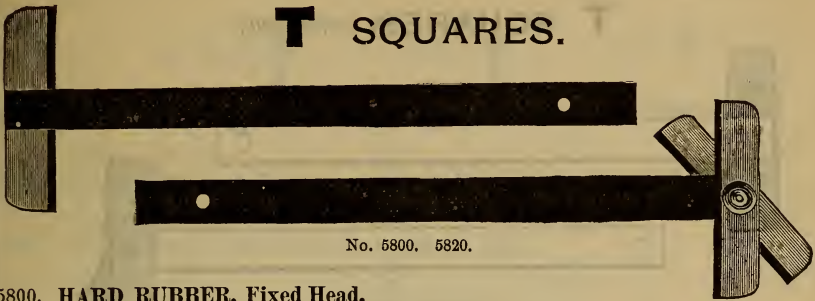
## PARALLEL RULERS.



No. 5758-5780.

5758.	Ivory, German Silver Bars	.....	each,	\$1.50			
5760.	Hard Rubber, Best Quality.						
	Each,	24	18	15	12	9	6 inch.
		\$3.50	2.50	2.00	1.50	1.00	.75
5770.	Ebony, American make, superior to the imported ones, which frequently warp, on account of climatic changes.						
	Each,	\$2.50	1.50	1.20	.90	.65	.35
		24	18	15	12	9	6 inch.
5780.	Ebony, Imported, Second Grade.						
	Each,	\$2.00	1.25	.90	.65	.40	.20
		24	18	15	12	9	6 inch.

# T SQUARES.



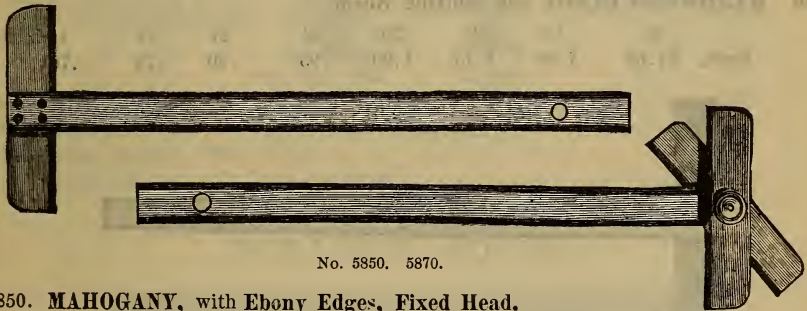
No. 5800, 5820.

**5800. HARD RUBBER, Fixed Head.**

	36	30	24	21	18	15	12	9	6 inch.
Each, \$	3.00	2.40	1.75	1.50	1.20	1.00	.90	.85	.65

**5820. HARD RUBBER, Swivel Head.**

	36	30	24	21	18	15	12	9	6 inch.
Each, \$	4.00	3.25	2.75	2.25	2.00	1.75	1.60	1.25	1.10



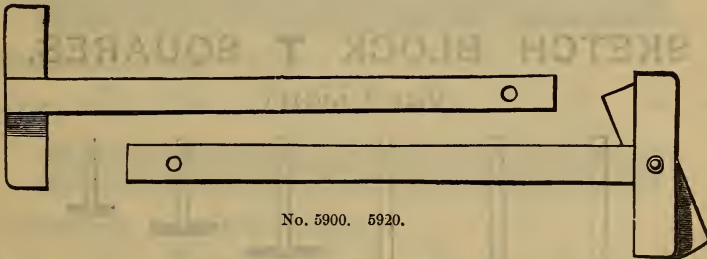
No. 5850, 5870.

**5850. MAHOGANY, with Ebony Edges, Fixed Head.**

	60	54	48	42	36	30	24	18	15	12 inch.
Each, \$	3.90	3.25	2.50	2.00	1.75	1.50	1.20	1.00	.90	.80

**5870. MAHOGANY, with Ebony Edges, Swivel Head.**

	60	54	48	42	36	30	24	18 inch.
Each, \$	4.90	4.25	3.50	3.00	2.65	2.35	2.00	1.60



No. 5900, 5920.

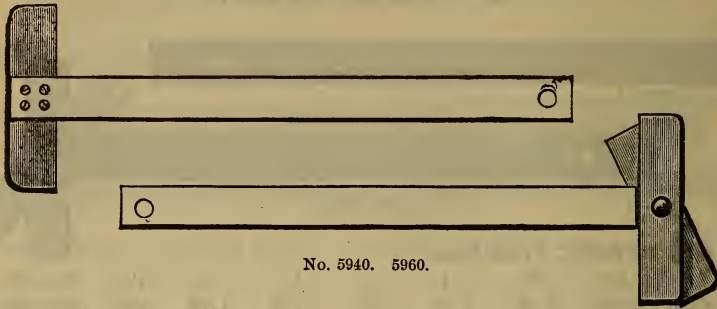
**5900. MAPLE BLADE, Walnut Fixed Head.**

	84	72	60	54	48	42	36	30	24	21	18	15 inch.
Each, \$	3.50	2.80	2.20	1.60	1.25	1.15	1.00	.90	.75	.60	.50	.40

**5920. MAPLE BLADE, Walnut Swivel Head.**

	60	54	48	42	36	30	24	21	18 inch.
Each, \$	2.85	2.00	1.75	1.65	1.50	1.35	1.20	1.10	1.00

**T SQUARES** (continued).



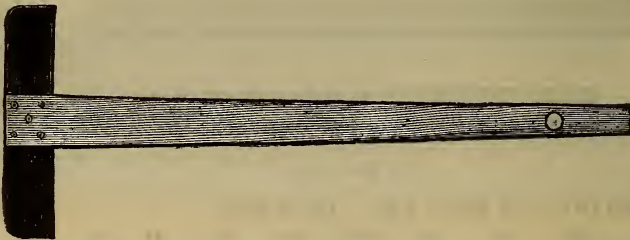
No. 5940. 5960.

**5940. HARDWOOD BLADE and Fixed Head.**

	48	42	36	30	24	21	18	15 inch.
Each, \$	1.00	.75	.65	.50	.45	.40	.35	.30

**5960. HARDWOOD BLADE and Shifting Head.**

	48	42	36	30	24	21	18	15 inch.
Each, \$	1.60	1.35	1.15	1.00	.95	.80	.75	.70

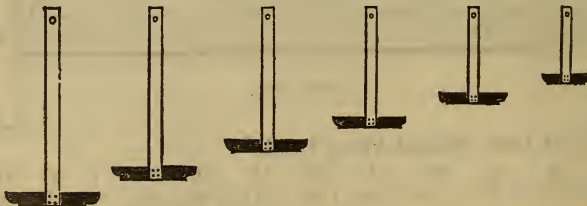


**5980. HARDWOOD TAPERED BLADE, Fixed Walnut Head.**

	60	54	48	42	36	30	24 inch.
Each, \$	3.00	2.50	2.00	1.75	1.50	1.20	1.00

**SKETCH BLOCK T SQUARES,**

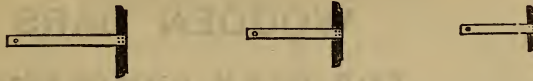
VERY LIGHT



**6000. HARDWOOD BLADE, Fixed Walnut Head.**

	18	15	12	9	6	4 inch.
Each, \$	.42	.38	.34	.30	.26	.22





6020. STEEL Engravers T Squares, Nickel Plated Blade, Fixed Brass Head.	12	9	6	4 inch.
Each, \$2.25	1.50	1.25	1.00	
6040. STEEL Engravers T Squares, Nickel Plated Blade, Swivel Brass Head.	12	9	6	4 inch.
Each, \$2.50	1.75	1.50	1.25	
6060. STEEL Nickel Plated Blade, Fixed Metal Head.	36	30	24	18 inch.
Each, \$6.50	5.50	4.50	3.25	
6070. STEEL, Nickel Plated Blade, Swivel Metal Head.	36	30	24	18 inch.
Each, \$8.00	7.00	6.00	4.75	

T SQUARE



No. 6080. 6082.

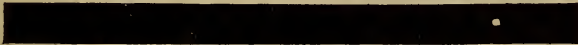


No. 6084.

SWIVELS.

6080. Plated Swivel, with Nut and Washer.....	each,	.75
6082. Brass Swivel, " " " .....	"	.60
6084. Brass Swivel, Milled Head.....	"	.40
6086. Brass Swivel, with Cross Bar Head.....	"	.30

STRAIGHT EDGES.



6100. HARD RUBBER.	42	36	30	24	21	18	15	12 inch.
Each, \$2.50	2.00	1.50	1.00	.90	.70	.50	.40	



6120. MAHOGANY, EBONY LINED.	60	54	48	42	36	30	24	18	15 inch.
Each, \$2.75	2.00	1.60	1.25	1.00	.70	.55	.50	.40	



6140. HARDWOOD, Beveled Edges, Thick.	72	60	54	48	42	36	30	24	18	15	12 inch.
Each, \$1.75	1.25	.90	.65	.50	.40	.30	.25	.20	.18	.15	



6160. STEEL, Nickel Plated, Beveled Edges.	72	60	48	42	36	30	24	18	15 inch.
Each, \$15.00	11.00	8.00	6.50	5.00	4.00	3.00	2.00	1.75	

6180. STEEL, Straight Edges, with Square Edges.	48 inch, \$6.00	36 inch, \$4.00	24 inch, \$2.00 each.
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No. 6200.

## WOODEN BARS FOR BEAM COMPASSES.

	72	60	48	42	36	30	24 inch.
Each, . .	.90	.75	.65	.55	.45	.40	.35

## TRIANGLES.

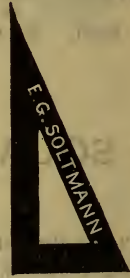
All Triangles measure this way.



No. 6300.  
30 and 60 Degrees.



6400.  
45 Degrees.



6500.  
22½ and 67½ Degrees.

**6300. HARD RUBBER, 30 and 60 Degrees.**

	16	15	14	13	12	11	10	9	8	7	6	5	4	3 inch.
Each, \$	1.75	1.50	1.25	1.00	.90	.75	.65	.60	.50	.40	.35	.30	.25	.20

**6400. HARD RUBBER, 45 Degrees.**

	16	15	14	13	12	11	10	9	8	7	6	5	4	3 inch.
Each, \$	2.50	2.25	2.00	1.75	1.50	1.25	1.00	.80	.65	.55	.45	.40	.35	.30

**6500. HARD RUBBER, 22½ and 67½ Degrees.**

	15	13	11	9	7 inch.
Each, \$	1.50	1.00	.75	.60	.40

**6550. HARD RUBBER, Solid, 30 and 60 Degrees.**

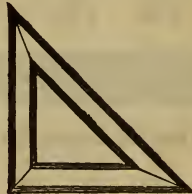
8 inch,	.35	6 inch,	.25	4 inch,	.18 each.
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**6570. HARD RUBBER, Solid, 45 Degrees.**

6 inch,	.35	5 inch,	.25	4 inch,	.18 each.
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No. 6600.



6620.

**6600. MAHOGANY, Ebony lined inside and outside, 30 and 60 Degrees.**

	24	21	18	15	13	11	9	8	7 inch.
Each, \$	2.50	2.00	1.50	1.25	1.00	.75	.60	.50	.45

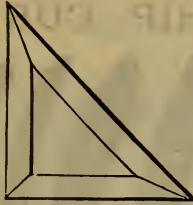
**6620. MAHOGANY, Ebony lined inside and outside, 45 Degrees.**

	24	20	18	16	14	12	10	8	7	6 inch.
Each, \$	3.00	2.20	1.75	1.50	1.25	1.00	.80	.65	.55	.45

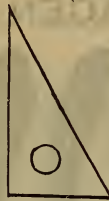
TRIANGLES (continued).



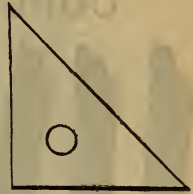
No. 6700.



6720.



6800.



6820.

6700. **HARDWOOD, 30 and 60 Degrees.**

	15	13	11	9	8	7	6 inch.
Each,	.70	.55	.45	.35	.30	.25	.22

6720. **HARDWOOD, 45 Degrees.**

	14	12	10	8	7	6	5 inch.
Each,	.70	.55	.45	.35	.30	.25	.22

6800. **HARDWOOD, Solid, 30 and 60 Degrees.**

Each,	9	7 inch.
	.20	.15

6820. **HARDWOOD, Solid, 45 Degrees.**

Each,	8	6 inch.
	.20	.15

METAL TRIANGLES.

6900. **STEEL, Nickel Plated, 30 and 60 Degrees, Open Centre.**

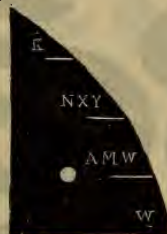
	15	10½	8	7	6 inch.
Each,	\$6.50	4.50	4.00	3.75	3.25

6920. **STEEL, Nickel Plated, 45 Degrees, Open Centre**

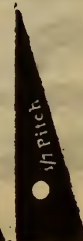
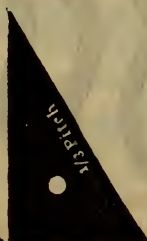
	12	10	8	6½	5 inch.
Each,	\$6.50	5.50	4.50	3.75	3.25

6950. **STEEL, Solid, Nickel Plated, with Knob for Lithographers.**

	12	10	8	7	6	5 inch.
Each,	\$3.00	2.75	2.25	1.80	1.40	1.00



6960. **HARD RUBBER Lettering Triangles, Set of 3 .....Set, \$1.25**



6964. **HARD RUBBER, Roof Pitches, Set of 6 .....Set, \$3.00**



HARD RUBBER  
COPENHAGEN SHIP CURVES.



No. 7000. 7020.

Copies of the original Danish "Kopenhagen" Curves; as they are made of rubber, they keep their shape, and have smooth working edges

*See description on next page.*



No. 7000.

7000. Set of 45 Hard Rubber Ship Curves, Nos. 1 to 45 (see illustration on previous page), in neat Polished Case... \$30.00

7020. Hard Rubber Ship Curves, Separate, illustration on previous page:

Pattern No.	1	2	3	4	5	6	7	8	9	10	11	12
Each,	\$1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	.80	.80	.75
Pattern No.	13	14	15	16	17	18	19	20	21	22	23	
Each,	.80	.75	1.00	.80	.50	.50	.55	.55	.45	.45	.45	
Pattern No.	24	25	26	27	28	29	30	31	32	33	34	
Each,	.45	.45	.45	.45	.35	.35	.40	.35	.35	.40	.40	
Pattern No.	35	36	37	38	39	40	41	42	43	44	45	
Each,	.35	.35	.35	.30	.25	.30	.30	.30	.30	.30	.25	

Set of 10 Ship Curves, for Mechanical Drawing.

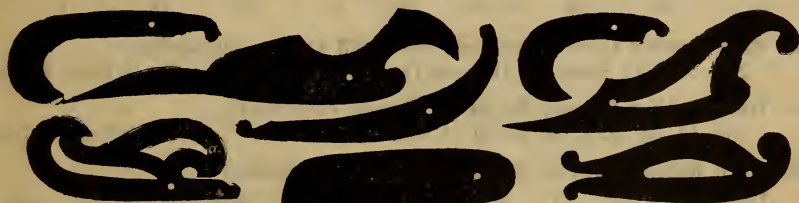


No. 7050. 7052.

7050. HARD RUBBER, in strong, neat Case..... Set, \$6.00

7052. HARD RUBBER, in Box..... " 5.25

CARRIAGE AND SLEIGH BUILDERS' CURVES.



7080. Set of 8 Hard Rubber Curves, in Case.....Set, \$5.50

WOODEN SHIP CURVES.

7090. WOODEN SHIP CURVES, 10 in Set ..... " 5.00

HARD RUBBER CURVES.



7100. Hard Rubber Curves, complete Set of 23 Curves, containing:  
Nos. 50 to 70, Spiral No. 7130, and Combination No. 7135... Set, in Case, \$16.50

7105. Hard Rubber Curves, Set of 12 Curves, containing:  
Nos. 51, 53, 55, 57, 58, 59, 60, 61, 63, 64, 66, 67.....Set, in Case, 7.25

7120. Hard Rubber Curves, SEPARATE (see illustrations) :

Pattern Nos.	50	51	52	53	54	55	56	57	58	59	
Each,	\$1.00	.85	.85	.75	.75	.50	.40	.50	.50	.50	
Pattern Nos.	60	61	62	63	64	65	66	67	68	69	70
Each,	.50	.50	.45	.35	.40	.40	.35	.35	.35	.25	.22

Other styles furnished at short notice.





No. 7180.

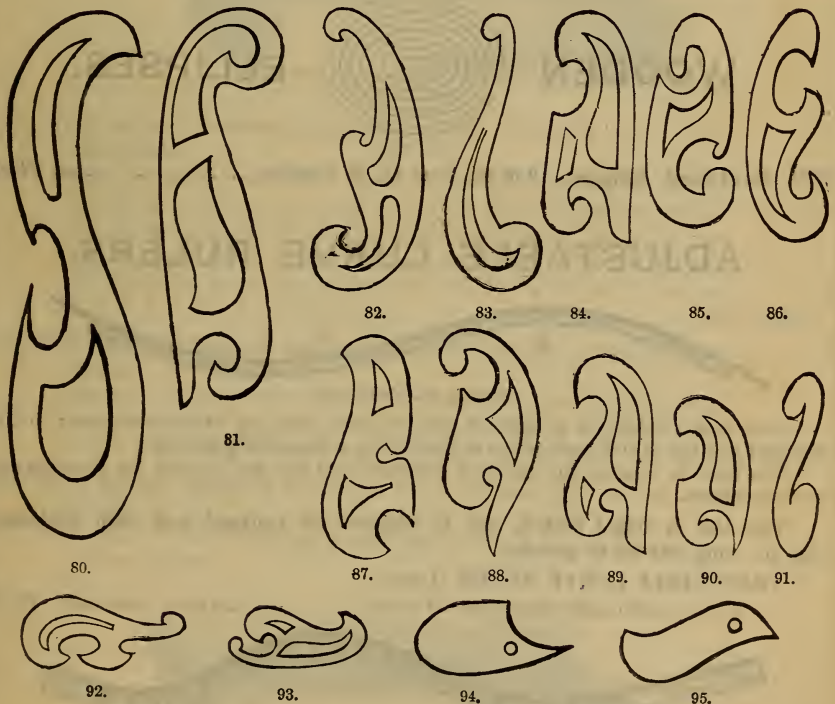


7135.

7130. **Hard Rubber Spiral Curve**..... each, \$1.50  
 The Spiral Curve contains every curve to the limit of its size.

7135. **Hard Rubber Combination Curve** ..... each, 2.25

**WOODEN CURVES.**

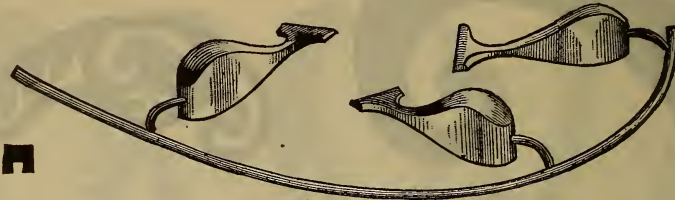


7160. **Wooden Curves, Set of 15 Curves**, containing Nos. 81 to 95. .Set, in Box, \$5.75

7165. **Wooden Curves, SEPARATE.**

Pattern Nos.	80	81	82	83	84	85	86	87
Each,	.55	.38	.35	.35	.35	.35	.35	.35
Pattern Nos.	88	89	90	91	92	93	94	95
Each,	.35	.30	.30	.25	.25	.25	.15	.15

## SPLINES AND WEIGHTS.



No. 7200-7230.

7200. Hard Rubber Splines, with Groove, to hold points of weights.
- |       |     |     |     |     |     |          |
|-------|-----|-----|-----|-----|-----|----------|
|       | 42  | 36  | 30  | 24  | 18  | 12 inch. |
| Each, | .50 | .45 | .40 | .35 | .30 | .25      |
7220. Hardwood Splines, Grooved ..... 24 inch, .25 each. 36 inch, .30 each.
7230. Lead Weights, for Splines, with Metal Point ..... (List Price, \$1.12) each, \$1.00
7240. Iron Weights, for Splines ..... " .60

## WOODEN



## ELLIPSES.

No. 7300.

7300. Hardwood Ellipses, 10 in set, from 1½ to 6 inches ..... set, \$2.00

## ADJUSTABLE CURVE RULERS.



Same as No. 8760 (large).

This Rule consists of a band of thin, flexible steel, ¾ of an inch wide; this is attached to a bar of soft lead, which is covered by a long, spiral spring.

The Rule is bent to the required position, and the soft leaden bar prevents any springing back.

This size is nickel plated, and is adapted for railroad and ship building, and for long curves in general.

### ADJUSTABLE CURVE RULER, Large.

- Entire length and ruling edge, 30 inches ..... (List Price, \$3.25) each, \$2.87



Same as No. 8762 (small).

The basis of this Ruler is a bar of soft lead, which can easily be bent, and remains so. To improve the working of it, the lead is lined with two thin bands of steel, and the drawing edge covered with rubber, which is held in place by the small ribs.

### ADJUSTABLE CURVE RULER, Small.

- Entire length, 14½ inches; ruling edge, 10 inches .. (List Price, \$1.67) each, \$1.50

## RAILROAD CURVES.

7400. **Hard Rubber Railroad Curves, Set of 102.** With Tangent, length of Curves from 7 to 21 inches. Finished on concave and convex side.  
 Contents : 200, 197, 195, 193, 190, 187, 185, 183, 180, 177, 175, 173, 170, 167, 165, 163, 160, 157, 155, 153, 150, 147, 145, 143, 140, 137, 135, 133, 130, 127, 125, 123, 120, 117, 115, 113, 110, 107, 105, 103, 100, 97, 95, 93, 90, 88, 85, 83, 80, 78, 75, 73, 70, 67, 65, 63, 60, 57, 55, 53, 50, 48, 46, 45, 44, 42, 40, 38, 36, 35, 34, 32, 30, 29, 28, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4½, 4, 3½, 3 inch Radius... Complete, in Box (List Price, \$110.00) **\$100.00**



No. 7440.

7440. **Hard Rubber Railroad Curves, Set of 100.** Finished only on the convex side.  
 Contents : 100, 99, 98, 97, 96, 95, 94, 93, 92, 91, 90, 89, 88, 87, 86, 85, 84, 83, 82, 81, 80, 79, 78, 77, 76, 75, 74, 73, 72, 71, 70, 69, 68, 67, 66, 65, 64, 63, 62, 61, 60, 59, 58, 57, 56, 55, 54, 53, 52, 51, 50, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 39, 38, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3½, 3, 2 inch Radius.....in Box, **\$70.00**
7450. **Hard Rubber Railroad Curves, Set of 43.** Finished only on the convex side.  
 Contents : 200, 180, 160, 140, 130, 120, 110, 100, 90, 84, 78, 72, 66, 60, 54, 48, 42, 39, 36, 33, 30, 27, 24, 22, 20, 18, 16, 14, 12, 10, 9½, 9, 8½, 8, 7½, 7, 6½, 6, 5½, 5, 4½, 4, 3½ inch Radius.....in Box, **28.00**
7460. **Hard Rubber Railroad Curves, Set of 17.** Finished only on the convex side.  
 Contents : 60, 57, 54, 51, 48, 45, 42, 39, 36, 33, 30, 27, 24, 21, 18, 15, 12 inch Radius.....in Box, **13.25**



No. 7470.

7470. **Hard Rubber Railroad Curves, Set of 10.** Finished only on the convex side.  
 Contents : 120, 108, 96, 84, 72, 60, 48, 36, 24, 12 inch Radius...in Box, **\$7.75**



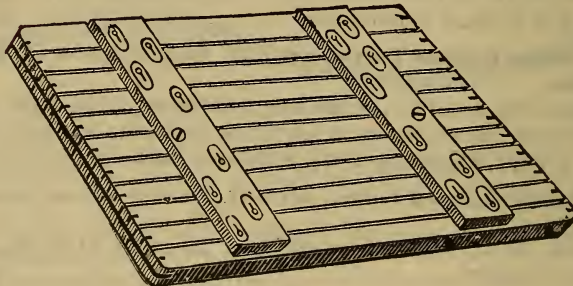
## WOODEN RAILROAD CURVES.

7640. **Best Quality Wooden Railroad Curves**, Set of 100. Finished only on the convex side.  
 Contents : 100, 99, 98, 97, 96, 95, 94, 93, 92, 91, 90, 89, 88, 87, 86, 85, 84, 83, 82, 81, 80, 79, 78, 77, 76, 75, 74, 73, 72, 71, 70, 69, 68, 67, 66, 65, 64, 63, 62, 61, 60, 59, 58, 57, 56, 55, 54, 53, 52, 51, 50, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 39, 38, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3½, 3, 2 inch Radius ..... in Box, \$45.00
7650. **Best Quality Wooden Railroad Curves**, Set of 43. Finished only on the convex side.  
 Contents : 200, 180, 160, 140, 130, 120, 110, 100, 90, 84, 78, 72, 66, 60, 54, 48, 42, 39, 36, 33, 30, 27, 24, 22, 20, 18, 16, 14, 12, 10, 9½, 9, 8½, 8, 7½, 7, 6½, 6, 5½, 5, 4½, 4, 3½ inch Radius..... in Box, 16 00
7660. **Best Quality Wooden Railroad Curves**, Set of 17. Finished only on the convex side.  
 Contents : 60, 57, 54, 51, 48, 45, 42, 39, 36, 33, 30, 27, 24, 21, 18, 15, 12 inch Radius..... in Box, 7.50
7670. **Best Quality Wooden Railroad Curves**, Set of 10. Finished only on the convex side.  
 Contents : 120, 108, 96, 84, 72, 60, 48, 36, 24, 12 inch Radius. .... in Box, 4.50  
 And various other grades.

Curves of Metric and other measurements furnished at short notice.

## DRAWING BOARDS.

Grooved Back.

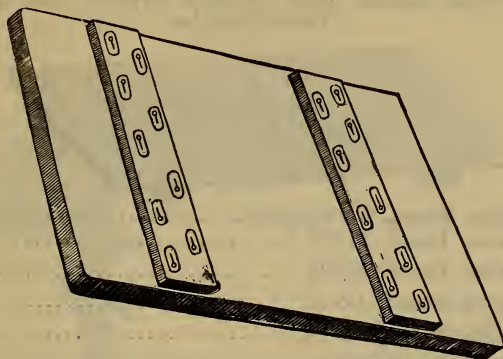


Nos. 7800-7812.

		Inches.	
7800. Grooved Back,	best quality, Antiquarian,	33×55.....	each, \$12.00
7804. Grooved Back,	“ “ Double Elephant,	31×42.....	“ 8.50
7808. Grooved Back,	“ “ Atlas,	27×34.....	“ 6.50
7812. Grooved Back,	“ “ Imperial,	23×31.....	“ 5.00

A glance at the illustration above will explain the good qualities of this style of board. The wood used is carefully selected pine, with hardwood cross-bars at back. To prevent the warping of the pine, the board is sawed half way through at about every two inches, and for the purpose of allowing the board to contract and expand, the cross-bars are not glued on, but fastened with screws, which run in oblong metal slots. At the ends, pieces of hardwood are inlaid, to give the T square a smooth working edge. They are also cut at every few inches, to allow for contraction and expansion of the board.

## DRAWING BOARDS, WITH WALNUT CROSS BARS.

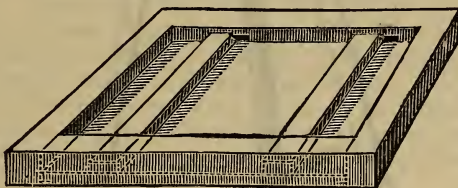


Nos. 7830-7896.

Nos. 7830 to 7896 are well made of narrow boards. The cross-bars are fastened with screws, running in brass slots to allow for contraction and expansion of the pine board.

	Inches.		
7830. Drawing Board,	Hardwood Cross Bars,	42×72 .....	each, \$14.50
7834. Drawing Board,	" " "	42×60 .....	" 11.50
7838. Drawing Board,	" " "	42×48 .....	" 8.50
7860. Drawing Board,	" " "	36×72 .....	" 13.00
7864. Drawing Board,	" " "	36×60 .....	" 10.00
7868. Drawing Board,	" " "	36×54 .....	" 8.00
7872. Drawing Board,	" " "	36×48 .....	" 7.00
7876. Drawing Board,	" " "	36×42 .....	" 6.00
7880. Drawing Board,	" " "	31×42 .....	" 5.00
7884. Drawing Board,	" " "	27×34 .....	" 4.25
7888. Drawing Board,	" " "	23×31 .....	" 3.50
7892. Drawing Board,	" " "	20×26 .....	" 2.20
7896. Drawing Board,	" " "	16×21 .....	" 1.50

## FRAMED DRAWING BOARDS.



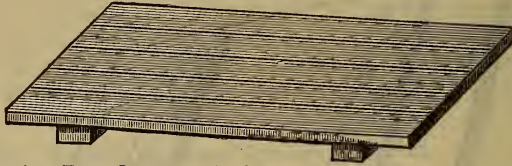
Nos. 7940-7952.

Framed Boards are used for stretching drawing paper. The inside cross pieces can easily be removed and the board taken out. A sheet of paper is wet and placed on the pine board; press the frame down; secure the cross pieces; allow the paper to dry and it is ready for use.

	Inches.	
7940. Framed Board,	18×26 .....	each, \$4.00
7944. Framed Board,	16×21 .....	" 3.00
7948. Framed Board,	14×19 .....	" 2.50
7952. Framed Board,	11×17 .....	" 2.00

## LIGHT DRAWING BOARDS.

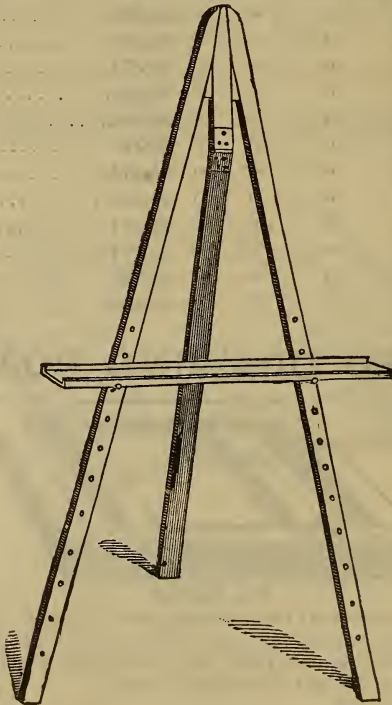
WELL MADE. FOR SCHOOL USE, PATENT OFFICE AND OTHER SMALL DRAWINGS, etc.



7966. Light Drawing Board, 27×34 inches.....	each,	\$2.75
7970. Light Drawing Board, 23×31.....	“	2.25
7974. Light Drawing Board, 20×26.....	“	1.75
7978. Light Drawing Board, 16×21.....	“	1.20
7982. Light Drawing Board, 14×18.....	“	1.10
7986. Light Drawing Board, 11×16.....	“	.85

## HORSES OR TRESTLES for Drawing Boards.

8000. Pair of Horses, 36 inches high.....	pair,	\$3.00
-------------------------------------------	-------	--------

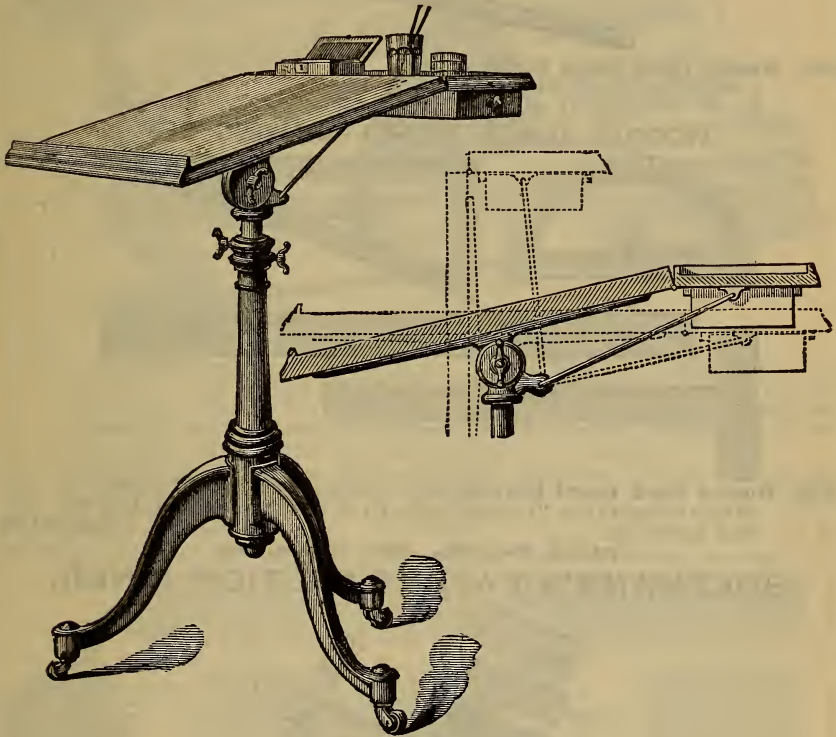


No. 8008. 8010.

8008. Walnut Folding Easel, 6 feet high, with shelf.....	each,	\$2.00
8010. Pine Folding Easel, 6 ‘ ‘ ‘.....	(List Price, \$1.12) ‘	1.00



ADJUSTABLE AND PORTABLE DRAWING TABLES.



No. 8020-8024.

This table can be fixed at any *required height*, so one can use it either sitting or standing; and by turning back the screw at the right, it is allowed to rotate, bringing *either side in front*. The shelf or ledge for instruments is attached to the *reverse side* of the table, so that it is *always level*, whatever inclination is given to the desk. This is very convenient for the water-cups, inkstands, etc. The second figure shows the table fixed at a slight inclination, the dotted lines showing it horizontal or vertical. When the table is nearly vertical the whole occupies but little space, and forms a perfect easel.

Under the instrument shelf are provided two drawers, one on each side, for working materials. The table and drawers are made of black walnut or other appropriate wood, nicely finished.

Cast iron is used for the tripod, hollow standard and sliding spindle, which are neatly painted and bronzed. The working parts are well finished, and very easily operated. The stand is sufficiently firm to hold a large drawing board. It can be raised to a level of 44 inches and lowered to 30 inches.

- 8020. **Black Walnut Top**, 22×26 inches, bronzed and ornamented stand, with shelf and two drawers, on castors ..... each, \$15.50
- 8024. **Black Walnut Top**, 22×26, with shelf and two drawers, on castors. “ 12.50
- 8028. **Hard Wood Top**, 22×24, with shelf, on castors..... “ 10.00

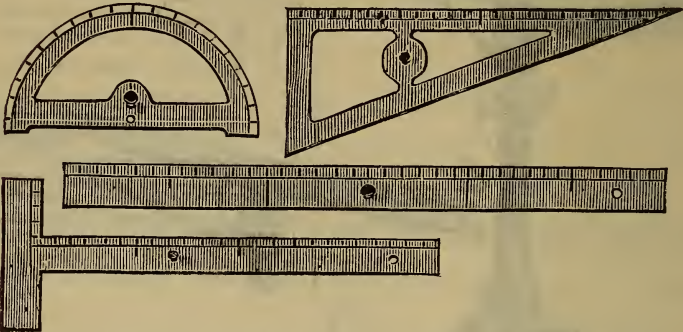
WOODEN BLACK BOARD DIVIDERS



8100. Wooden Black Board Dividers.

30	24	18	15 inch.
\$2.00	1.60	1.25	\$1.00 each.

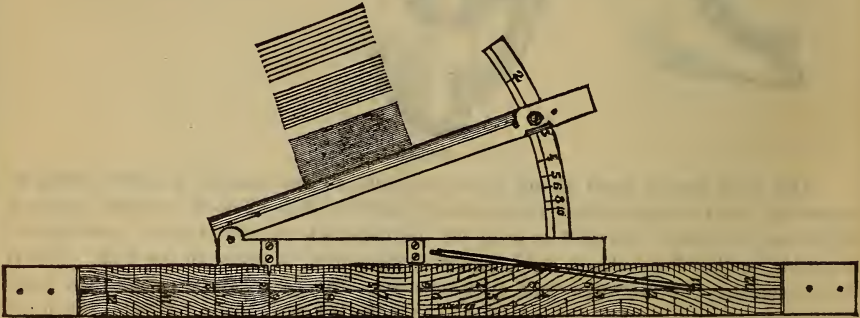
WOODEN BLACK BOARD DRAWING SET.



8120. Wooden Black Board Drawing Set, consisting of 24 inch T square, 36 inch straight edge, 24 inch triangle, all divided to inches, and 15½ inch protractor ..... set, \$5.00

**Black Boards. See 19,500, etc.**

SOLTMANN'S PATENT SECTION LINER.



8300. Soltmann's Patent Section Liner, in Case..... each, \$2.75

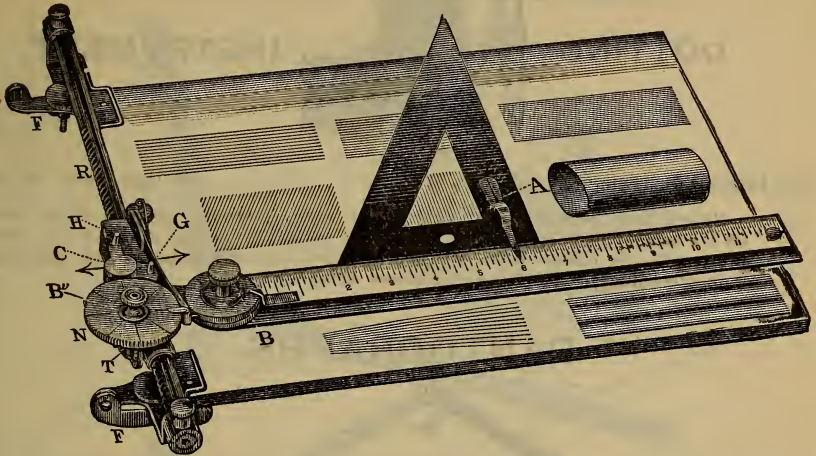
Consists of a rule deeply notched at every  $\frac{1}{8}$  inch on one and  $\frac{1}{10}$  inch on the other side, having brass ends with holes, to fasten the rule to the board with weights or tacks. The movable square is held to the rule by a metal arm ; to produce uniform distances apart, the angle has a small conical shaped piece of metal which fits into the notches on the rule, and by the pressure of the finger remains until the line is drawn. A spring (not shown in cut) underneath the angle raises the latter out of the notch, and enables the draughtsman to move the angle back and forth without lifting it. The movable angle and the notched rule have each a small brass hook, to which a rubber band can be attached, which draws the angle towards the right. The metal arc holds the angle at any point by means of a thumb screw.

With this instrument very close shading and hatching can be quickly and correctly done. The arc contains lines, and the figures 2, 3, 4, 5, etc. When the angle is set to figure 2, the sections produced are  $\frac{1}{2}$  of the distance between the notches ; if used on the  $\frac{1}{10}$  side, the hatching is  $\frac{1}{10}$  of an inch, and on the  $\frac{1}{8}$  side the result is  $\frac{1}{16}$  inch. Figure 3 reduces three times ; figure 4 four times, etc.



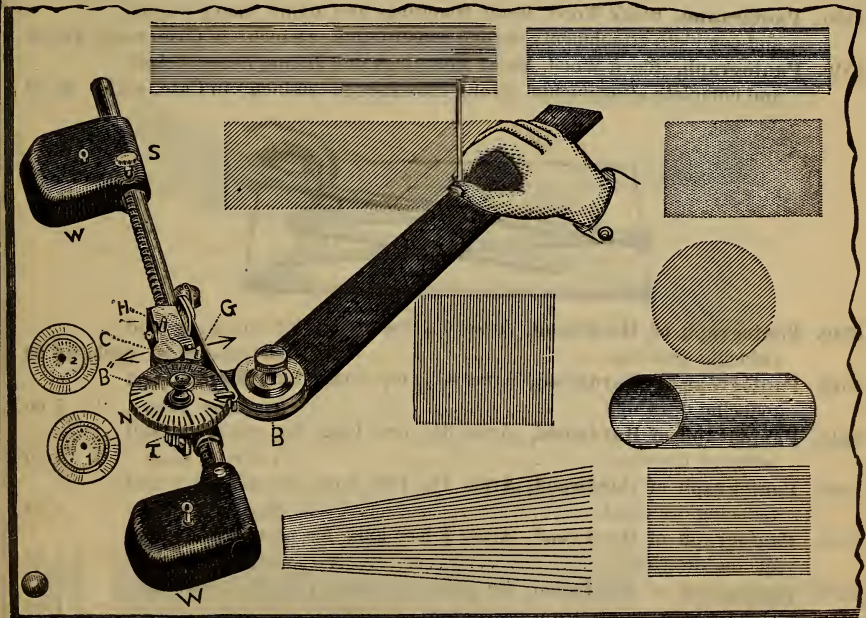
SECTION LINERS.

"Positive" Section Liner and T Square.



This instrument can be attached to a drawing board, by fastening the clamp screws. As the motion is produced by means of notched wheels, the movements are uniform. The ruler may be set at any angle. Printed round diagrams for various diameters are attached to the wheel B, with which cylinders can be shaded, by simply following the lines on the diagrams.

- 8310. Positive Section Liner, to fit Board 20×31 inches or less, in Case, each, \$15.00
- 8312. Positive Section Liner, " " 12×16 " " " " 12.00
- 8314. Positive Section Liner, " " 10×14 " " " " 10.00



- 8320. Positive Section Liner, with heavy weights to place on any part of the drawing without injuring it. . . . . each, \$7.50





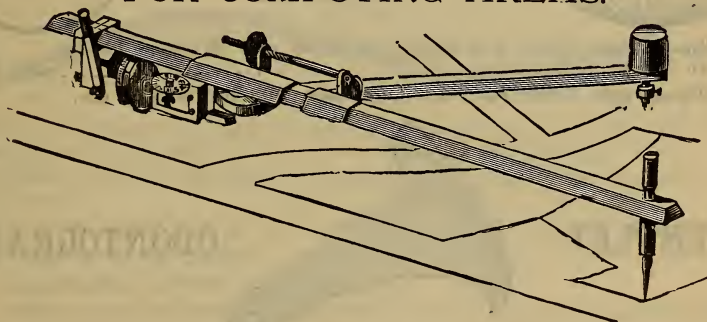
PERSPECTIVE LINEADS.



No. 8600-8608.

- |       |                 |                   |           |       |       |        |
|-------|-----------------|-------------------|-----------|-------|-------|--------|
| 8600. | Hardwood Lined, | with Brass Screw, | 36 inches | ..... | pair, | \$6.50 |
| 8604. | Hardwood Lined, | " " "             | 24 "      | ..... | "     | 5.00   |
| 8608. | Hardwood Lined, | " " "             | 18 "      | ..... | "     | 4.00   |

PLANIMETER,  
FOR COMPUTING AREAS.



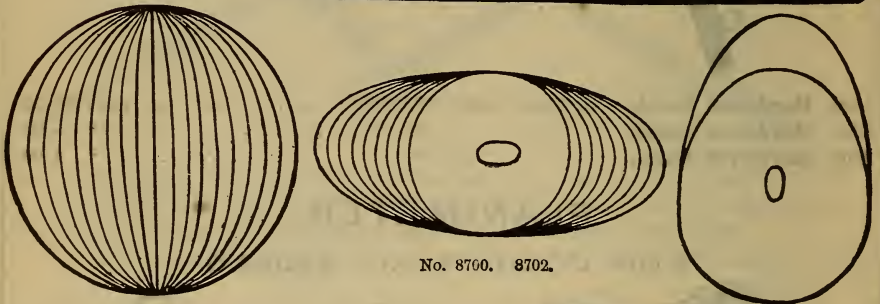
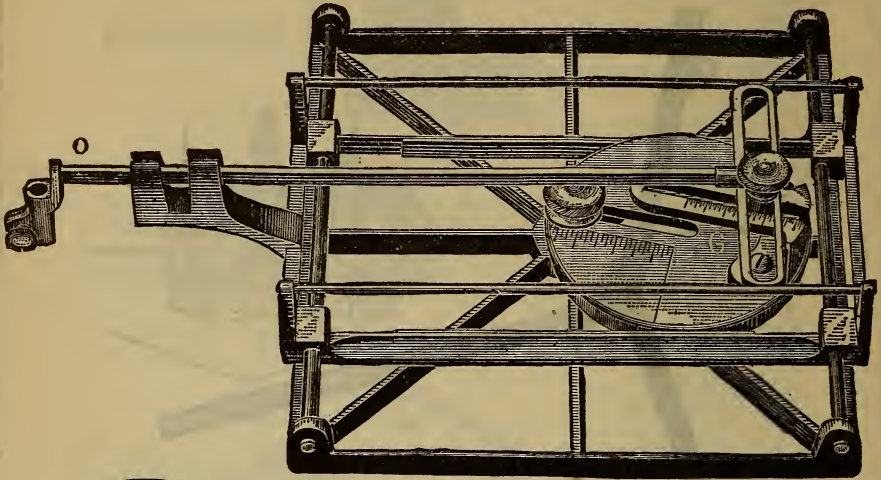
8650. Planimeter, Complete in Case, with directions for use.....each, \$30.00

ECCENTRO LINEAD.



8660. Eccentro Linead, Ebony, German Silver Mountings, for drawing eccentric lines, teeth of wheels, etc.....each, \$2.75

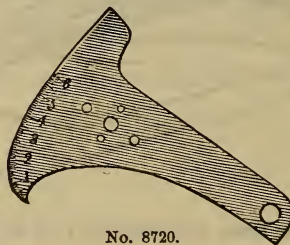
ELLIPSOGRAPH.



No. 8700. 8702.

- 8700. Ellipsograph, Strong and substantial make, with directions for use. In Wooden Box.....each, \$7.90
- 8702. Ellipsograph, Strong and substantial make, with directions for use.. “ 6.65

TEMPLER



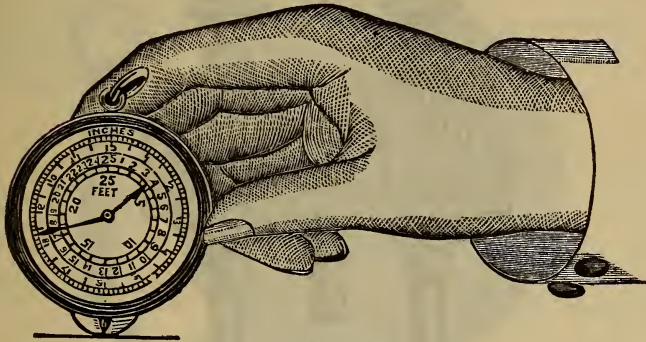
No. 8720.

ODONTOGRAPH.

- 8720. Templet Odontograph, with full description, for drawing teeth of Gear Wheels ; useful for Machinists and general Mechanical Drawing.....In Case, each, \$3.50
- Illustrated Treatise on the Use of the Odontograph, by Prof. S. W. Robinson..... “ .50
- 8728. Willis' Odontograph, No. 1, for drawing the teeth of small wheels by diametrical pitch, when only a single arc is required ..... “ 2.75
- 8730. Willis' Odontograph, No. 2, for drawing the teeth of larger wheels by circular pitch, where it is necessary to have separate arcs for flanks and faces,—with drawings, and directions for use..... “ 4.45



## MEASURING INSTRUMENT AND WATCH CHARM



No. 8750. 8752.

8750. Measuring Instrument, in fine Morocco Case.....each, \$2.25  
 8752. Measuring Instrument..... “ 2.00

To measure, it is only necessary to move the instrument over the surface. The small dial registers the feet and the large one, the inches. When 25 feet have been traversed, the small hand has made a complete revolution, and begins the second one, etc. It is about the size of a small locket, and convenient to carry.

## ADJUSTABLE CURVE RULERS.



No. 8760 (large).

This Rule consists of a band of thin, flexible steel,  $\frac{3}{4}$  of an inch wide; this is attached to a bar of soft lead, which is covered by a long, spiral spring.

The Rule is bent to the required position, and the soft leaden bar prevents any springing back.

This size is nickel plated, and is adapted for railroad and ship building, and for long curves in general.

### 8760. ADJUSTABLE CURVE RULER, Large.

Entire length and ruling edge, 30 inches.....(List Price, \$3.25) each, \$2.87



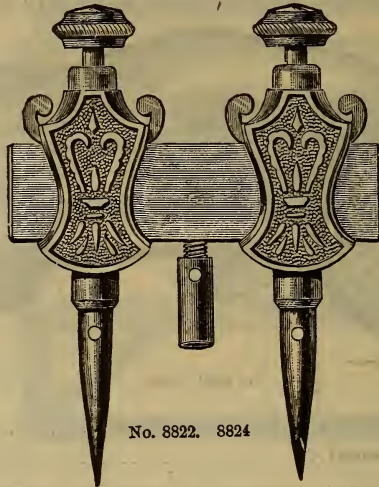
No. 8762 (small).

The basis of this Ruler is a bar of soft lead, which can easily be bent, and remains so. To improve the working of it, the lead is lined with two thin bands of steel, and the drawing edge covered with rubber, which is held in place by the small ribs.

### 8762. ADJUSTABLE CURVE RULER, Small.

Entire length,  $14\frac{1}{2}$  inches; ruling edge, 10 inches . .(List Price, \$1.67) each, \$1.50

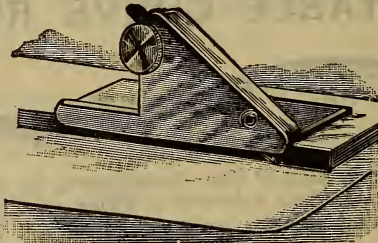
TRAMMEL HEADS.



No. 8822. 8824

8822. Trammel Heads, Bronzed, Medium size.....pair, \$2.00  
 8824. Trammel Heads, “ Small “ ..... “ 1.50

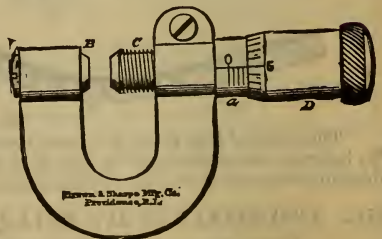
PAPER CUTTING INSTRUMENT.



No. 8830.

8830. Paper Cutting Instrument, for cutting stretched sheets of Drawing Paper from the board.....each, .50

DARLING, BROWN & SHARPE'S GOODS

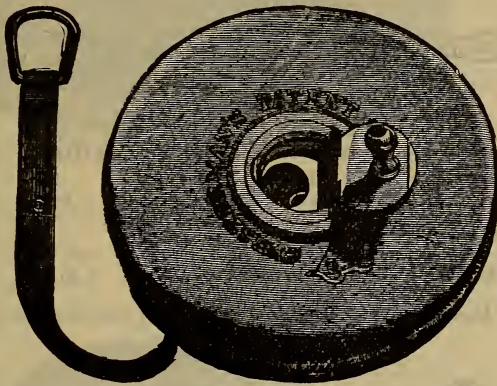


Darling & Sharpe Mfg. Co.  
Providence, R.I.

(CATALOGUE MAILED ON APPLICATION.)

FURNISHED AT MANUFACTURER'S PRICES.

**TAPES REPAIRED AT SHORT NOTICE.**  
**MEASURING TAPES.**



No. 8900.

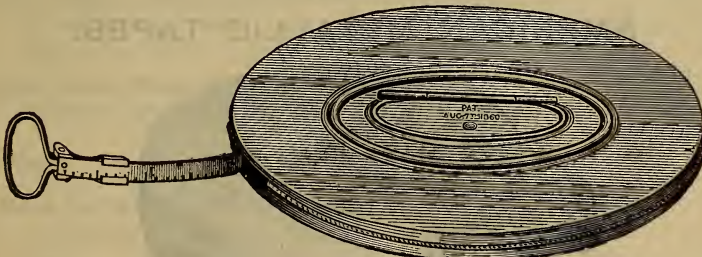
8900. **Chesterman's Steel Tapes, Leather Case, Flush Handle.**

Divided $\frac{1}{2}$ or $\frac{1}{10}$ of foot,	100	75	66	50	33	25 feet.
Each.....	\$15.00	12.00	10.00	8.00	6.25	5.50

8920. **Chesterman's Metallic Tapes, Leather Case, Folding Handle.**

Divided $\frac{1}{2}$ or $\frac{1}{10}$ of foot,	100	75	66	50	33	25 feet.
Each .....	\$4.75	3.75	3.30	3.00	2.35	2.00

**PAINÉ'S PATENT STANDARD STEEL TAPES.**



Nos. 8960-8980.

These tapes have been in the market for a number of years. The increased demand is the best evidence of their good qualities. The handles of all tapes (50 feet and over) are detachable; compensating, and other handles can be put on. The entire tape, if taken out of the case, by fastening an extra handle to the other end, can be used as a chain.

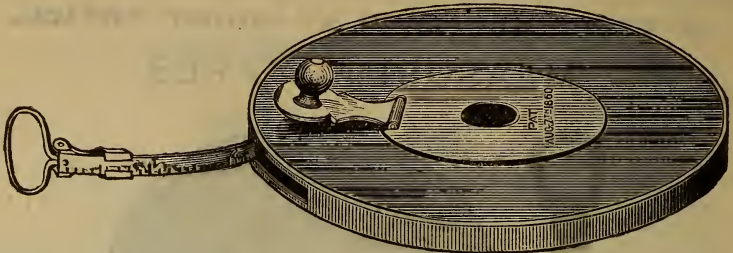
8960. **Paine's Steel Tapes, Leather Covered Case, Flush Handle**

Divided $\frac{1}{2}$ or $\frac{1}{10}$ of foot . .	100	75	66	50	33 feet.
Each.....	\$15.00	12.00	10.00	8.00	5.50

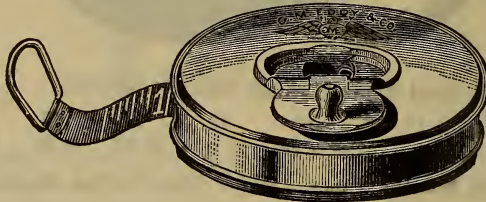
8980. **Paine's Steel Tapes, Leather Covered Case, Flush Handle.**

Divided $\frac{1}{2}$ foot on one, and Metric on other side..	100	75	50 feet.
Each .....	\$18.00	14.25	9.50





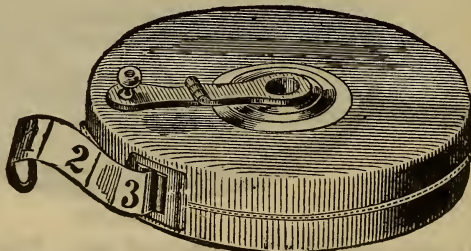
9000. Paine's Steel Tapes, Japanned Metal Case, Folding Handle.
- |                                                   |         |       |      |      |      |          |
|---------------------------------------------------|---------|-------|------|------|------|----------|
| Divided $\frac{1}{2}$ or $\frac{1}{10}$ of foot.. | 100     | 75    | 66   | 50   | 33   | 25 feet. |
| Each.....                                         | \$12.00 | 10.00 | 8.00 | 6.00 | 4.50 | 3.50     |
9020. Paine's Steel Tapes, without Case.
- |               |     |      |      |          |
|---------------|-----|------|------|----------|
|               | 100 | 75   | 66   | 50 feet. |
| Each, \$10.00 |     | 7.50 | 6.60 | 5.00     |
9030. Graduated Compensating Handles, for various temperatures.....pair, \$3.35



9050. Case  $2\frac{1}{4}$  inch diam.

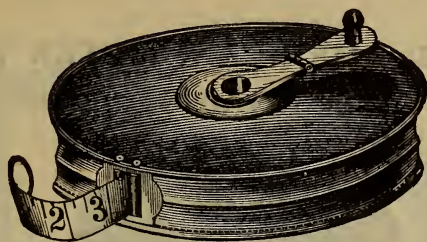
9050. Steel Nickel Plated Pocket Tapes, very light, Flush Handle, divided  $\frac{1}{2}$  or  $\frac{1}{10}$  of foot, 25 feet long.....each, \$5.50
9060. Steel Nickel Plated Pocket Tapes, very light, Flush Handle, divided  $\frac{1}{2}$  of foot on one, and Metric on other side, 25 feet long..... " 6.00

AMERICAN METALLIC TAPES.



No. 9080.

9080. Metallic Tapes, Red Leather Case, Wire Woven, Folding Handle.
- |                                                       |        |      |      |          |
|-------------------------------------------------------|--------|------|------|----------|
| Divided $\frac{1}{2}$ or $\frac{1}{10}$ of a foot.... | 100    | 75   | 66   | 50 feet. |
| Each.....                                             | \$4.45 | 3.50 | 3.00 | 2.75     |
9090. Metallic Tapes, Red Leather Case, Wire Woven, Folding Handle.
- |                                                                 |        |      |          |
|-----------------------------------------------------------------|--------|------|----------|
| Divided $\frac{1}{2}$ of foot on one, and Metric on other side. | 100    | 75   | 50 feet. |
| Each.....                                                       | \$4.75 | 3.75 | 3.00     |
9110. Metallic Tapes, Wire Woven, without Case.
- |                                                      |        |      |          |
|------------------------------------------------------|--------|------|----------|
| Divided $\frac{1}{2}$ or $\frac{1}{10}$ of foot..... | 100    | 75   | 50 feet. |
| Each.....                                            | \$3.25 | 2.50 | 1.90     |

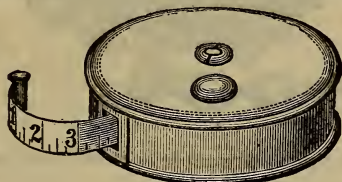


No. 9120.

9120. Corded Linen Tapes, in Patent Leather Case.

Divided $\frac{1}{4}$ of foot.....	100	75	50 feet.
Each.....	\$1.75	1.50	1.25

**POCKET TAPES,**  
WITH SPRING AND STOP.



No. 9200, 9210.

9200. Steel Spring Pocket Tapes, in Nickel Plated Case.

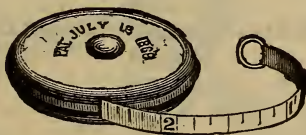
Divided $\frac{1}{4}$ or $\frac{1}{10}$ of foot.....	12	8	6	5	3 feet.
Each.....	\$3.50	2.50	2.00	1.80	1.50

9210. Steel Spring Pocket Tapes, in Nickel Plated Case.

Divided $\frac{1}{2}$ foot on one, and Metric on other side.					
	12	8	6	5	3 feet.
Each.....	\$3.75	2.75	2.25	2.00	1.65

9220. Linen Spring Pocket Tapes, in Nickel Plated Case (case like 9200).

Best Quality. Divided into inches. ....	6	5	3 feet.
Each.....	\$1.25	1.10	.90



9230. Linen Spring Pocket Tapes, in Nickel Plated Case.

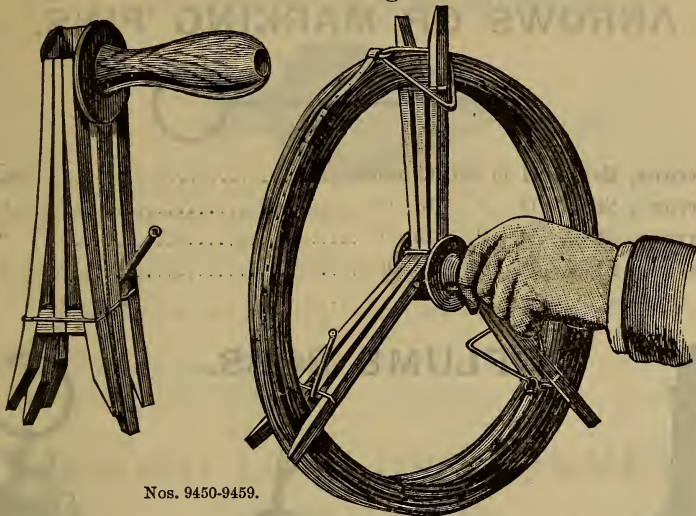
Divided into inches.....	6	5	3 feet.
Each.....	.70	.60	.50

OTHER TAPES AND GRADUATIONS FURNISHED AT SHORT NOTICE.





**ROE'S IMPROVED STEEL TAPE CHAIN,**  
With Folding Reel.



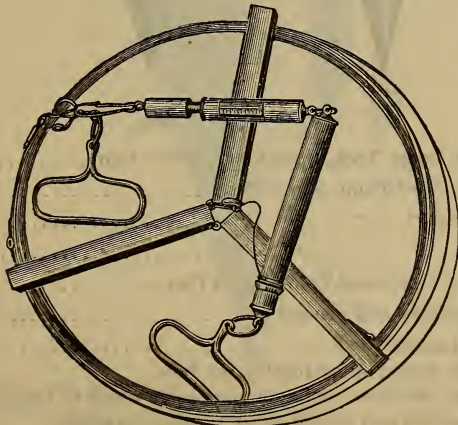
Nos. 9450-9459.

These tapes are made of spring steel about  $\frac{1}{8}$ -inch wide. Each consecutive foot has a brass rivet, and every five and ten feet have large plates with figures stamped thereon. For country and field work the tapes have given excellent satisfaction. They can be dragged through woodland, brush, etc., without catching or kinking, and as they are nickel-plated (mat finish) they do not rust, and require no oiling or cleaning after being used.

- |                                                                                                                                       |        |
|---------------------------------------------------------------------------------------------------------------------------------------|--------|
| 9450. Roe's Improved Tape Chain, NICKEL-PLATED, 100 feet long, graduated every foot, end feet in tenths. . . . . (List Price, \$7.78) | \$7.00 |
| 9453. Roe's Improved Tape Chain, NICKEL-PLATED, 66 feet long, graduated every link . . . . . (List Price, \$7.22)                     | 6.50   |
| 9456. Roe's Improved Tape Chain, NICKEL-PLATED, 50 feet long, graduated every foot, end feet in tenths. . . . . (List Price, \$6.12)  | 5.50   |
| 9459. Roe's Improved Tape Chain, NICKEL-PLATED, 33 feet long, graduated every foot, end feet in tenths. . . . . (List Price, \$4.45)  | 4.00   |

Meter and Vara Tapes furnished at short notice.

**SPRING BALANCE TAPE CHAINS.**



9465. Spring Balance Tape Chain, 50 feet long,  $\frac{3}{8}$  inch wide, with Spirit Level, Thermometer, Spring Balance and Brass Handles. They are extensively used for accurate measurements in large cities. . . . . each, \$20.00

ARROWS OR MARKING PINS.

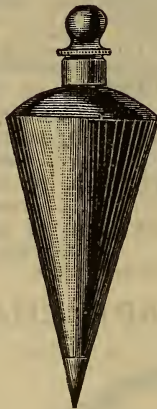


- 9500. Arrows, Brass, 11 in Set, 14 inches.....Set, \$2.50
- 9510. Arrows, Steel, 11 " 15 " ..... " 1.75
- 9514. Arrows, Steel, 11 " 12 " ..... " 1.25
- 9518. Arrows, Steel, 11 " 9 " ..... " 1.00

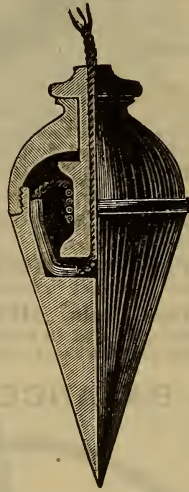
PLUMB BOBS.



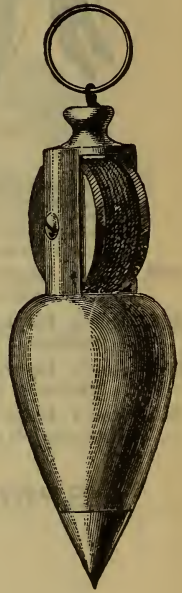
No. 9550.



9560.  
9562.  
9564.



9574.



9576.  
9577.

- 9550. Brass, Large, Long Neck, Steel Point, Screw Cap.....each, \$3.00
- 9560. Brass, Large, Steel Point, Screw Cap ..... " 2.50
- 9562. Brass, Medium, " " " " ..... " 2.25
- 9564. Brass, Small, " " " " ..... " 2.00
- 9566. Plated, Pocket Size, Steel Point, Screw Cap ..... " 1.25
- 9570. Brass, for Builders' and general use ..... " 1 25
- 9574. Brass, with Centre Reel..... " 2.50  
The string is wound up by turning the Bob.
- 9576. Brass, Large, with Reel containing the cord, which is lengthened by dropping the Bob and wound up by turning the wheel..... " 2.00
- 9577. Brass, Medium, with Reel containing the cord, which is lengthened by dropping the Bob and wound up by turning the wheel..... " 1.75

**IRON PLUMB BOBS.**



No. 9584.

9584. **Iron**, for Builders and general use..... each .75

**BRAIDED LINEN PLUMB BOB LINE.**

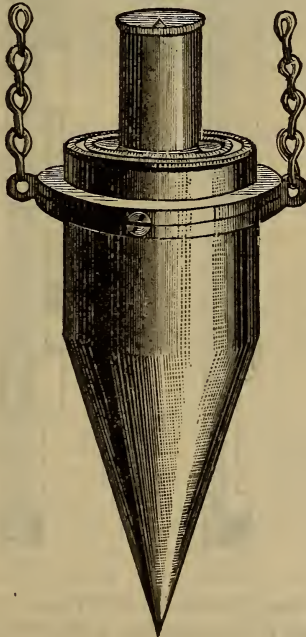
With this line, the Bob will become stationary sooner than with ordinary cord.

9600. **Braided Plumb Bob Line**, Block containing 50 feet ..... each, .80  
 Coil of 10 yards..... “ .50

**MINING LAMP OR PLUMMET.**

Made of Brass.

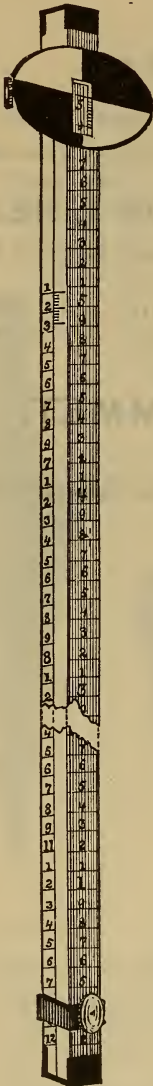
The upper part is hollow, and contains an oil lamp. When lowered into a dark shaft, the sight is taken to the centre of the light.



9620. **Mining Lamp and Plummet.**  
 Two Lamps packed in strong Box, with Strap ..... case, \$25.00  
 9624. **Mining Lamp and Plummet.**  
 In Box ..... each, 13.00



LEVELING RODS AND POLES.



No. 9700.



9710.



9720.

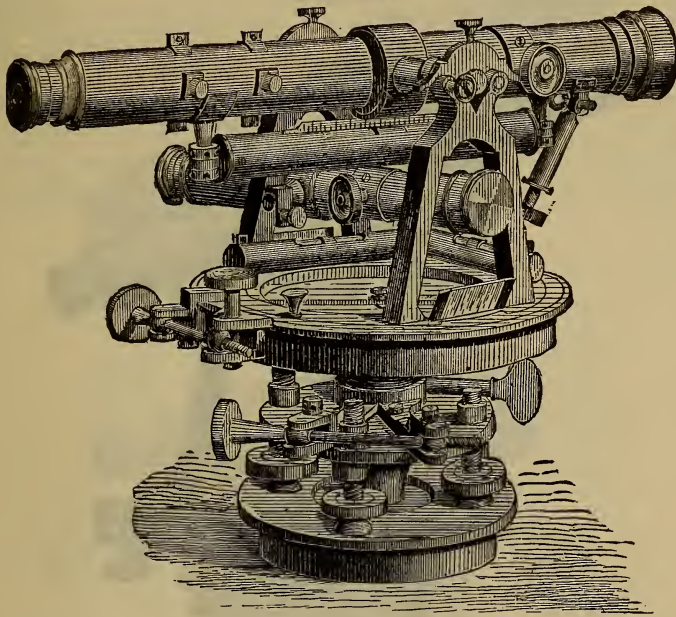


9760.

- 9700. New York Leveling Rod, Hardwood, with Target.....each, \$16.00
- 9710. Philadelphia Leveling Rod, Mahogany, White Face, Self Reading. " 18.00
- 9720. Boston Leveling Rod, Mahogany, with Target ..... " 16.00
- 9760. Leveling, or Flag Poles, each foot painted alternately red and white.

	10	8	6	5 feet.
Each,	\$3.50	3.00	2.50	2.25

SURVEYING INSTRUMENTS.



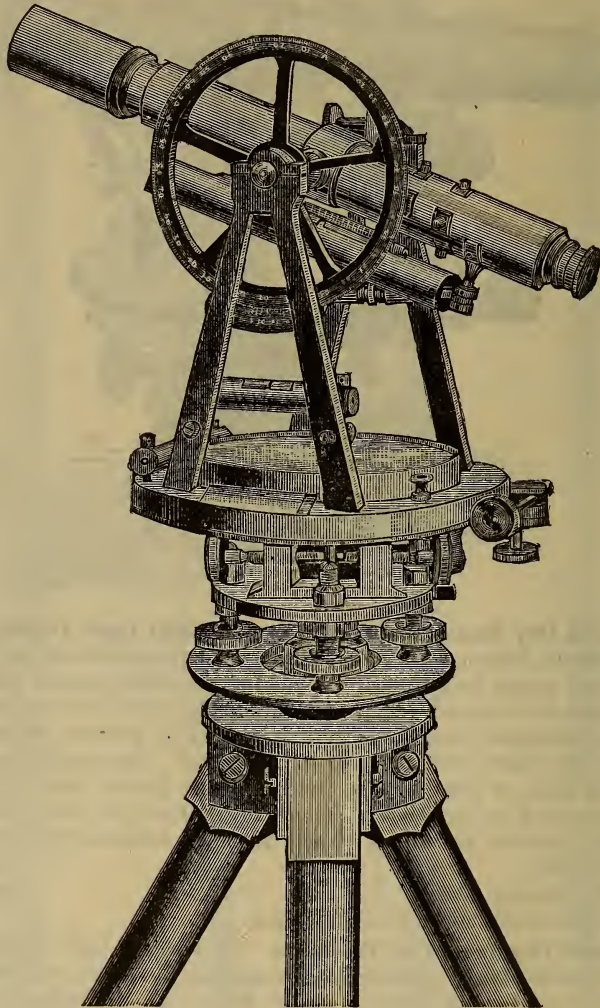
9800. Improved City Transit or Theodolite, with Right Angle Telescope.

Powerful Telescope 12 inches long, magnifying power 20 to 22 times, 4½ inch needle, long sensitive ground Bubble under telescope with tangent screw, adjustable brace attached to object end of telescope, 7 inch horizontal limb, reversible axis, divided on silver to 20 minutes with double vernier reading to 20 seconds. The standards are not as high as those of other transits, which greatly adds to the steadiness of the instrument. Complete, in Mahogany Case, with Strap, including Plumb Bob, Magnifying Glass, Adjusting Pins, etc., and Tripod.....each, \$325.00  
 With Shifting Centre .....extra, 10.00  
 Reflecting Shades for mining purposes..... “ 8.00

9805. Improved City Transit or Theodolite. (Style similar to No. 9800.)

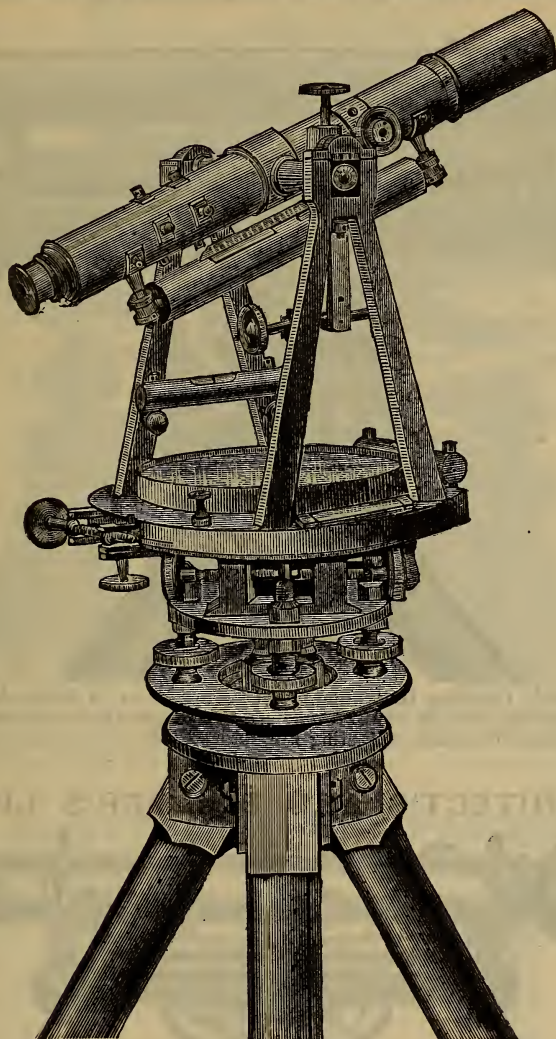
Powerful telescope 12 inches long, magnifying power 20 to 22 times, 4½ inch needle, long sensitive ground Bubble under telescope with tangent screw, adjustable brace attached to object end of telescope, 7 inch horizontal limb, reversible axis, divided on silver to 20 minutes, with double vernier reading to 20 seconds. The standards are not so high as those of other transits, which greatly adds to the steadiness of the instrument. Complete, in Mahogany Case, with Strap, including Plumb Bob, Magnifying Glass, Adjusting Pins, etc., and Tripod .....each, \$275.00  
 With Shifting Centre .....extra, 10.00  
 Reflecting Shades for mining purposes..... “ 8.00

## SURVEYING INSTRUMENTS,

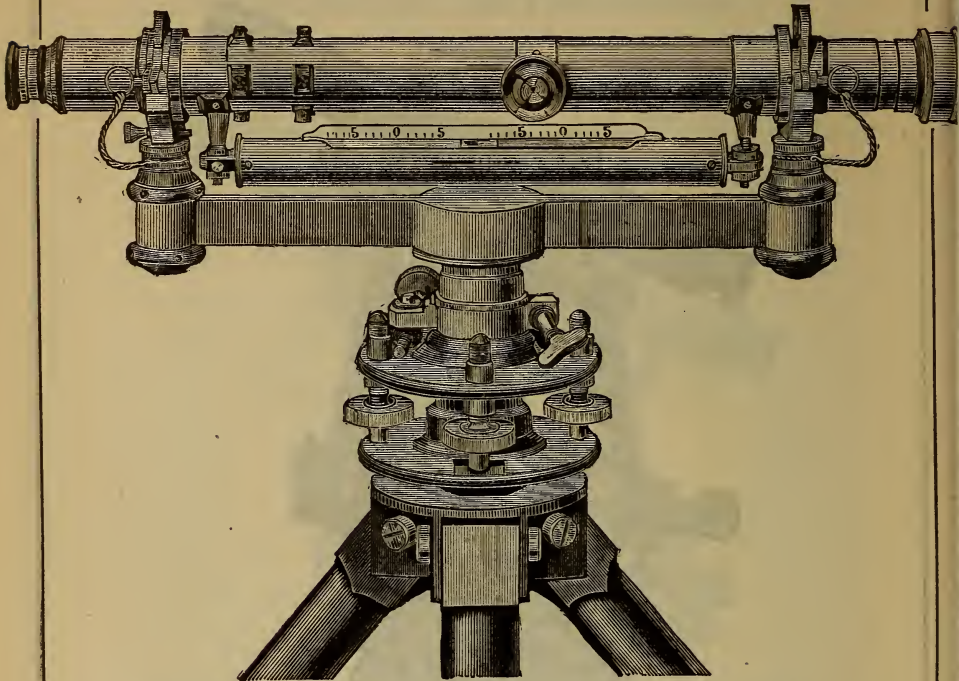
*Continued.*

9810. **Engineer's or Surveyor's Transit**, Telescope 11 to 12 inches long, magnifying power 18 times, horizontal limb 6 inch diameter, divided to 20 minutes, double vernier reading to 30 seconds,  $4\frac{1}{2}$  inch needle, long sensitive level to telescope with clamp and tangent attachment, 5 inch vertical circle reading to 1 minute. Complete in Mahogany Box, with Strap, including Plumb Bob, Magnifying Glass, Adjusting Pins, etc., and Tripod . . . . . each, \$230.00  
 Shifting Centre . . . . . extra, 10.00



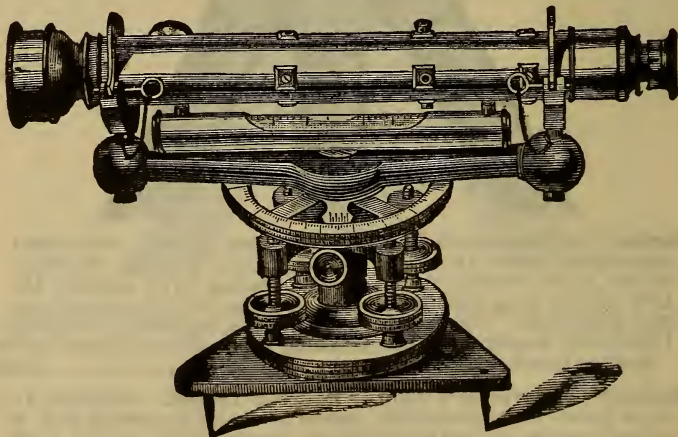
SURVEYING INSTRUMENTS (*continued*).

9814. **Engineer's or Surveyor's Transit.** Telescope, 11 to 12 inches long; magnifying power, 18 times; horizontal limb, 6 inches diameter, divided to 20 minutes; double vernier, reading to 30 seconds;  $4\frac{1}{2}$  inch needle; long, sensitive level to telescope, with clamp and tangent attachment. Complete in Mahogany Box, with Strap, including Plumb Bob, Magnifying Glass, Adjusting Pins, etc., and Tripod . . . each, \$210.00  
Shifting Centre . . . . . extra, 10.00
9818. **Engineer's or Surveyor's Plain or Railroad Transit.** Telescope, 11 to 12 inches long; magnifying, power 18 times; horizontal limb, 6 inches diameter, divided to 20 minutes; double vernier, reading to 30 seconds;  $4\frac{1}{2}$  inch needle. Complete in Mahogany Box, with Strap, including Plumb Bob, Magnifying Glass, Adjusting Pins, etc., and Tripod . . . . . each, \$185.00  
Shifting Centre . . . . . extra, 10.00

SURVEYING INSTRUMENTS (*continued*).

9824. **Engineer's Leveling Instrument.** Telescope 18 to 20 inches long, magnifying power 22 times. Complete, in Mahogany Box, with Strap, including Sun Shade, Adjusting Pin, and Tripod ..... each, \$130.00

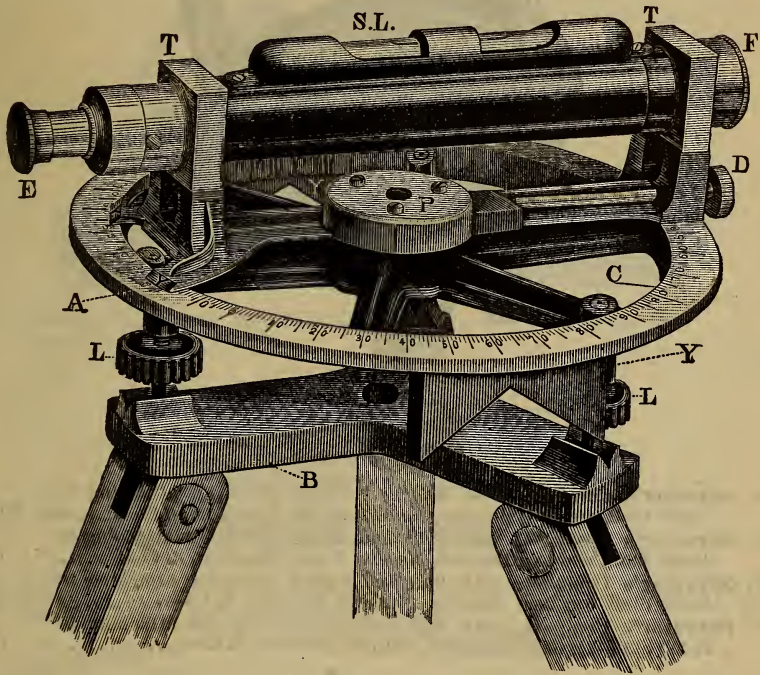
## ARCHITECT'S AND BUILDER'S LEVEL.



9830. **Architect's and Builder's Level, with divided Circle.** This instrument is light in weight and convenient in shape for easy transportation. The construction is on the principle of a regular surveying instrument. Complete, in Box, including Plumb Bob and Tripod...each, \$45.00

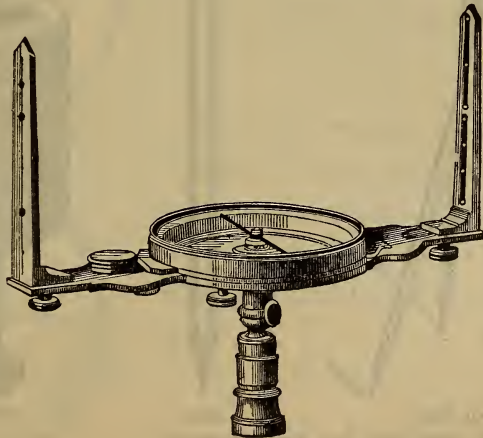


BUILDER'S LEVEL.



9840. **Builder's Level**, very strong construction, with large divided circle. A servicable instrument for general use. Complete, in Wooden Box, including Plumb Bob and Tripod.....each, \$38.00

SURVEYORS' COMPASSES.

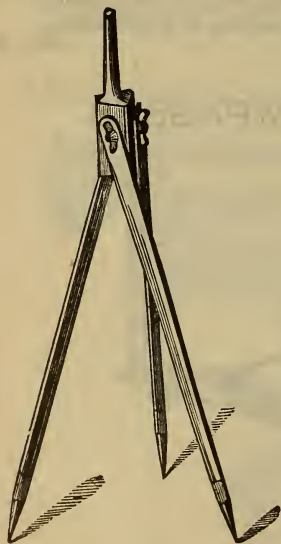


9900. **Surveyor's Compass**, with double Sights, two Bubbles, Ball and Socket Joint, with Jacob Staff Mountings, 5-inch Needle, in Case.....each, \$35.00





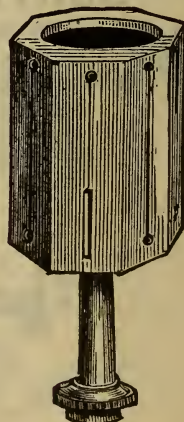
- 9920. Surveyor's Compass, with Ball and Socket Joint for attaching to Jacob Staff, and two Bubbles, Needle 4-inch diameter, in Case....each, \$17.00
- 9924. Surveyor's Compass, with Ball and Socket Joint for attaching to Jacob Staff, and two Bubbles, Needle 3-inch diameter, in Case..... " 14.50
- 9928. Surveyor's Compass, with Ball and Socket Joint for attaching to Jacob Staff, 3½-inch diameter, without Bubbles, in Case..... " 13.75
- 9932. Surveyor's Compass, with Ball and Socket Joint for attaching to Jacob Staff, 2½-inch diameter, without Bubbles, in Case..... " 11.50



No. 9950.



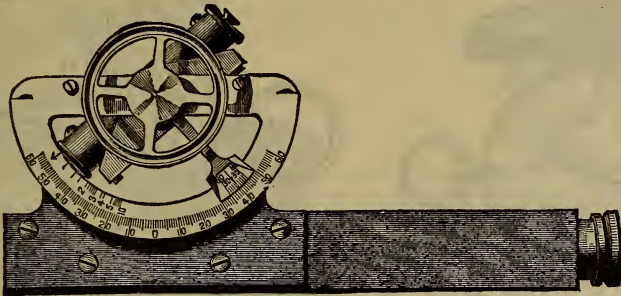
9960.



9970.

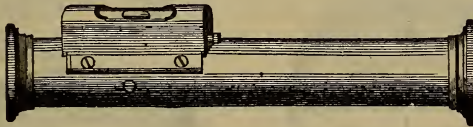
- 9950. Tripod, with Jacob Staff Top, for Compasses.....each, \$3.00
- 9960. Jacob Staff, with metal foot..... " 1.00
- 9970. Surveyor's Cross, for Jacob Staff, in Case..... " 3.00

### ABNEY'S HAND LEVEL AND CLINOMETER.



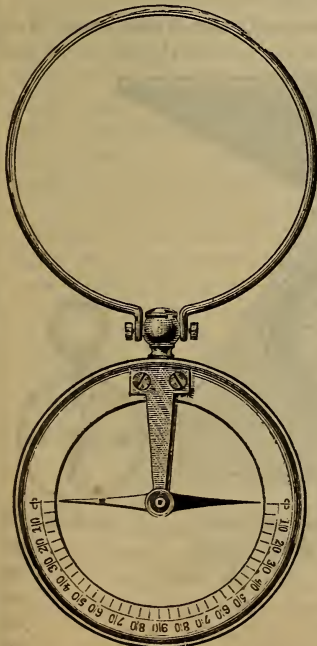
10,000. Abney's Reflecting Hand Level and Clinometer, with divided arc to show angles,.....In Case, each, \$15.00

### LOCKE'S HAND LEVELS.



10,020. Locke's Hand Level, with Reflector, White Metal.....In Case, \$10.00  
10,040. Locke's Hand Level, with Reflector, Brass ..... " 9.00  
These are also made in cheaper grades.

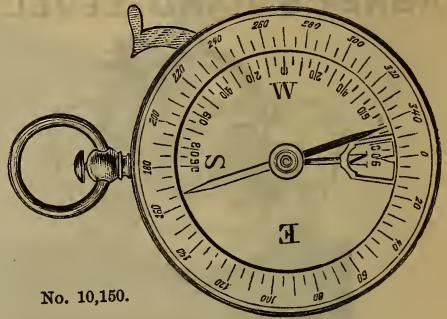
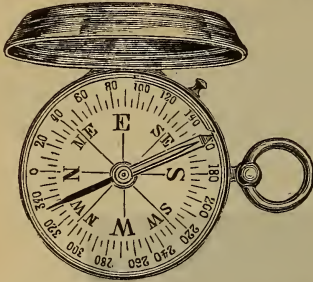
### MINER'S DIPPING NEEDLE AND COMPASS.



For tracing iron ore. Consists of a needle mounted in a metal ring, graduated to degrees, and having glass on top and bottom. When used for tracing ore, the prospector should hold the ring, and keep the needle pointing north and south.

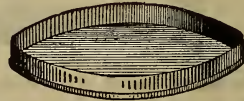
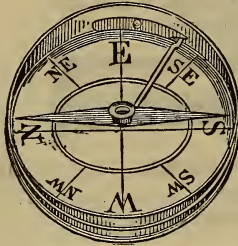
10,100. Miner's Dipping Needle. Complete, with Stop .....In Case, each, \$12.00

POCKET COMPASSES.

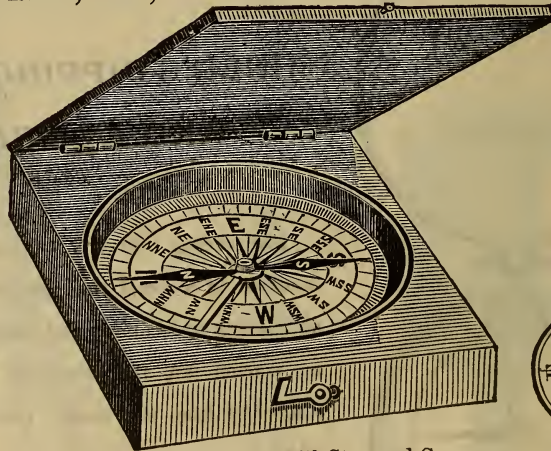


No. 10,150.

- 10,120. Compass, Gilt, Hunting Case Watch Pattern, with Stop, Metal Dial, Jeweled Centre, 2 inches..... each, \$6.50
- 10,140. Compass, Nickel Plated, Hunting Case Watch Pattern, with Stop, Metal Dial, Jeweled Centre, 1¾ inches..... “ 3.75
- 10,150. Compass, with Clinometer and Pendulum, 2½ inches..... “ 5.50



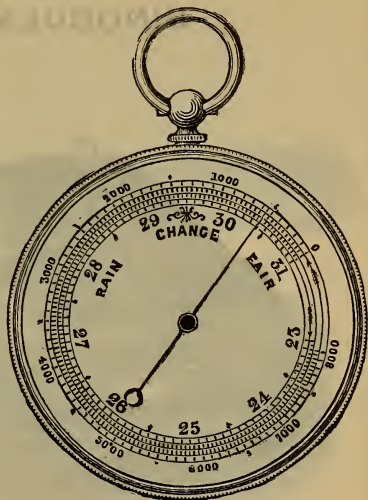
- 10,160. Compass, Round, Brass, Slip Cover, Stop, Jeweled Centre, 2 inch, each, \$2.25
- 10,162. Compass, Round, Brass, “ “ “ “ “ 1½ “ “ 1.75



- 10,180. Compass, Square, Mahogany Case, with Stop and Cover.....each, \$1.00
- 10,200. Compass, Watch Pattern, Brass, Jeweled Centre, 2 inch..... “ 1.25
- 10,202. Compass, Watch Pattern, Brass, “ “ 1½ inch..... “ 1.00
- 10,220. Compass, Watch Pattern, Brass, 2 inch..... “ .80
- 10,222. Compass, Watch Pattern, Brass, 1½ inch..... “ .60
- 10,260. Compass, Round, Brass, 2 inch..... “ .60
- 10,262. Compass, Round, Brass, 1½ inch..... “ .30



ANEROID BAROMETERS.



No. 10,350.

On account of its extreme sensitiveness, the slightest variations in gradients, levels, etc., are easily ascertained, and therefore this instrument is adapted for general mining and surveying. By a new arrangement, the scale of altitude can be subdivided by a vernier. The barometrical scale of inches has been made progressive so as to give the correct relative readings with the scale of altitudes.

For mining purposes the entire circle of the dial is graduated to represent 6 inches of the mercurial column, *i. e.*, from 27 inches to 33. This scale will register about 2,000 feet below sea-level to 4,000 feet above; the finest divisions,  $\frac{1}{100}$ ths of the altitude scale, represent 10 feet measurements, which can be again subdivided by the vernier scale to single feet. The vernier scale is moved by a rack-work adjustment, and a magnifying lens which rotates on the outer circumference of the instrument facilitates the reading of minute quantities.

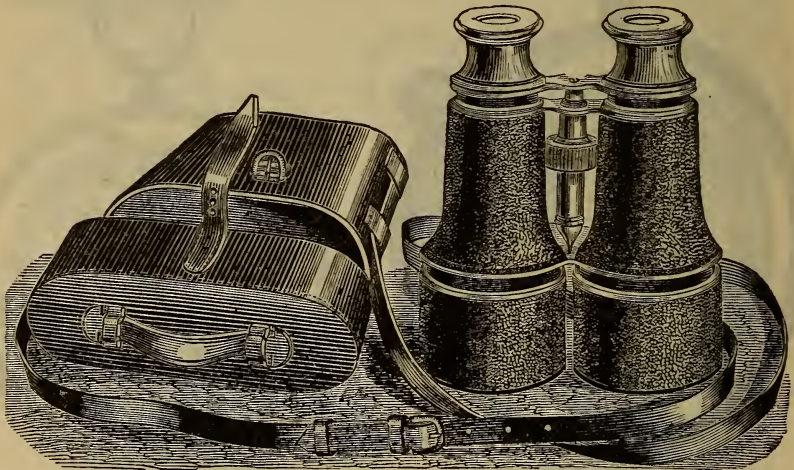
For surface surveying purposes only, not to be used below sea-level, the instrument is made with the scale divided from 25 to 31 inches, thus giving an altitude scale of 6,000 feet above sea-level only, and with this open scale and the assistance of the vernier, the same minute readings can be easily taken.

The instruments are also constructed for measuring greater altitudes, *i. e.*, 10,000, 15,000, or 20,000 feet, but with these scales the measurements cannot be made quite so minute as in the more open scales.

- 10,350. Mining and Surveying Aneroid Barometer, 5 inch diameter, silvered dial, raised rings for divisions, altitude 2,000 feet below and 4,000 feet above sea-level, with rack vernier scale reading to 1 foot and magnifying lens, in Leather Case.....each, \$50.00
- 10,380. Pocket Mountain Aneroid, 2½ inch, compensated for temperature, with ring altitude scale, 15,000 feet, in Case..... “ 24.00
- 10,400. Pocket Mountain Aneroid, 2 inch, with ring altitude scale 8,000 feet, in Case..... “ 16.00
- 10,421. Pocket Mountain Aneroid, 1¾ inches, metal case, altitude 8,000 feet, in Case..... “ 13.00

And various other sizes and styles.

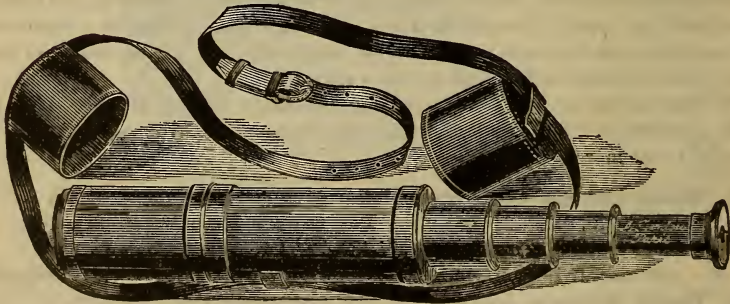
**FIELD AND MARINE GLASSES AND  
BINOCULAR TELESCOPES.**



- 10,500. **Field and Marine Glasses, Bronzed and covered with Leather, Sun Shade extending over Object Glasses, in strong Leather Case with straps** ..... each, \$33.00
- 10,510. **Field and Marine Glasses, with revolving eye-pieces. Suitable for Field, Marine or Theatre purposes. Bronzed and covered with Leather, in Case** ..... “ 24.00
- 10,540. **Binocular Telescopes, Bronzed and covered with Morocco, with jointed body, to adjust to distance between eyes, Sun Shade, in strong Leather Case, adapted for military and naval service.**..... “ 42.00

**TELESCOPES,**

**IN LEATHER-COVERED BODY.**



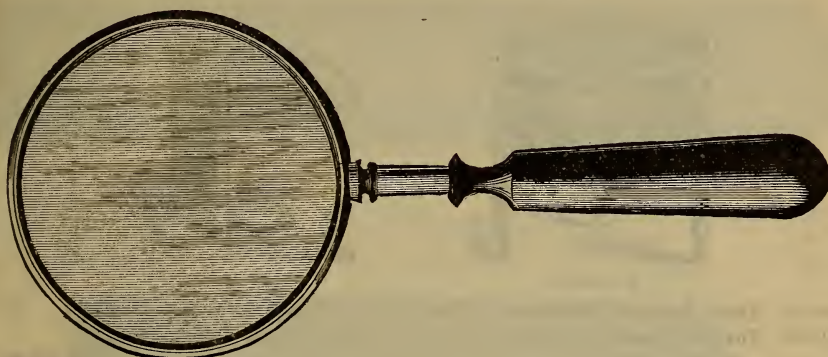
- 10,600. **Telescope in Leather Covered Body, with strap and caps, opens to 33 inches, closes to 11 inches. Power, 35 times.**..... each, \$26.00
- 10,620. **Telescope in Leather Covered Body, with straps and caps, opens to 17 inches, closes to 6 inches. Power, 20 times** ..... “ 11.00

**TRIPOD FOR TELESCOPES.**

- 10,640. **Tripod for Telescopes**..... “ 5.00

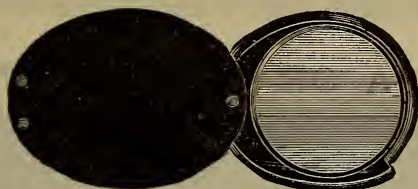


MAGNIFYING GLASSES.



10,700. Reading Glasses, German Silver Ring, Ebony Handle, Best Quality.

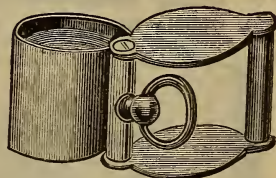
	5	4½	4	3½	3	2½	2	1½-inch.
Each,	\$5.00	4.00	3.50	3.00	2.50	1.75	1.00	.75



10,730. Oval Pocket Magnifying Glasses,	Rubber Case, 2	inch,	2	Lenses, each,	\$2.20	
10,734. Oval Pocket Magnifying Glasses,	"	1½	"	2	"	1.50
10,738. Oval Pocket Magnifying Glasses,	"	1¼	"	2	"	1.00
10,742. Oval Pocket Magnifying Glasses,	"	1	"	2	"	.70
10,750. Oval Pocket Magnifying Glasses,	"	2	"	1	Lense,	1.12
10,754. Oval Pocket Magnifying Glasses,	"	1½	"	1	"	.60
10,758. Oval Pocket Magnifying Glasses,	"	1¼	"	1	"	.50
10,762. Oval Pocket Magnifying Glasses,	"	1	"	1	"	.35



No. 10,850.

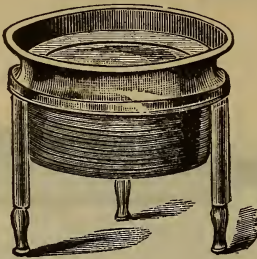


10,860.

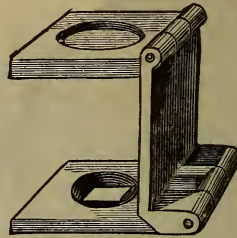
10,850. Coddington Magnifier, with Handle,	1½	inch,	\$3.25	; 1	inch	.....	each,	\$2.00
10,860. Coddington Magnifier, in Plated Folding Case with Ring,	1½	inch,	\$3.75	; 1	inch	.....	"	2.75
10,870. Coddington Magnifier, with twisted handle, White Metal,	½	inch.	"				"	1.50



MAGNIFYING GLASSES (continued).



No. 10,875.



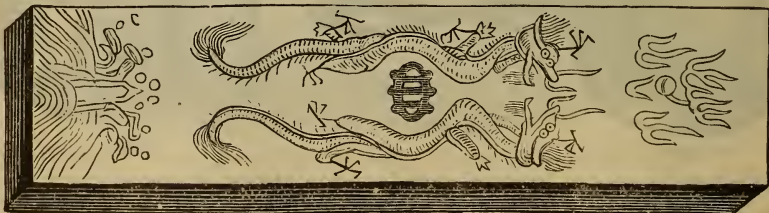
10,880-10,888.

- 10,875. Three Legged Microscope, adjustable to Focus, Brass.....each, .75
- 10,880. Thread Counter, Brass, for Linen, Cotton, Silk, Burlap, etc.,  
Extra Large..... " \$2.00
- 10,884. Thread Counter, Brass, for Linen, Cotton, Silk, Burlap, etc.,  
Medium..... " 1.25
- 10,888. Thread Counter, Brass, for Linen, Cotton, Silk, Burlap, etc.,  
Small..... " 50

INDIA OR CHINESE INK.



- 11,150. Oblong Black, 4 inch, ornamental figures.....each, \$10.00
- 11,160. Oblong Black, 4 " black and gilt figures..... " 7 00
- 11,170. Oblong Black, 4 " various black lettering and figures..... " 5.00



No. 11,180. 11,184.

- 11,180. "Double Golden Dragon," Fine Gilt.....each, \$5.00
- 11,184. "Double Golden Dragon," Second Grade Gilt..... " 2.00

INDIA OR CHINESE INK (continued).



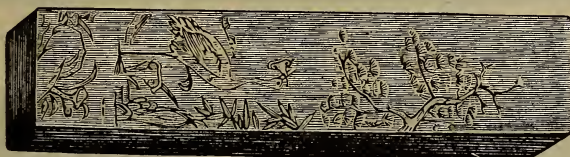
No. 11,190.

- 11,190. Hexagon, Soft and Black,  $4\frac{1}{2}$  inches..... each, \$3.00  
 11,194. Hexagon, “ “ 2 “ very small, extra quality..... “ 1.00  
 11,198. Hexagon, “ “  $1\frac{1}{2}$  “ Miniature, “ “ ..... “ .60



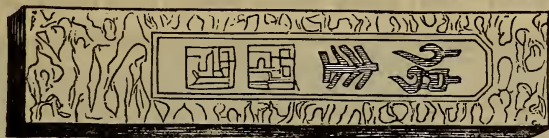
No. 11,210.

- 11,210. “CHINESE VASE,” Oblong Black,  $3\frac{1}{2}$  inch.....each, \$3.00



No. 11,220.

- 11,220. “GOLDEN STORK,”  $2\frac{7}{8}$  inch, Gilt, Extra Quality.... each, \$3.00



No. 11,230.

- 11,230. Oblong Gilt,  $2\frac{7}{8}$  inch, Fine Quality..... each, \$2.25  
 11,234. Oblong Gilt,  $2\frac{7}{8}$  “ Second Grade ..... “ 1.50

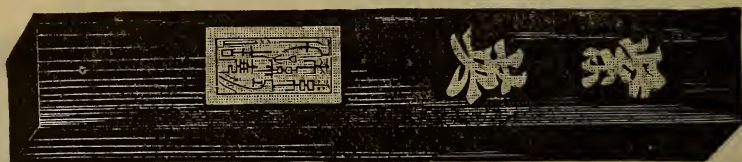


No. 11,240.

- 11,240. OBLONG BLACK, with Pearl,  $2\frac{7}{8}$  inch, Fine Quality..... each, \$2.25



INDIA OR CHINESE INK (continued).



No. 11,250.

11,250. OBLONG POLISHED, Large,  $3\frac{5}{8}$  inch..... (List Price, \$1.67)..each, \$1.50



No. 11,254.

11,254. OBLONG POLISHED, Small,  $2\frac{7}{8}$  inch.....(List Price, \$ .85)..each, \$ .75



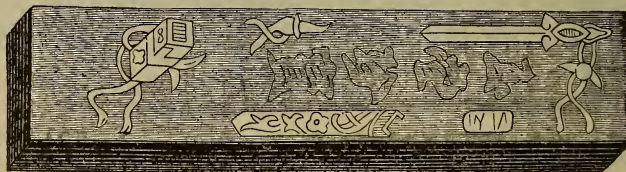
No. 11,260.

11,260. "ELEPHANT" INK, Large, Oblong Black .....each, \$1.75



No. 11,264.

11,264. "ELEPHANT" INK, Small, Oblong Black....(List Price, \$1.12)..each, \$1 00



No. 11,280.

11,280. Gilt "Sword" Ink,  $3\frac{1}{8}$  inch, Oblong, Black, with figures..... each, \$1 50



11,290. Single Dragon,  $2\frac{5}{8}$  inch, Black, Gilt Figures, extra quality..... each, \$1.50

11,294. Single Dragon,  $2\frac{5}{8}$  " all Gilt, second grade..... " .60



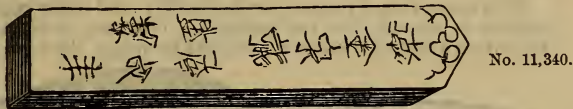
INDIA OR CHINESE INK (continued).



11,320. Lion Head, Black, Oval, Polished, 3 inch.....each, .50



11,330. Square, Black, Gilt Figures, 2 1/8 inch.....each, .50



11,340. Pointed, Gilt, 2 1/4 inch, with Figures ....each, .40



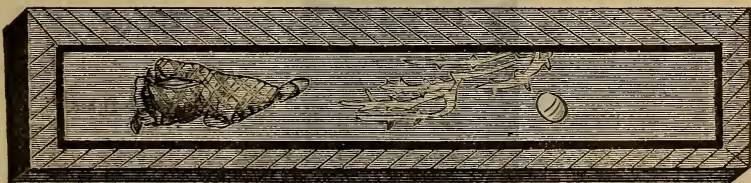
11,350. Lion Head, Black, Oval, Polished, 2 1/2 inch.....each, .25



11,400.	BLUE CHINESE INK	.....(List Price, \$ .85) ..	each,	.75
11,404.	RED	“ “ “ “ “ “ “ “	“ ..	.75
11,408.	BROWN	“ “ “ “ “ “ “ “	“ ..	.75
11,412.	YELLOW	“ “ “ “ “ “ “ “	“ ..	.75
11,416.	GREEN	“ “ “ “ “ “ “ “	“ ..	.75
11,420.	WHITE	“ “ “ “ “ “ “ “	“ ..	.75

JAPANESE INK.

The Japanese Inks are not always made of the same patterns, which are varied from time to time by the makers.

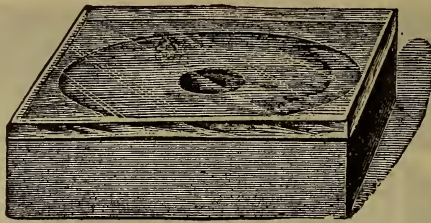


Japanese Ink is harder than the Chinese. For this reason a line drawn with it can be washed over with color, without blurring.

11,450.	Oblong, Black, Best Quality, Large	.....each,	\$3.00
11,454.	Oblong, Black, Best Quality, Medium	“ “	2.00
11,458.	Oblong, Black, Best Quality, Small	“ “	1.00

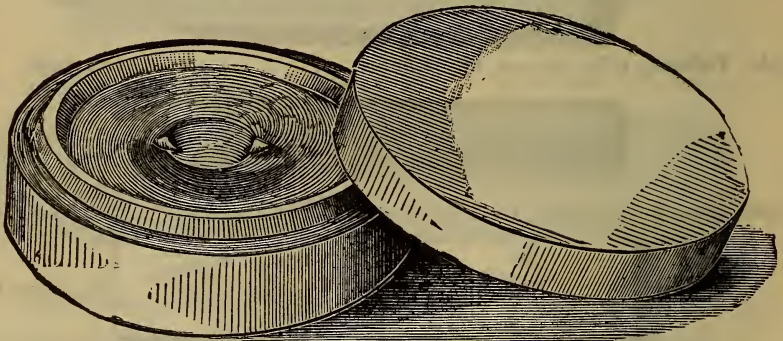
MANY OTHER GRADES KEPT IN STOCK.

INK AND COLOR SLABS.

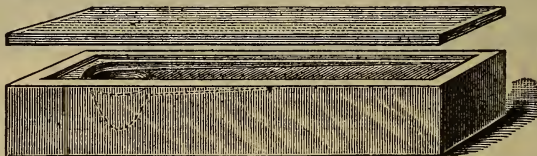


- 11,500. Slate Ink Stone, 5 inch, with heavy glass cover.....each, .75
- 11,504. Slate Ink Stone, 3½ “ “ “ “ ..... “ .50

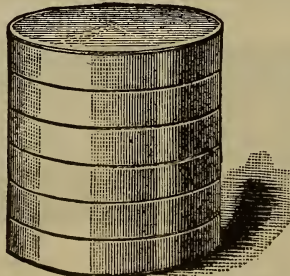
With these stones the ink can be quickly and uniformly ground. The slate surface is smooth, but not polished. The deep well in the centre gathers the ink and makes it more convenient for filling the pen.



- 11,510. Round White Glass Ink Slab, with cover.....each, .50



- 11,520. Patent Ink Slab, with cover, 2⅛×5½ inches.....each, .60
- 11,522. Patent Ink Slab, with cover, 1¾×4½ “ ..... “ .50



Nos 11,540-11,546.

- 11,540. Nests of Cabinet Saucers, 3¾ inches, 6 in Nest.....each, \$1.00
- 11,542. Nests of Cabinet Saucers, 3¼ “ 6 “ ..... “ .80
- 11,544. Nests of Cabinet Saucers, 2⅝ “ 6 “ ..... “ .70
- 11,546. Nests of Cabinet Saucers, 2⅜ “ 6 “ ..... “ .60

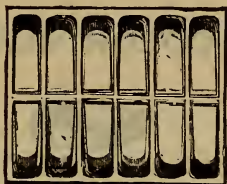


INK AND COLOR

SLABS (continued).



No. 11,566.

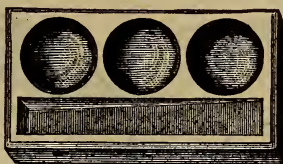


11,560.



11,572.

11,560. Slanting Tiles,	12 divisions,	6 × 7 <sup>5</sup> / <sub>8</sub> inches	.....	each,	\$1.20
11,562. Slanting Tiles,	10 "	6 × 7 <sup>5</sup> / <sub>8</sub> "	.....	"	1.00
11,564. Slanting Tiles,	8 "	6 × 7 <sup>5</sup> / <sub>8</sub> "	.....	"	.70
11,566. Slanting Tiles,	6 "	3 <sup>1</sup> / <sub>8</sub> × 7 <sup>3</sup> / <sub>4</sub> "	.....	"	.55
11,568. Slanting Tiles,	5 "	3 <sup>1</sup> / <sub>8</sub> × 7 <sup>3</sup> / <sub>4</sub> "	.....	"	.45
11,570. Slanting Tiles,	4 "	3 <sup>1</sup> / <sub>8</sub> × 7 <sup>3</sup> / <sub>4</sub> "	.....	"	.35
11,572. Slanting Tiles,	3 "	2 <sup>1</sup> / <sub>4</sub> × 4 "	.....	"	.20



11,590. Ink or Color Slab,	3 Wells and Slant,	3 × 4 <sup>1</sup> / <sub>2</sub> inches	.....	each,	.35
11,592. Ink or Color Slab,	3 "	" 2 <sup>3</sup> / <sub>4</sub> × 4 <sup>1</sup> / <sub>4</sub> "	.....	"	.30
11,594. Ink or Color Slab,	3 "	" 2 <sup>3</sup> / <sub>8</sub> × 3 <sup>5</sup> / <sub>8</sub> "	.....	"	.25
11,596. Ink or Color Slab,	3 "	" 1 <sup>1</sup> / <sub>2</sub> × 2 <sup>3</sup> / <sub>4</sub> "	.....	"	.15



No. 11,610.

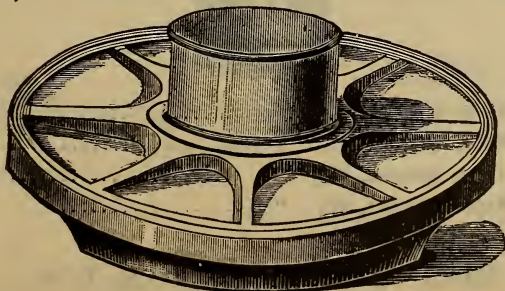


No. 11,614.

11,610. Ink or Color Slab,	5 Wells and 5 Slants,	4 × 7 <sup>5</sup> / <sub>8</sub> inches	.....	each,	.70
11,614. Ink or Color Slab,	3 " 3 " 2 <sup>1</sup> / <sub>2</sub> × 4 "	.....	"	"	.25



11,620. Box Slab,	5 divisions,	2 <sup>3</sup> / <sub>8</sub> × 6 inches	.....	each,	.35
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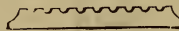
11,630. Architect's Slant and Basin,	8 divisions, and Cup	.....	each,	\$1.35
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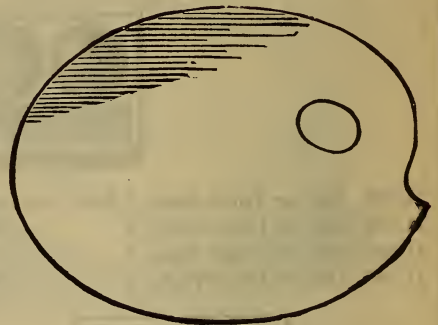
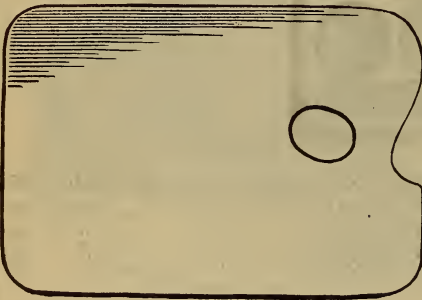
INK AND COLOR SLABS (continued).



11,640. China Color Cups.						
	3½	3	2½	2	1¾	1½ inch.
Each,	.22	.18	.14	.10	.07	.05
11,660. Deep China Cups, with Cover.						
Each,		.25 large.		.22 medium.		.18 small.



11,670. China Brush Rest.....each, .15



11,680. China Palettes, Oblong or Oval.						
	10	9	8	7	6	5
Each,	.70	.60	.50	.40	.35	.30
						4 inch.
						.25

WATER GLASSES,

With Lips, to Clean and Dry Brushes.



11,690. Artists' Water Glasses, 4¼ inches.....each,	.45
11,692. Artists' Water Glasses, 3¾ “ .....	“ .35
11,694. Artists' Water Glasses, 3¼ “ .....	“ .25
11,696. Artists' Water Glasses, 2¾ “ .....	“ .15

SPONGE CUPS. (See No. 19,440.)

Other China Ware furnished at short notice.

## TESTIMONIALS.

The following Testimonials are furnished by the manufacturers of Turck's Inks, and published with their permission:

CHICAGO, March 2d, 1885.

We, the architects of the City of Chicago, use Turck's Diamond Drafting Inks and Colors, and recommend their use to the Architectural Profession:

W. W. BOYNTON,  
HENRY LORD GAY,  
J. M. VAN OSDELL & CO.  
E. BAUMAN,  
EDBROOK & BURNHAM,

WHEELOCK CLAY,  
A. M. F. COLTON,  
BURNHAM & ROOT,  
ADLER & SULLIVAN,  
JOHN C. COCHRAN,

JAMES J. EGAN,  
BAUER & HILL,  
TREAT & FOLZ,  
L. B. DIXON,  
(And many others).

Office of the City Civil Engineer, }  
CLEVELAND, Oct. 2d, 1883. }

F. B. TURCK, Esq.

*Dear Sir:* I am very much pleased with your Waterproof Drafting Ink and Colors; they are the finest and best materials for drafting and coloring that I have ever used.

Yours truly,  
B. F. MORSE,  
City Civil Engineer.

Messrs. F. B. TURCK & Co.

*Gentlemen:* I like your Drafting Ink. I have used your brand "8B" some time, and like it the best of any India Ink I have tried. You may use this letter as a recommendation.

Very respectfully yours,

THOMAS DREW STETSON,  
Patent Solicitor and Mechanical Expert, New York.

F. B. TURCK, Esq.

Office of J. B. LEGG, Architect,  
St. Louis, July 15th, 1884.

*Dear Sir:* I have been using Turck's Drafting Inks in my business, and I am pleased to state that I find them fully satisfactory in every particular.—they being entirely waterproof, of deep brilliant colors, and flow smooth and evenly, and besides they are always ready for use, save much time, and are far cheaper than cakes.

Respectfully,  
J. B. LEGG.

FENTON B. TURCK, Esq.

St. Louis, July 9th, 1884.

*Dear Sir:* We use your Drafting Inks and Colors in preference to any in the market. Your inks and colors being ready for use, and waterproof, are superior for making finer work and saving time.

Respectfully yours,

GEO. J. BARNETT & SON.

F. B. TURCK, Esq.

Office of E. E. MYERS, Architect,  
DETROIT, MICH., Aug. 1st, 1883.

*Dear Sir:* We have been using your Drafting Inks and Colors, which excel all others for drafting purposes. This is a boon to the profession.

Very truly yours,  
E. E. MYERS.

F. B. TURCK, Esq.

Office of JAMES FRERET, Architect,  
NEW ORLEANS, LA., April 14th, 1884.

*Dear Sir:* We use your Waterproof Liquid Indian Ink, and find it very convenient as being ready liquid and waterproof—allowing the colors being run over the lines without spreading.

Yours truly,

JAS. FRERET.

See Testimonials on previous page.

## CABINET OF TURCK'S DRAFTING INKS.



The above cut represents the style of Cabinet, No. 11,820. Price \$10.00.

SOLD AT MANUFACTURER'S PRICES.

- 11,820. Cabinet No. 5 (see Illustration), containing one Extra Large Bottle each: Indelible Black, Indelible Carmine, Indelible Blue, Indelible Green, Indelible Yellow, Indelible Orange. Not Indelible Burnt Sienna, for Coloring, and Not Indelible "8B" Black, for Tracing Cloth and for general use..... each, \$10.00

### SEPARATE BOTTLES OF INKS OF ABOVE SIZE.

- 11,832. Indelible Black, Not Indelible "8B" Black, for Tracing Cloth and for general use, extra large size ..... each bottle, 2 00
- 11,833. Indelible Carmine, Indelible Blue, extra large size ..... " " 1 75
- 11,834. Indelible Green, Indelible Yellow, Indelible Orange, Not Indelible Burnt Sienna, for Coloring, extra large size ..... each bottle, 1 50

For other sizes, see next page.



**“CRYSTALLINE” INK,  
FOR WRITING AND DRAWING ON BLUE PRINTS.**

This Ink contains no acid injurious to steel pens; it has the consistency of India Ink, and flows evenly.



- 11,815. “Crystalline” Ink, White or Red.  
Neat, Polished Partitioned Box, containing 12 bottles, each, \$1.90  
Neat, Polished Partitioned Box, containing 6 bottles, each, 1.00  
Bottle (List Price, 17c.) .15

**TURCK’S DIAMOND DRAFTING INKS.**

SOLD AT MANUFACTURER’S PRICES.

**STRONG PARTITIONED CABINETS covered with LEATHER.**

- 11,820. Cabinet No. 5, containing *one Extra Large Bottle each*: Indelible Black, Indelible Carmine, Indelible Blue, Indelible Green, Indelible Yellow, Indelible Orange. Not Indelible Bt. Sienna for coloring, and Not Indelible “8B” Black for Tracing Cloth and general use each, \$10.00  
11,823. Cabinet No. 2, containing *one Medium-size Bottle each*: Indelible Black, Indelible Carmine, Indelible Blue, Indelible Green, Indelible Yellow, Indelible Orange. Not Indelible Bt. Sienna for Coloring, and Not Indelible “8B” Black for Tracing Cloth and for general use . “ 4.00  
11,824. Cabinet No. 1, containing *one small Bottle each*: Indelible Black, Indelible Carmine, Indelible Blue, Indelible Green, Indelible Yellow, Indelible Orange. Not Indelible Bt. Sienna for Coloring, and Not Indelible “8B” Black for Tracing Cloth and for general use.. “ 2.50

**SEPARATE BOTTLES OF TURCK’S INKS.**

- 11,830. Indelible Black, Mammoth size..... each Bottle, \$3.50  
11,832. Indelible Black, Not Indelible “8B” Black for Tracing Cloth and for general use, extra large size..... “ 2.00  
11,833. Indelible Carmine, Indelible Blue, extra large size..... “ 1.75  
11,834. Indelible Green, Indelible Yellow, Indelible Orange, Not Indelible Burnt Sienna, extra large size..... “ 1.50  
11,836. Indelible Black, Indelible Carmine, Indelible Blue, Indelible Green, Indelible Yellow, Indelible Orange. Not Indelible Burnt Sienna for coloring, Not Indelible “8B” Black for Tracing Cloth and for general use, medium size..... “ .50  
11,838. Indelible Black, Indelible Carmine, Indelible Blue, Indelible Green, Indelible Yellow, Indelible Orange. Not Indelible Burnt Sienna for coloring, Not Indelible “8B” Black for Tracing Cloth and general use, small size..... “ .25

**FRENCH INDELIBLE BLACK DRAWING INK.**

- 11,846. French Indel. Black, Package cont’g 1 doz. bottles. (List Price, \$3.60) 3.00  
Bottle..... ( “ “ .30) .25

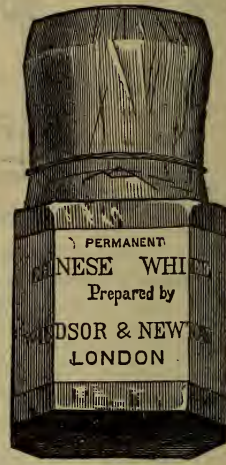
HIGGINS'S LIQUID DRAWING INKS.

11,850. Higgins's Drawing Inks, Waterproof, and General. Box of  
 1 doz.....\$3.00. Bottle, .25

WINSOR & NEWTON'S LIQUID COLORS.



No. 11,870.



11,872

11,860.	Winsor & Newton's	Liquid Carmine.....	each,	.40
11,862.	“	“ Liquid Indelible Brown Ink.....	“	.40
11,864.	“	“ Liquid Prout's Brown.....	“	.40
11,866.	“	“ Liquid Sepia.....	“	.40
11,868.	“	“ Liquid Gold Ink.....	“	.40
11,869.	“	“ Liquid Silver Ink.....	“	.40
11,870.	“	“ Liquid Indian Ink.....	“	.35
11,872.	“	“ Liquid Chinese White.....	“	.35
11,874.	“	“ Liquid Prussian Blue.....	“	.35
11,876.	“	“ Liquid Oxgall.....	“	.35
11,880.	“	“ Liquid Water Color Megilp.....	“	.35
11,882.	“	“ Liquid Water Mat Gold Size.....	“	.35
11,884.	“	“ Liquid Gum Water.....	“	.35
11,886.	“	“ Pots of Oxgall.....	“	.25
11,888.	Schoenfeld's	Liquid Chinese White.....	“	.35
11,892.	Rowney's	Liquid Chinese White.....	“	.35
11,896.	“Imperial”	Liquid Chinese White.....	“	.30

E. G. SOLTSMANN.

No. 11900.

**"VICTOR"**

(Registered Trade Mark.)

**LIQUID INDELIBLE BLACK  
DRAWING INK.**



FULL SIZE OF WIDE NECK BOTTLE.

A line drawn with this Ink will not blur when washed over with water color or water.

Neat, polished, partitioned box, containing 1 dozen bottles.....	\$3.00
“ “ “ “ “ 4 bottles .....	1.00
Bottle .....	.25



No. 12250.

“ FLORENCE ”

MOIST WATER COLORS.

FOR DETAILS, TRACING CLOTH, ETC.

IN GLASS JARS, WITH METAL SCREW CAPS.



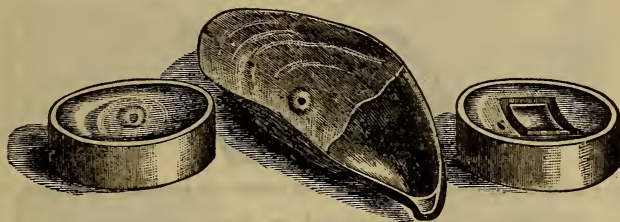
FULL SIZE OF DOUBLE JAR.



FULL SIZE OF SINGLE JAR.

- |                                               |                                               |                |            |
|-----------------------------------------------|-----------------------------------------------|----------------|------------|
| 300. Antwerp Blue                             | 322. Ivory Black                              | } Double Jars, |            |
| 307. Burnt Sienna                             | 325. Light Red                                |                | Each, 40c. |
| 308. Burnt Umber                              | 332. Prussian Blue                            | } Single Jars, |            |
| 309. Chinese White                            | 335. Raw Umber                                |                | Each, 22c. |
| 310. Chrome Yellow                            | 342. Vandyke Brown                            |                |            |
| 314. Emerald Green                            | 343. Venetian Red                             |                |            |
| 319. Indian Red                               | 346. Yellow Ochre.                            |                |            |
| 362. Scarlet Lake.....Single Jars, each, 40c. | 369. Cobalt Blue .....Single Jars, each, 60c. |                |            |
| 380. Cadmium Yellow                           | 382. French Blue                              | } Single Jars, |            |
| 381. Carmine                                  | 391. Rose Madder                              |                | Each, 80c. |

GOLD AND SILVER SHELLS, CUPS, etc.



No. 11,930-11,940.

11,944. 11,948.

11,920. 11,924.

11,920.	Gold Cakes.....	each,	\$2.00
11,924.	Silver Cakes.....	"	.50
11,930.	Gold Cups, 1¼ inch diameter.....	"	.50
11,932.	Gold Cups, 1¼ " ".....	"	.25
11,934.	Gold Cups, 1 " ".....	"	.15
11,940.	Silver Cups, 1¼ " ".....	"	.15
11,944.	Gold Shells.....	"	.20
11,948.	Silver Shells.....	"	.10

GOLD AND SILVER PAINT.

11,956.	Williams' Liquid Gold Paint, Box containing Gold Paint, Brush, and Directions for Use.....	each,	\$1.00
11,960.	Williams' Liquid Silver Paint, Box containing Silver Paint, Brush, and Directions for Use.....	"	.75
11,964.	Ruby's Royal Gilding, Box containing Gilding, Brush, and Directions for Use.....	"	.50



MARSCHING'S

FRENCH GOLD PAINT

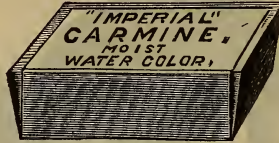
FOR ALL ORNAMENTAL GILDING

AND

DECORATIVE PURPOSES.

11,970.	Marsching's Gold Paint and Liquid.....	Set of 2 Bottles,	.75
11,974.	" Gold Paint, without Liquid.....	Bottle,	.50
11,976.	" Silver Paint, " ".....	"	.50
11,978.	" Liquid for Gold or Silver Paint.....	"	.25
11,982.	" Gold Paint and Liquid, small outfit in Box.....	each,	.50
11,986.	" Silver Paint and Liquid, small outfit in box.....	"	.50

# THE "IMPERIAL" MOIST WATER COLORS.



These Colors are of good quality, and will answer all purposes for general use.

Colors can be ordered by their numbers.

## IN WHOLE PANS.

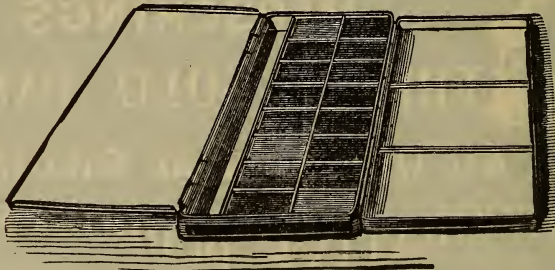
				Each.	
12,200.	207. Burnt Sienna	217. Hooker's Green, No. 1	234. Raw Sienna	} .20	
	208. Burnt Umber	218. Hooker's Green, No. 2	235. Raw Umber		
	209. Chinese White	219. Indian Red	242. Vandyke Brown		
	210. Chrome Yellow	224. Lamp Black	243. Venetian Red		
	212. Deep Chrome	225. Light Red	244. Vermilion		
	214. Emerald Green	228. New Blue	246. Yellow Ochre		
	216. Gamboge	232. Prussian Blue			
12,201.	252. Brown Madder	259. Purple Lake	264. Sepia		} .35
	256. Crimson Lake	262. Scarlet Lake			
12,202.	269. Cobalt Blue	270. Indian Yellow			} .45
12,203.	280. Cadmium Yellow	281. Carmine	282. French Blue		

## FILLED JAPANED TIN BOXES

OF

# "IMPERIAL" MOIST WATER COLORS

AND BRUSHES.



12,220.	Japanned Tin Box, containing 24 Colors, with Brushes	.....each,	\$10.00
12,222.	Japanned Tin Box, " 20 " " "	..... "	8.75
12,224.	Japanned Tin Box, " 16 " " "	..... "	7.25
12,226.	Japanned Tin Box, " 12 " " "	..... "	5.50
12,228.	Japanned Tin Box, " 10 " " "	..... "	4.50
12,230.	Japanned Tin Box, " 8 " " "	..... "	3.75
12,232.	Japanned Tin Box, " 6 " " "	..... "	3.00



WINSOR & NEWTON'S WATER COLORS.

Whole Cake.



Whole Pan.

Half Cake.



Half Pan.

**COLORS MARKED \* ARE NOT MADE MOIST.**

Colors can be ordered by their numbers.

Price List arranged according to Grades.

				Whole Cake or Pan.	Half Cake or Pan.
12,300.	100. Antwerp Blue	116. Gamboge	130. Orange Chrome	}	
	101. Bistre	117. Hooker's Green, No. 1	131. Payne's Grey		
	102. Blue Black		132. Prussian Blue		
	103. *British Ink	118. Hooker's Green, No. 2	133. Prussian Green		
	104. *Bronze		134. Raw Sienna		
	105. Brown Ochre	119. Indian Red	135. Raw Umber		
	106. Brown Pink	120. Indigo	137. *Red Lead		
	107. Burnt Sienna	121. Italian Pink	139. Roman Ochre		
	108. Burnt Umber	122. Ivory Black	140. Sap Green		
	109. Chinese White	123. *King's Yellow	141. Terre Verte		
	110. Chrome Yellow	124. Lamp Black	142. Vandyke Brown		
	111. Cologne Earth	125. Light Red	143. Venetian Red		
	112. Deep Chrome	126. Naples Yellow	144. Vermilion		
	113. *Dragon's Blood	127. Neutral Tint	145. Yellow Lake		
	114. Emerald Green	128. New Blue	146. Yellow Ochre		
	115. *Flake White	129. Olive Green		.25	15
12,301.	151. *Black Lead	156. Crimson Lake	161. Rubens Madder	}	
	152. Brown Madder	157. Mars Yellow	162. Scarlet Lake		
	153. Cerulean Blue	158. Neutral Orange	163. Scarlet Vermilion		
	154. *Chalons Brown	159. Purple Lake	164. Sepia		
	155. *Constant White	160. Roman Sepia	165. Warm Sepia		
12,302.	169. Cobalt Blue	171. Lemon Yellow	173. Violet Carmine	}	
	170. Indian Yellow	172. Orange Vermilion	174. Viridian		
12,303.	177. Aureolin	183. Gallstone	188. Pale Cadmium Yellow	}	
	178. Burnt Carmine	184. Green Oxide of Chromium	189. Pink Madder		
	179. Cadmium Orange	185. Indian Purple	190. Pure Scarlet		
	180. Cadmium Yellow	186. Intense Blue	191. Rose Madder		
	181. Carmine	187. Mars Orange			
	182. French Blue				
12,304.	194. *Field's Orange Vermilion	195. *MadderCarmine	197. Smalt	}	
		196. Purple Madder	198. Ultramarine Ash		
				.45	.25
				.65	.35
				.90	.45
				\$1.40	.70

PRICE LIST OF COLORS ALPHABETICALLY ARRANGED, see page 154.

PRICE LIST OF COLORS ARRANGED ACCORDING TO TINTS, see page 155.

## WINSOR &amp; NEWTON'S WATER COLORS.

## ALPHABETICALLY ARRANGED

TO FACILITATE FINDING PRICE OF ANY COLOR WITHOUT KNOWING ITS GRADE.

COLORS MARKED \* ARE NOT MADE MOIST.

Colors can be ordered by their numbers.

No.	Whole Cake or Pan.	Half Cake or Pan.	No.	Whole Cake or Pan.	Half Cake or Pan.
100. Antwerp Blue .....	.25	.15	124. Lamp Black .....	.25	.15
177. Aureolin .....	.90	.45	171. Lemon Yellow .....	.65	.35
101. Bistre .....	.25	.15	125. Light Red .....	.25	.15
151. * Black Lead .....	.45	.25	195. * Madder Carmine .....	1.40	.70
102. Blue Black .....	.25	.15	187. Mars Orange .....	.90	.45
103. * British Ink .....	.25	.15	157. Mars Yellow .....	.45	.25
104. * Bronze .....	.25	.15	126. Naples Yellow .....	.25	.15
152. Brown Madder .....	.45	.25	158. Neutral Orange .....	.45	.25
105. Brown Ochre .....	.25	.15	127. Neutral Tint .....	.25	.15
106. Brown Pink .....	.25	.15	128. New Blue .....	.25	.15
178. Burnt Carmine .....	.90	.45	129. Olive Green .....	.25	.15
177. Burnt Sienna .....	.25	.15	130. Orange Chrome .....	.25	.15
108. Burnt Umber .....	.25	.15	172. Orange Vermilion .....	.65	.35
179. Cadmium Orange .....	.90	.45	188. Pale Cadmium Yellow .....	.90	.45
180. Cadmium Yellow .....	.90	.45	131. Payne's Grey .....	.25	.15
181. Carmine .....	.90	.45	189. Pink Magder .....	.90	.45
153. Cerulean Blue .....	.45	.25	132. Prussian Blue .....	.25	.15
154. * Chalons Brown .....	.45	.25	133. Prussian Green .....	.25	.15
109. Chinese White .....	.25	.15	190. Pure Scarlet .....	.90	.45
110. Chrome Yellow .....	.25	.15	159. Purple Lake .....	.45	.25
169. Cobalt Blue .....	.65	.35	196. Purple Madder .....	1.40	.70
111. Cologne Earth .....	.25	.15	134. Raw Sienna .....	.25	.15
155. * Constant White .....	.45	.25	135. Raw Umber .....	.25	.15
156. Crimson Lake .....	.45	.25	137. * Red Lead .....	.25	.15
112. Deep Chrome .....	.25	.15	139. Roman Ochre .....	.25	.15
113. * Dragon's Blood .....	.25	.15	160. Roman Sepia .....	.45	.25
114. Emerald Green .....	.25	.15	191. Rose Madder .....	.90	.45
194. * Field's Orange Vermilion	\$1.40	.70	161. Ruben's Madder .....	.45	.25
115. * Flake White .....	.25	.15	140. Sap Green .....	.25	.15
182. French Blue .....	.90	.45	162. Scarlet Lake .....	.45	.25
183. Gallstone .....	.90	.45	163. Scarlet Vermilion .....	.45	.25
116. Gamboge .....	.25	.15	164. Sepia .....	.45	.25
154. Green Oxide of Chromium.	.90	.45	197. Smalt .....	1.40	.70
117. Hooker's Green, No. 1 .....	.25	.15	141. Terre Verte .....	.25	.15
118. Hooker's Green, No. 2 .....	.25	.15	198. Ultramarine Ash .....	1.40	.70
185. Indian Purple .....	.90	.45	142. Vandyke Brown .....	.25	.15
119. Indian Red .....	.25	.15	143. Venetian Red .....	.25	.15
170. Indian Yellow .....	.65	.35	144. Vermilion .....	.25	.15
120. Indigo .....	.25	.15	173. Violet Carmine .....	.65	.35
186. Intense Blue .....	.90	.45	174. Viridian .....	.65	.35
121. Italian Pink .....	.25	.15	165. Warm Sepia .....	.45	.25
122. Ivory Black .....	.25	.15	145. Yellow Lake .....	.25	.15
123. * King's Yellow .....	.25	.15	146. Yellow Ochre .....	.25	.15

PRICE LIST OF COLORS ARRANGED ACCORDING TO GRADES, see page 153.

PRICE LIST OF COLORS ARRANGED ACCORDING TO TINTS, see page 155.

## WINSOR &amp; NEWTON'S WATER COLORS.

Arranged according to Tints.

COLORS MARKED \* ARE NOT MADE MOIST.

Colors can be ordered by their numbers.

	Whole Cake or Pan.	Half Cake or Pan.		Whole Cake or Pan.	Half Cake or Pan.
<b>WHITE.</b>			<b>REDS, LAKES AND MADDERS.</b>		
No.			No.		
109. Chinese White.....	.25	.15	178. Burnt Carmine.....	.90	.45
155. *Constant White.....	.45	.25	181. Carmine.....	.90	.45
115. *Flake White.....	.25	.15	156. Crimson Lake.....	.45	.25
<b>BLACK.</b>			113. *Dragon's Blood.....	.25	.15
151. *Black Lead.....	.45	.25	194. *Field's Orange Vermilion	\$1.40	.70
102. Blue Black.....	.25	.15	119. Indian Red.....	.25	.15
103. *British Ink.....	.25	.15	121. Italian Pink.....	.25	.15
122. Ivory Black.....	.25	.15	125. Light Red.....	.25	.15
124. Lamp Black.....	.25	.15	195. *Madder Carmine.....	1.40	.70
<b>BLUE AND PURPLE.</b>			189. Pink Madder.....	.90	.45
100. Antwerp Blue.....	.25	.15	190. Pure Scarlet.....	.90	.45
153. Cerulean Blue.....	.45	.25	137. *Red Lead.....	.25	.15
169. Cobalt Blue.....	.65	.35	191. Rose Madder.....	.90	.45
182. French Blue.....	.90	.45	161. Ruben's Madder.....	.45	.25
185. Indian Purple.....	.90	.45	162. Scarlet Lake.....	.45	.25
120. Indigo.....	.25	.15	163. Scarlet Vermilion.....	.45	.25
186. Intense Blue.....	.90	.45	143. Venetian Red.....	.25	.15
128. New Blue.....	.25	.15	144. Vermilion.....	.25	.15
132. Prussian Blue.....	.25	.15	173. Violet Carmine.....	.65	.35
159. Purple Lake.....	.45	.25	<b>YELLOW AND ORANGE.</b>		
196. Purple Madder.....	\$1.40	.70	177. Aureolin.....	.90	.45
197. Smalt.....	1.40	.70	179. Cadmium Orange.....	.90	.45
198. Ultramarine Ash.....	1.40	.70	180. Cadmium Yellow.....	.90	.45
<b>GREEN.</b>			110. Chrome Yellow.....	.25	.15
114. Emerald Green.....	.25	.15	112. Deep Chrome.....	.25	.15
184. Green Oxide of Chromium.	.90	.45	116. Gamboge.....	.25	.15
117. Hooker's Green, No. 1.....	.25	.15	170. Indian Yellow.....	.65	.35
118. Hooker's Green, No. 2.....	.25	.15	123. *King's Yellow.....	.25	.15
129. Olive Green.....	.25	.15	171. Lemon Yellow.....	.65	.35
133. Prussian Green.....	.25	.15	187. Mars Orange.....	.90	.45
140. Sap Green.....	.25	.15	157. Mars Yellow.....	.45	.25
141. Terre Verte.....	.25	.15	126. Naples Yellow.....	.25	.15
174. Viridian.....	.65	.35	158. Neutral Orange.....	.45	.25
<b>BROWNS, SIENNAS AND UMBERS.</b>			130. Orange Chrome.....	.25	.15
152. Brown Madder.....	.45	.25	172. Orange Vermilion.....	.65	.35
105. Brown Ochre.....	.25	.15	188. Pale Cadmium Yellow.....	.90	.45
106. Brown Pink.....	.25	.15	145. Yellow Lake.....	.25	.15
107. Burnt Sienna.....	.25	.15	146. Yellow Ochre.....	.25	.15
108. Burnt Umber.....	.25	.15	<b>VARIOUS.</b>		
154. *Chalons Brown.....	.45	.25	101. Bistre.....	.25	.15
111. Cologne Earth.....	.25	.15	104. *Bronze.....	.25	.15
134. Raw Sienna.....	.25	.15	183. Gallstone.....	.90	.45
135. Raw Umber.....	.25	.15	127. Neutral Tint.....	.25	.15
160. Roman Sepia.....	.45	.25	131. Payne's Grey.....	.25	.15
164. Sepia.....	.45	.25	139. Roman Ochre.....	.25	.15
142. Vandyke Brown.....	.25	.15			
165. Warm Sepia.....	.45	.25			

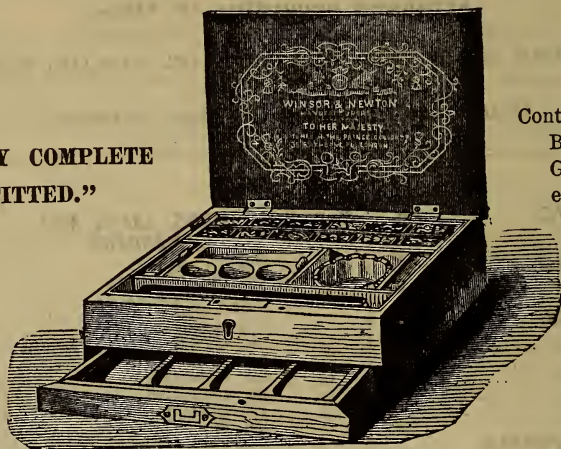
PRICE LIST OF COLORS ARRANGED ACCORDING TO GRADES, see page 153.

PRICE LIST OF COLORS ALPHABETICALLY ARRANGED, see page - - 154.



WINSOR & NEWTON'S  
BOXES OF WATER COLORS.

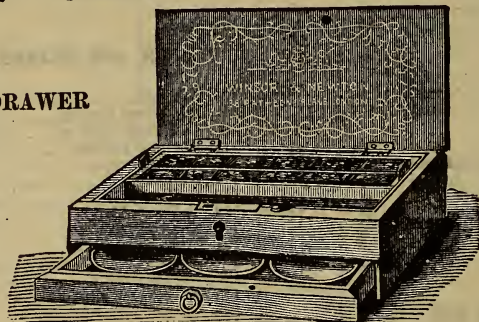
“MAHOGANY COMPLETE  
BOX FITTED.”



Containing Colors,  
Brushes, Water  
Glass, Ink Slabs,  
etc.

- |                                                    |       |         |
|----------------------------------------------------|-------|---------|
| 12,350. Mahogany Complete Box, 24 Whole Cakes..... | each, | \$18.00 |
| 12,352. Mahogany Complete Box, 18 " " .....        | "     | 14.00   |
| 12,354. Mahogany Complete Box, 12 " " .....        | "     | 10.00   |
| 12,362. Mahogany Complete Box, 18 Half Cakes ..... | "     | 8.00    |
| 12,364. Mahogany Complete Box, 12 " " .....        | "     | 6.00    |

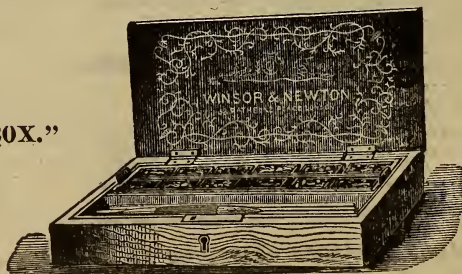
“LOCK AND DRAWER  
BOX.”



Containing Colors,  
Brushes, Color  
Saucers, etc.

- |                                       |         |                                      |        |
|---------------------------------------|---------|--------------------------------------|--------|
| 12,372. 18 Colors, Whole Cakes, each, | \$10.00 | 12,382. 18 Colors, Half Cakes, each, | \$7.00 |
| 12,373. 12 " " " " " 6 50             |         | 12,384. 12 " " " " " 5.50            |        |

“LOCK BOX.”



Containing Colors,  
Brushes, etc.

- |                                       |        |                                      |        |
|---------------------------------------|--------|--------------------------------------|--------|
| 12,392. 18 Colors. Whole Cakes, each, | \$9.00 | 12,402. 18 Colors, Half Cakes, each, | \$6.00 |
| 12,394. 12 " " " " " 6.00             |        | 12,404. 12 " " " " " 4.50            |        |

WINSOR & NEWTON'S COLOR BOXES (continued).

“SLIDE TOP BOX.”



Containing Colors and Brushes.

12,410.	24 Colors, Whole Cakes, each,	\$10.00	12,420.	24 Colors, Half Cakes, each,	\$5.40
12,412.	18 “ “ “ “	7.50	12,422.	18 “ “ “ “	4.25
12,414.	12 “ “ “ “	5.00	12,424.	12 “ “ “ “	3.00
12,416.	6 “ “ “ “	2.50	12,426.	6 “ “ “ “	1.75

SMALL JAPANED TIN BOXES,

With Colors. To carry in the Pocket.

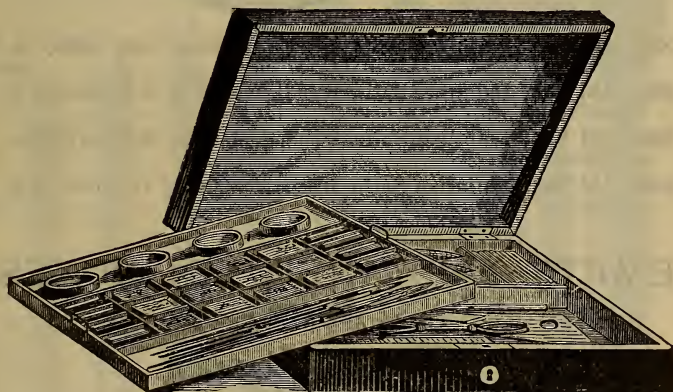
12,430. Pocket Janned Tin Boxes, filled.

	24	16	12	10	8 Colors.
Each,	\$4.50	3.00	2.20	1.80	1.50

“MURILLO” & “REMBRANDT” COLOR BOXES.

12,450	Murillo Janned Box, containing 18 Colors, and Brushes.....	each,	\$1.00
12,454.	Rembrandt Janned Box, “ 12 “ “ .....	“	.50

FRENCH WATER COLOR BOXES.

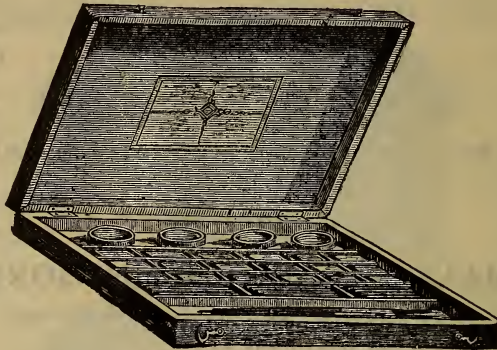


No. 12,520.

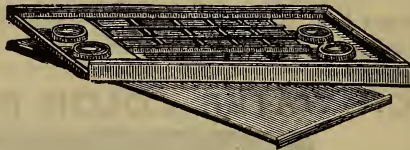
12,500.	Dark Polished Hinged Wooden Case, containing a variety of Colors and Brushes, India Ink, Color Cups, Crayons, Crayon Holder, Stump, and Sundries.....	each,	\$7.00
12,504.	Polished Wooden Case, dark finish, Hinged Cover, with Tray, containing a good selection of Color, Brushes, Color Cups, Crayons, and Sundries .....	“	5.50
12,508.	Polished Wooden Case, with hinged Cover; Tray, to lift out; containing an assortment of Colors, Brushes, Crayons, Cups, and Sundries.....	“	3.50
12,512.	Hinged Wooden Case, Polished, with Tray, containing a collection of Colors, Brushes, Cups, and Sundries.....	“	2.50
12,520.	Imitation Satin Wood Case, hinged Cover, with Tray, containing 18 Colors, 4 Cups, and Colored Crayons .....	“	1.50



FRENCH WATER COLOR BOXES (continued).



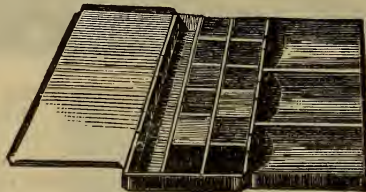
- 12,530. Imitation Satin Wood, Hinged Case, containing Colors, Brushes, Crayons, etc. .... each, \$1.12
- 12,532. Imitation Satin Wood, Hinged Case, containing 12 Colors, 2 Cups, and Colored Crayons ..... " .85



- 12,550. Slide Lid Box, Imitation Satin Wood, containing large variety of Colors, Color Cups, and Colored Crayons..... each, \$1.00
- 12,554. Slide Lid Box, Imitation Satin Wood, containing 15 Colors and 4 Color Cups. .... " .80
- 12,558. Slide Lid Box, Imitation Satin Wood, containing 15 Small Colors and 4 Color Cups ..... " .60
- 12,562. Slide Lid Box, Imitation Satin Wood, containing 12 Colors and Color Cups..... " .50

EMPTY JAPANED TIN BOXES,

For Whole and Half Pans.



- 12,700. Japanned Box, for 24 Whole or 48 Half Pans ..... each, \$2.00
- 12,702. Japanned Box, " 20 " 40 " " ..... " 1.75
- 12,706. Japanned Box, " 16 " 32 " " ..... " 1.60
- 12,708. Japanned Box, " 12 " 24 " " ..... " 1.45
- 12,710. Japanned Box, " 10 " 20 " " ..... " 1.25
- 12,714. Japanned Box, " 8 " 16 " " ..... " 1.15
- 12,716. Japanned Box, " 6 " 12 " " ..... " 1.00



**EMPTY WOODEN BOXES.**

For Winsor and Newton's Colors.

12,800. For Whole Cakes, Spaces for	24	18	12 Colors.
Each.....	\$1.00	.75	.60
12,810. For Half Cakes, Spaces for	24	18	12 Colors.
Each.....	.75	.60	.50

**WATER**

No. 12,900.



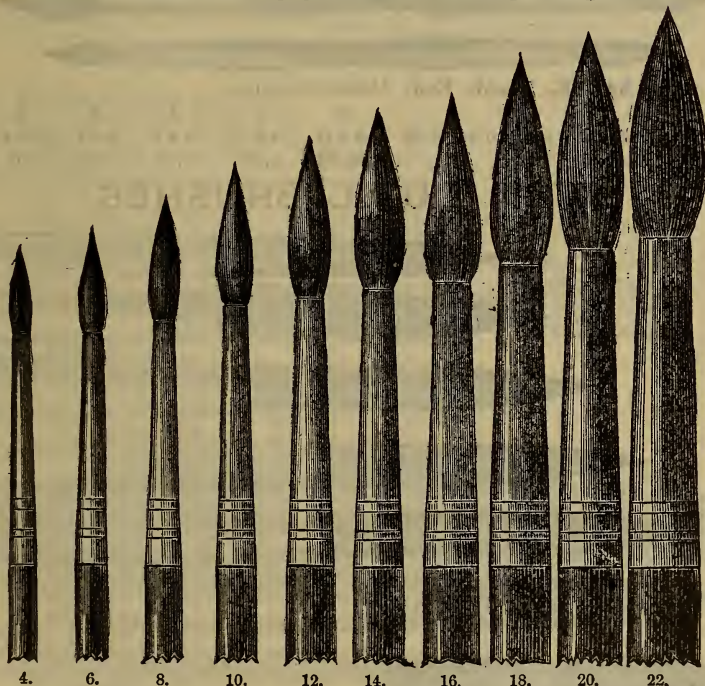
**BOTTLES.**

No. 12,904.



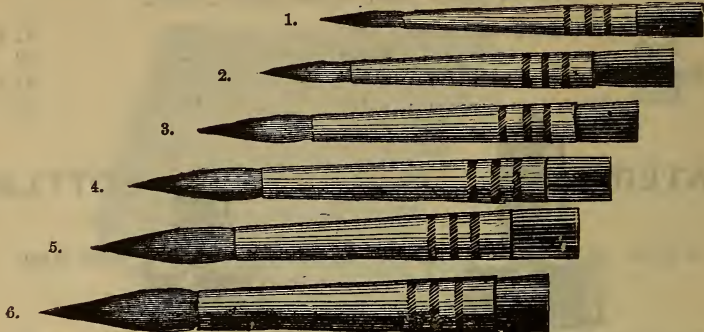
12,900. Japanned Tin Water Bottles, med. size, with two cups to slip off..each,	.85
12,904. Japanned Tin Water Bottles, small, with two cups to slip off..... "	.70

**WATER COLOR BRUSHES.**



13,100. <b>BLACK SABLE, Black Handle, Albata Ferrules.</b>											
	22	20	18	16	14	12	10	8	6	4	2
Each, \$	3.50	3.00	2.25	1.75	1.25	.90	.75	.60	.45	.35	.30
13,120. <b>RED SABLE, Black Handle, Albata Ferrules, EXTRA QUALITY.</b>											
	22	20	18	16	14	12	10	8	6	4	2
Each, \$	2.25	2.00	1.65	1.12	.85	.60	.45	.35	.30	.25	.20
13,140. <b>"SABELENE," a grade between Camel Hair and Sable. Yellow Handles.</b>											
No.	12		10		8		6		4		2
Each,	.35		.30		.25		.20		.18		.15

**WATER COLOR BRUSHES** (continued).



13,170. **RED SABLE, Extra Long Hair, Winsor & Newton Style, American make.**

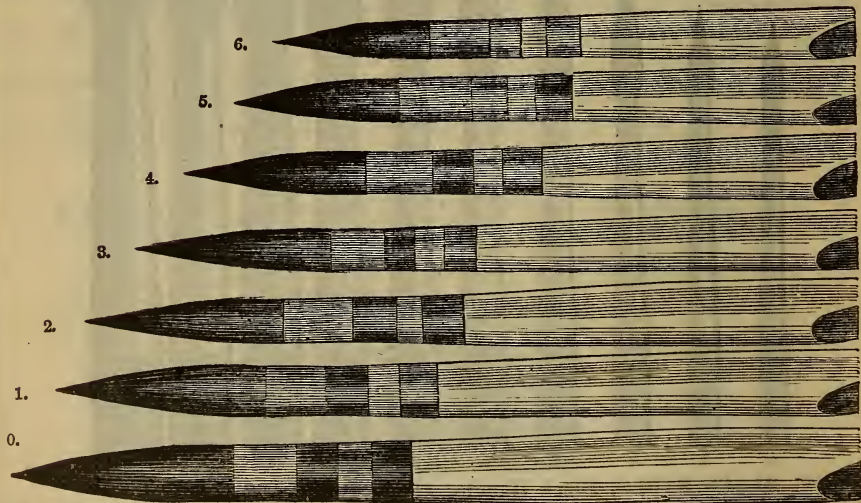
No.	6	5	4	3	2	1
Each,	\$1.00	.80	.60	.50	.40	.30



13,210. **RED SABLE, Double End, Albata Ferrules.**

No.	6	5	4	3	2	1
Sizes about equal to No. 13,129	20 & 12	16 & 10	14 & 8	12 & 6	10 & 4	8 & 2
Each,	\$2.50	1.50	1.12	.90	.70	.55

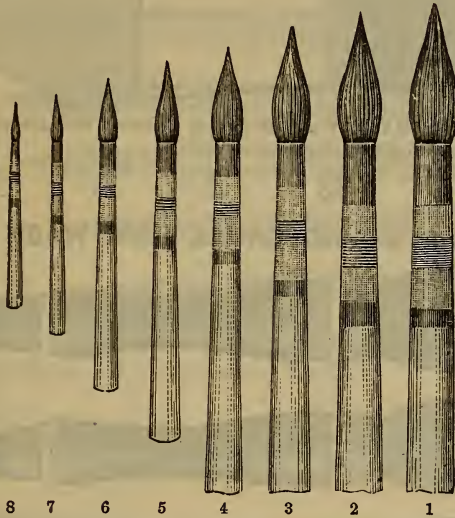
**SWAN QUILL BRUSHES.**



		No 13,370.		13,400.				
13,370. <b>BLACK SABLE Swan Quill.</b>	No.	0	1	2	3	4	5	6
	Each,	\$2.75	2.50	2.00	1.35	1.00	.75	.65
13,400. <b>CAMEL HAIR Swan Quill.</b>	No.	0	1	2	3	4	5	6
	Each,	.50	.45	.35	.25	.20	.18	.15



QUILL BRUSHES.



13,440. **BLACK SABLE, in Quills.**

No.	1	2	3	4	5	6	7	8
Each,	.50	.40	.35	.30	.20	.18	.15	.12

13,460. **“SABELENE,” a grade between Sable and Camel Hair, in Quills.**

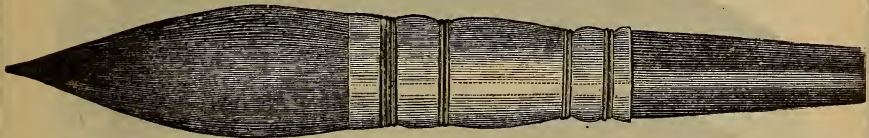
No.	1	2	3	4	5	6	7	8
Each,	.25	.22	.20	.18	.15	.12	.10	.8

13,480. **CAMEL HAIR in Quills, Nos. 1 to 8.....each, .5 to .10**



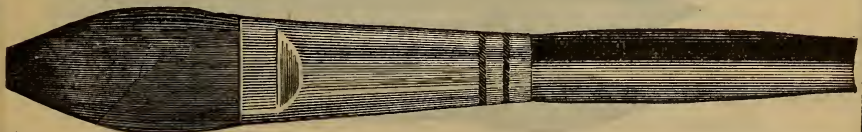
13,490. **CAMEL HAIR, in Quills, Extra Large Size.....each, .15**

CAMEL HAIR BRUSHES.



13,500. **CAMEL HAIR Wash or Sky Brush, Bound in Quills, with Handle.**

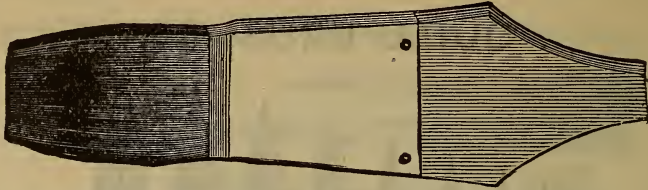
No.....	3	2	1
Each.....	\$1.00	.75	.60



13,520. **CAMEL HAIR Wash or Sky Brush, Albata Ferrule, with Handle.**

No.....	3	2	1
Each.....	.80	.65	.50

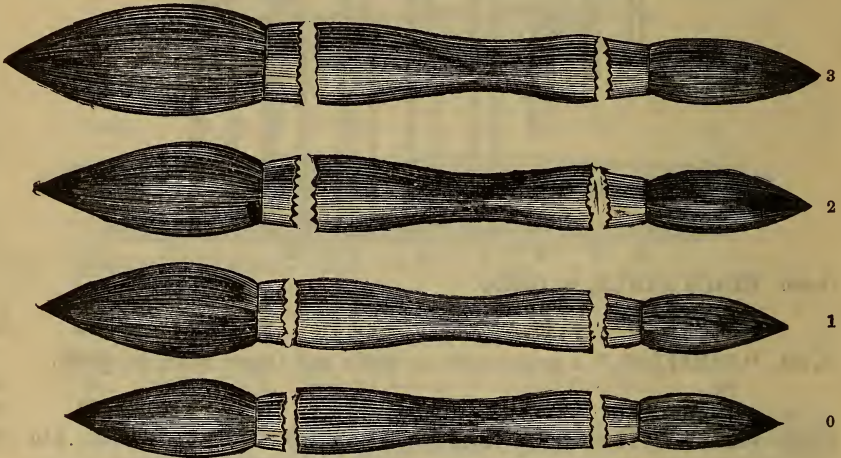




13,550. **FLAT CAMEL HAIR Wash Brushes**, Polished Red Handles, for bold Sky Washes and coloring large surfaces.

Width,	2	1½	1¼	1	¾	½ inch.
Each,	.65	.50	.40	.35	.30	.25

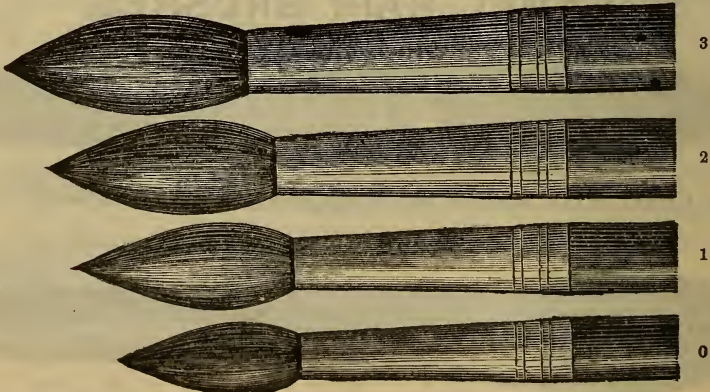
**DOUBLE END ROUND CAMEL HAIR WASH BRUSHES.**



13,570. **CAMEL HAIR Double End Round Wash or Sky Brushes**, with Polished Handles.

No.	3	2	1	0	00	000
Each,	.75	.60	.50	.45	.40	.35

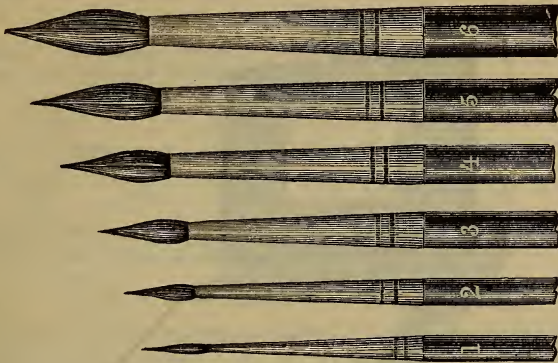
**SINGLE END ROUND CAMEL HAIR WASH BRUSHES.**



13,580. **CAMEL HAIR Round Wash or Sky Brushes**, with Polished Handles

No.	3	2	1	0	00	000
Each,	.40	.35	.30	.25	.22	.20

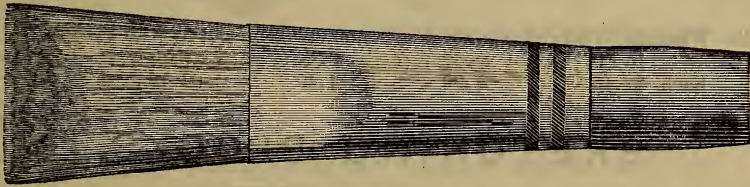
**SMALL CAMEL HAIR BRUSHES.**



13,600. CAMEL HAIR, in Tin Ferrules, Red Handles.

No.	6	5	4	3	2	1
Each,	.15	.12	.12	.10	.10	10

**GUM BRUSHES.**



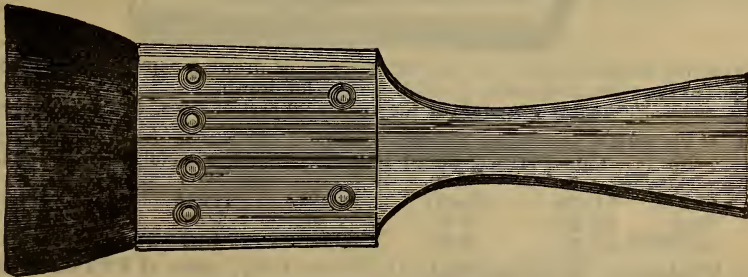
No 13,700.

13,700. GUM BRUSHES, with Long Handles.

Each,	.20 large.	.15 medium.	.12 small.
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Convenient for applying the "Par Excellence" Gum, No. 19,110, or any Mucilage.

**BRUSHES FOR PREPARING "BLUE PROCESS" PAPER, ETC.**



No. 13,710.

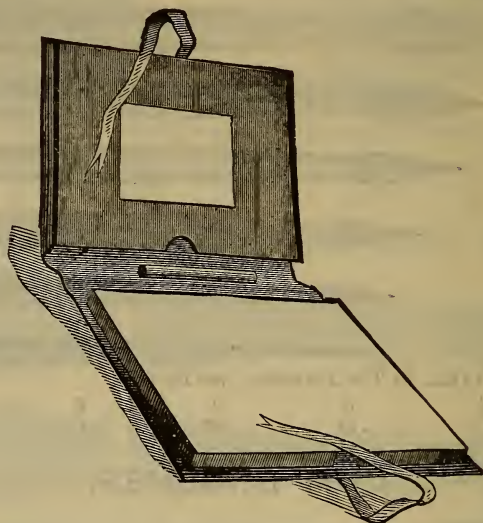
13,710. CAMEL HAIR, Flat, Extra Quality, FOR PREPARING BLUE PROCESS PAPERS, Stretching Drawing Papers, Letter Press Copies, etc.

Each,	\$2.75	2.20	1.65	1.12
	6	5	4	3 inch.

Other sizes made to order at short notice.



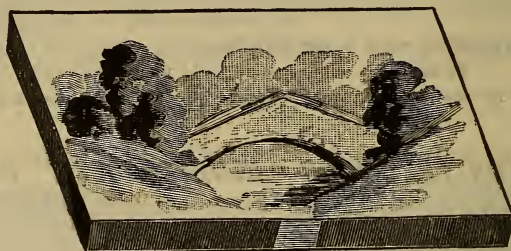
## BOUND SKETCHING BLOCKS.



13,900. **Whatman's Sketching Blocks**, bound in strong Cover, with Pocket.

	10×14	9×12	7×10	6×9	5×7 inches.
Each,	\$2.45	1.90	1.40	1.15	.85

## SKETCHING BLOCKS.



Sketching Blocks consist of a number of sheets of drawing paper pressed together and glued at the sides, thus forming a solid surface for drawing.

To remove sheets, insert a knife at the uncovered part of sides, and cut all around.

14,000. **"VICTOR" Sketching Blocks**, containing 48 sheets, made of **"Victor,"** No. 147, Cold Pressed Detail Paper. They are useful for bold, off-hand sketches.

	24×30	24×24	18×24	12×18	9×12 inches.
Each,	\$3.50	3.00	2.50	1.50	.85
List Prices, (\$3.90)		(3.35)	(2.80)	(1.70)	(.95)

14,100. **Whatman's Sketching Blocks**, for Water Color, made of **EXTRA HEAVY WHATMAN'S PAPER.**

	14×20	10×14	9×12	7×10	5×7 inches.
Each,	\$5.50	3.25	2.85	1.65	.85

14,120. **Whatman's Sketching Blocks.**

	14×20	12×18	10×14	9×12	7×10	6×9	5×7	4×6	3½×5
Each,	\$2.85	2.20	1.50	1.12	.80	.60	.45	.38	.25



**SKETCHING BLOCKS** (continued).

14,160. "LEONA" Sketching Blocks, made of "Leona" Paper, for Color and Pencil, and General Drawing.

	15×20	10×15	7½×10	5×7½ inches.
Each,	\$2.50	1.35	.75	.40

14,180. "Empire" Sketching Blocks, for Pencil and General Drawing.

	10×14	9×12	7×10	6×9	5×7	4×6	3½×5 inches.
Each,	\$.80	.55	.45	.30	.25	.20	.15

14,220. "QUEEN" Tinted Sketching Blocks. Assorted Tints. Made of "Queen" Best Tinted Paper.

	10×14	9×12	7×10	6×9	5×7 inch.
Each,	\$1.20	.95	.60	.50	.30

14,260. "JULLIEN" Tinted Sketching Blocks, Assorted Tints. Made of "Jullien" Tinted Paper.

	9×12	6×9	5×7	4×6 inch.
Each.....	\$.65	.35	.25	.20

14,300. "ANTLER" Charcoal Blocks, Assorted Tints. Made of "Antler" Charcoal Paper.

	18×24	12×18	9×12 inch.
Each.....	\$1.75	.90	.45

The sizes of Charcoal Blocks occasionally are a trifle smaller, owing to the uneven edges of the original sheets, which frequently are wrinkled.

14,340. **CROSS SECTION BLOCKS**, made of Cross Section Paper ruled in squares, convenient for sketching plots of ground, sizes of rooms, and general drawing. Every inch line heavier than the rest.

	16×20	10×16	8×10	4×5 inch
Each.....	\$3.00	1.75	1.00	.55

Cross Section Books, see Nos. 840, etc.

14,360. **METALLIC PAPER Sketching Blocks.**

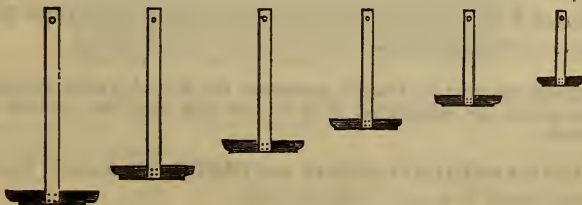
	10×16	8×10	5×8 inch.
Each.....	\$2.20	1.25	.75

Metallic Pencils, No. 16,604, for above.....dozen, .60

Sketches made on this paper do not rub off, and are not affected by moisture.

Metallic Sketching Books, see No. 14,470.

**SKETCH BLOCK T SQUARES.**



Same as No. 6000.

	18	15	12	9	6	4 inch.
Each,	.42	.38	.34	.30	.26	.22

## SKETCHING BOOKS.



### 14,400. Whatman's Sketching Books.

	10×14	9×12	7×10	6×9	5×7	4×6	3½×5 inch.
Each,	\$2.35	1.90	1.40	1.12	.85	.60	.50

### 14,420. "LEONA" Sketching Books, made of "Leona" Paper. For Water Color, Pencil and General Drawing.

	10×15	7½×10	5×7½ inch.
Each.....	\$2.00	1.25	.75

### 14,440. "EMPIRE" Sketching Books, made of "Empire" Drawing Paper.

	10×14	9×12	7×10	6×9	5×7	4×6	3½×5 inch.
Each,	\$1.50	1.25	1.00	.85	.65	.50	.40

### 14,460. "JULLIEN" Tinted Sketching Books, made of "Jullien" Tinted Paper.

	9×12	6×9	5×7	4×6 inch.
Each.....	\$1.50	.90	.70	.45

### 14,470. METALLIC PAPER SKETCHING BOOKS,

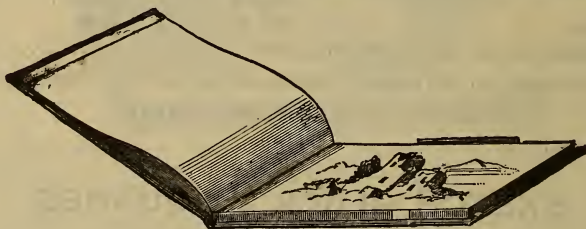
8×10 inches each, \$2.00; 5×8 inches, each, \$1.12.

Metallic Pencils, No. 16,604, dozen, 60c.

Sketches made on this paper do not rub off, and are not affected by moisture.

**METALLIC SKETCHING BLOCKS**, see No. 14,360.

## COMBINED SKETCHING BOOKS AND BLOCKS.



This is a Sketch Book with the front and two side edges of the paper fastened to the lower cover, like a sketching block.

The advantage claimed is, that it possesses the firm drawing surface of a block, and when the sheets are separated they do not get lost, but remain bound to the back of the book.

### 14,500. COMBINED SKETCHING BOOK and BLOCK, Whatman's Paper, nicely bound in muslin, with gilt lines.

	10×14	9×12	7×10	6×9	5×7	4×6 inch.
Each,	\$3.00	2.50	2.00	1.75	1.00	.75

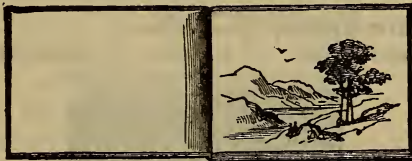
## EASEL, OR LAP BOARDS.



14,580. Easel or Lap Boards. Made of heavy board, covered with paper; the leather corners hold the paper in position.

	18×24	14×20	12×17	10×14	9×13	8×10 inch.
Each,	\$2.00	1.25	1.00	.85	.75	.60

## STUDENTS' DRAWING BOOKS.



Made of good quality of paper, interleaved with sheets of thin white paper, to prevent the pencil marks from soiling the adjacent sheets.

14,600.	Ex. large, 9×11½	Large, 8¼×10¾	Gen'l size, 7¼×9½	Small, 6½×8½ in.
Each,	.30	.25	.20	.15

## PORTFOLIOS.



14,700. Portfolios, Best Quality, Strongest Board, Fine Leather Back and Corners, Muslin Sides, ornamented with gilt lines, with flaps to keep out dust.

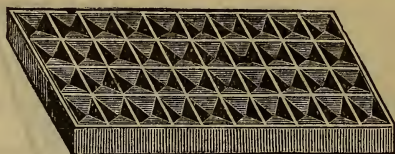
	32×42	26×36	22×31	19×25	16×22	14×18	11×16 inch.
Each,	\$7.50	6.00	4.45	3.00	2.50	2.00	1.75

14,720. Portfolios, Good Quality, Muslin Back and Corners, Paper Sides.

	33×42	26×37	23×31	20×25	16×22	14×18	11×16 inch
Each,	\$4.45	2.50	1.75	1.25	1.00	.80	.60



## PENCIL RUBBERS.



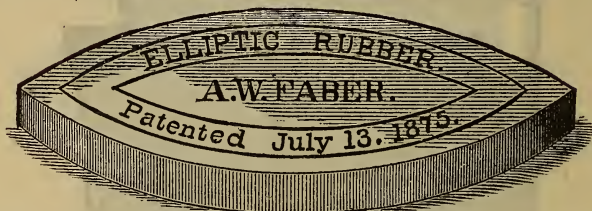
- 14,780. "WAFFLE" Rubber. Soft and pliable. Does not rub away the paper.  
 Extra Large, .35 each. Large, .28 each. Small, .17 each.



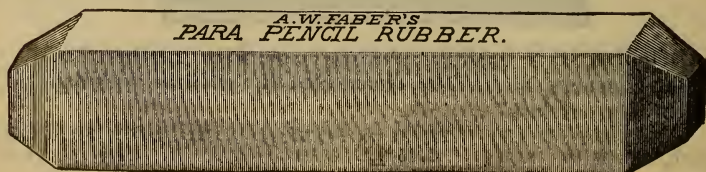
- 14,800. Davidson's Velvet Rubber, Oblong Shape.  
 Each, .20 extra large. .10 large. .08 medium. .06 small cake.



- 14,820. A. W. Faber's Artists' Gum, or Rubber.  
 Each, .40 extra large. .20 large. .16 medium. .10 small cake.



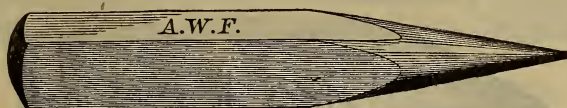
- 14,840. A. W. Faber's Elliptic Rubber.  
 Each, .35 extra large. .25 large. .20 medium. .15 small cake.



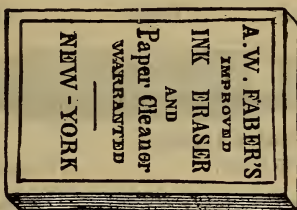
- 14,860. A. W. Faber's Para Pencil Rubber.  
 Each, .20 extra large. .10 large. .08 medium. .06 small cake.

PENCIL AND INK RUBBERS (continued).

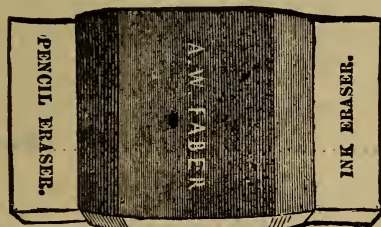
- 14,880. **A. W. Faber's Black Rubber.**  
 Each, .50 extra large. .35 large. .25 medium. .15 small cake.
- 14,900. **A. W. Faber's Virgin Rubber.** This is pure gum, of irregular sizes.  
 Each, .50 extra large. .35 large. .25 medium. .15 small cake.



- 14,920. **A. W. Faber's Pointed Rubber.**  
 Each, .12 large. .09 medium. .06 small cake.



- 14,930. **A. W. Faber's Ink Eraser.**  
 Each, .20 extra large. .10 medium. .05 small.



- 14,940. **A. W. Faber's Ink and Pencil Eraser, Wooden Centre.**  
 Each ..... .25 mammoth. .15 small.



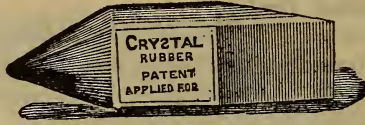
- 14,950. **A. W. Faber's Ink Eraser, Long Oval, Pencil Shape** ..... each, .12  
 14,960. “ “ **Ink and Pencil Eraser, Long Oval, Pencil Shape**... “ .15



- 15,100. **Wedge Rubber.**  
 Each, .20 extra large. .15 large. .10 medium. .08 small cake.



RUBBERS (continued).



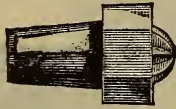
15,110. "Crystal" Rubber. Each, .10 large. 05 small.



15,120. Rubber Stumps, Wooden Centre. Each, .35 large. .25 medium. .15 small.

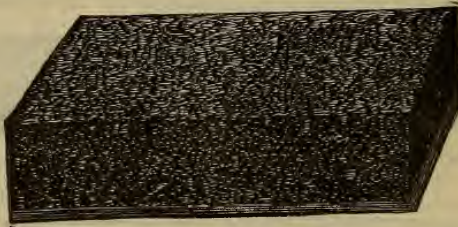


15,130. Rubber Stumps, all Rubber. Each, .12 large. .09 medium. .06 small.



15,140. Rubber Pencil Tips.....dozen, .20

SOLTMANN'S FIRM SPONGE RUBBER.



Has a thin coating of rubber on one side, which holds the porous rubber more firmly.

This quality keeps longer than the soft kind, and is less liable to crumble.

15,200.	SOLTMANN'S Firm Sponge Rubber.	Cakes about 3x6x1 inch..each,	\$1.80
	SOLTMANN'S Firm Sponge Rubber.	" " 3x4x1 " .. "	1.20
	SOLTMANN'S Firm Sponge Rubber.	" " 2x3x1 " .. "	.60
	SOLTMANN'S Firm Sponge Rubber.	" " 1½x2x1 " .. "	.30



# A. W. FABER'S DRAWING PENCILS.



## EXPLANATION OF LETTERS.

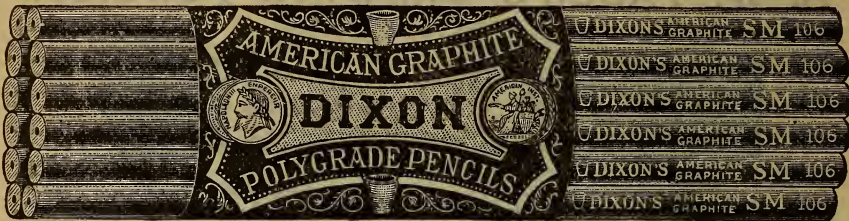
	About equal to Faber's Number.	About equal to Dixon's Number.
HHHHHH (6H) Hardest .....	—	VVH
HHHH (4H) Extra Extra Hard .....	5	VH
HHH Extra Hard .....	—	H
HH Very Hard .....	4	MH
H Hard .....	—	M
F Firm .....	3	MB
HB Medium, Hard and Black .....	2	SM
B Soft .....	—	S
BB Soft, and very Black .....	1	VS
BBB Very Soft, and very Black .....	—	VVS
BBBB (4B) Very Soft, and Extra Black .....	—	—
BBBBB (6B) Extra Extra Soft, and Extra Black .....	—	—

- 16,100. A. W. Faber's Siberian Pencils.  
6H, 4H, 3H, 2H, H, F, HB, B, BB .. dozen, \$1.25  
Box, containing 3 dozen of a kind, or assorted .. each, 3.75
- 16,110. A. W. Faber's Siberian Pencils.  
3B, 4B .. dozen, 1.40
- 16,112. A. W. Faber's Siberian Pencils.  
6B .. " 1.55

## EXPLANATION OF NUMBERS.

- No. 5, Extra Extra Hard; No. 4, Very Hard; No. 3, Firm; No. 2, Medium Hard, and Black; No. 1, Soft, and Very Black.
- 16,120. A. W. Faber's Red Hexagon, Gilt, Pencils.  
Nos. 1, 2, 3, 4, 5 .. dozen, .75  
Package, containing 3 dozen of a kind, or assorted .. each, 2.25
  - 16,130. A. W. Faber's Black, Round, Pencils.  
Nos. 1, 2, 3, 4 .. dozen, 60  
Package, containing 3 dozen of a kind, or assorted .. each, 1.80
  - 16,140. A. W. Faber's Yellow, Round, Silver Pencils.  
Nos. 4H, 3H, 2H, H, F, HB, B, 2B, 3B, 4B .. dozen, .60  
Box, containing 3 dozen of a kind, or assorted .. each, 1.80
  - 16,150. A. W. Faber's Mathematical Instrument Pencils.  
Very small, hexagon, gilt, No. 4 .. dozen, .70
  - 16,152. A. W. Faber's Mathematical Instrument Pencils.  
Very small, black polished, round, No. 4 .. " .60

## DIXON'S PENCILS.



### EXPLANATION OF LETTERS.

VVH Very Very Hard, about the same as Imported.....	.6 H
VH Very Hard, " " " " .....	.4 H or 5
H Hard, " " " " .....	.3 H
MH Medium Hard, " " " " .....	.2 H or 4
M Medium, " " " " .....	.H or 3
MB Medium Black, " " " " .....	.F
SM Soft Medium, " " " " .....	.HB or 2
S Soft, " " " " .....	.B or 1
VS Very Soft, " " " " .....	.BB
VVS Very Very Soft, " " " " .....	.BBB

- 16,180. Dixon's "ARTISTS'" Pencils, Very best quality.  
 VVH, VH, H, MH, M, MB, SM, S, VS, VVS.....dozen, \$1.10  
 Box containing 6 dozen of a kind, or assorted.....each, 6.60
- 16,200. Dixon's Hexagon Pencils,  
 VH, H, M, SM, S.....dozen, .67  
 Box containing 6 dozen of a kind, or assorted.....each, 4.00
- 16,210. Dixon's Round Pencils,  
 VH, H, M, SM, S.....dozen, .55  
 Box containing 6 dozen of a kind, or assorted.....each, 3.30



- 16,220. Dixon's Rubber Tip Pencils.....dozen, .85

## GILBERT'S PENCILS (French).



These Pencils are extensively used abroad, and are rapidly gaining favor in this country. The manufacturers have been awarded Gold Medals by the Exposition Universelle, Paris, 1878, and the Society for the Encouragement of Arts, in 1880.

The following Artists and professional men have recommended them in highest terms : E. Meissonier, L. Gérôme, E. Grandsirè, A. Cabanel, J. Schubert, Gustave Doré, A. Lenoir, H. Clerget, and A. Cassagne.

- 16,250. Gilbert's Siberian Pencils, Best Quality.  
 B=No. 0. HB=1. F=2. H=3. 2H=4. 3H=5.....dozen, \$1.00

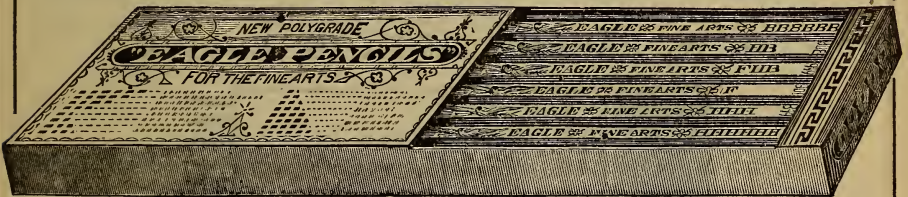


GILBERT'S PENCILS (continued).

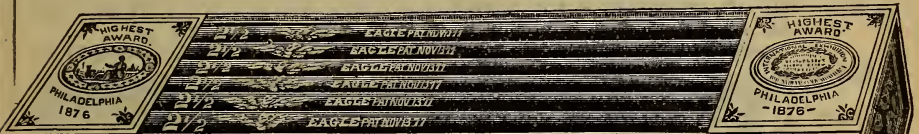


16,270. Gilbert's Round Pencils, 0, 1, 2, 3, 4, 5.....dozen, .50

EAGLE PENCILS.



16,290. Eagle "Fine Arts" Pencils, best Quality.  
 6H, 5H, 4H, 3H, 2H, H, F, FHB, HB, B, 2B, 3B, 4B, 5B, 6B ... dozen, \$1.00  
 Box, containing half dozen of a kind ..... .50  
 Box, containing 3 dozen of a kind, or assorted ..... 3.00



EAGLE PENCIL COMPANY, NEW YORK.

16,300. Eagle Pencils, 1, 2, 2½, 3, 4.....dozen, .45  
 Box containing 6 dozen of a kind, or assorted ..... each, \$2.67

STAR PENCILS.

16,330. Star Pencils, 1, 2, 3, 4.....dozen, .30  
 Box containing 6 dozen of a kind, or assorted, ..... each, \$1.65

Various other standard grades of Pencils in stock or furnished at short notice.

A. W. FABER'S ARTISTS' PENCILS.



16,400. A. W. Faber's Siberian Artists' Pencils, with Movable Lead.  
 6H, 4H, 3H, 2H, H, F, HB, B, BB.....(List Price, .28) each, .25  
 Box containing 6 Artists' Pencils of a kind, or assorted of any  
 number from 6H to BB ..... " \$1.50  
 16,410. A. W. Faber's Siberian Artists' Pencils, 3B, 4B ..... " .30  
 16,412. A. W. Faber's Siberian Artists' Pencils, 6B..... " .35



16,414. A. W. Faber's Siberian Artists' Pencils, Double End.(List Price, .33) each, .30

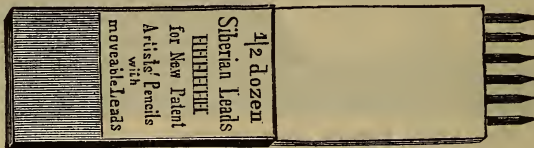


**A. W. FABER'S ARTISTS' PENCILS** *(continued).*



- 16,420. A. W. Faber's Artists' Pencils, with Movable Leads.
  - Nos. 1, 2, 3, 4, 5 ..... each, .20
  - Box, containing 1 dozen of a kind, or Assorted ..... \$2.40
- 16,430. A. W. Faber's Artists' Pencils, with Movable Leads, Medium Length ..... each, .20
- 16,432. A. W. Faber's Artists' Pencils, with Movable Leads, Short ..... " .17
- 16,440. Ivory, Artists' Pocket Pencils, to hold Faber's Leads.
  - Each,  $\frac{4}{70}$   $\frac{3\frac{1}{2}}{60}$   $\frac{3\frac{1}{4}}{50}$  inch.

**A. W. FABER'S ARTISTS' LEADS.**



*These Leads can be used for the Pencil Points of Mathematical Instruments.*

- 16,460. A. W. Faber's Siberian Artists' Leads, for Artists' Pencils.
  - 6H, 4H, 3H, 2H, H, F, HB, B, 2B ..... box, .65
  - Large case, containing 12 small boxes of a kind, from 6H to 2B, or assorted ..... case, \$7.80
- 16,470. A. W. Faber's Siberian Artists' Leads, for Artists' Pencils, 3B, 4B ..... box, .75
- 16,472. A. W. Faber's Siberian Artists' Leads, for Artists' Pencils, 6B .. " .85
- 16,480. A. W. Faber's Leads.
  - Nos. 1, 2, 3, 4, 5 ..... " .35
  - Large case, containing 12 small boxes of one kind, or assorted ..... case, 4.20

**VARIOUS PENCILS.**

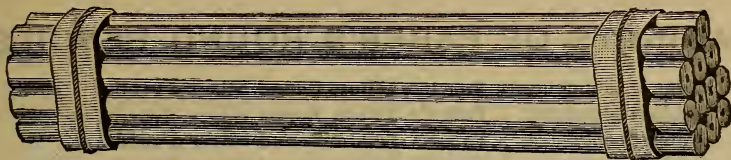
- 16,600. Stenographic Pencils, ..... dozen, \$1.00
- 16,604. Metallic, for Writing and Sketching on Metallic Paper ..... " .60
- 16,608. Indelible Pencils, Large ..... " 1.25



- 16,620. Indelible Pencil, with movable Copying Lead ..... each, .25



- 16,624. Copying Leads, for Indelible Pencil ..... box, .25
- 16,640. A. W. Faber's Black Chalk Pencils, in Cedar, Hard and Soft ..dozen, .55



- 16,648. Red Chalk, in Polished Cedar, best quality, for marking Stakes, etc. .dozen, .75  
 16,650. Red Chalk, in Cedar, for marking Stakes, etc..... " .55



- 16,680. Carpenters' Pencils, extra quality, in Polished Cedar.  
 Dozen, 12 9 7 inch.  
 \$1.00 .75 .55

ANY OF THE PENCILS IN THE FOLLOWING SETS CAN BE REPLACED WHEN USED.

**CABINETS OF FABER'S ARTISTS' PENCILS.**

- 16,750. Cabinet containing 10 Faber's Siberian Artists' Pencils, with Movable Leads..... each, \$3.50  
 16,752. Cabinet containing 7 Faber's Siberian Artists' Pencils, with Movable Lead..... " 2.50  
 16,754. Cabinet containing 5 Faber's Siberian Artists' Pencils, with Movable Leads..... " 2.00  
 16,756. Cabinet containing 5 Faber's Siberian Artists' Pencils, with Moveable Leads and File and Rubber..... " 2.20

**CABINETS OF FABER'S SIBERIAN PENCILS.**



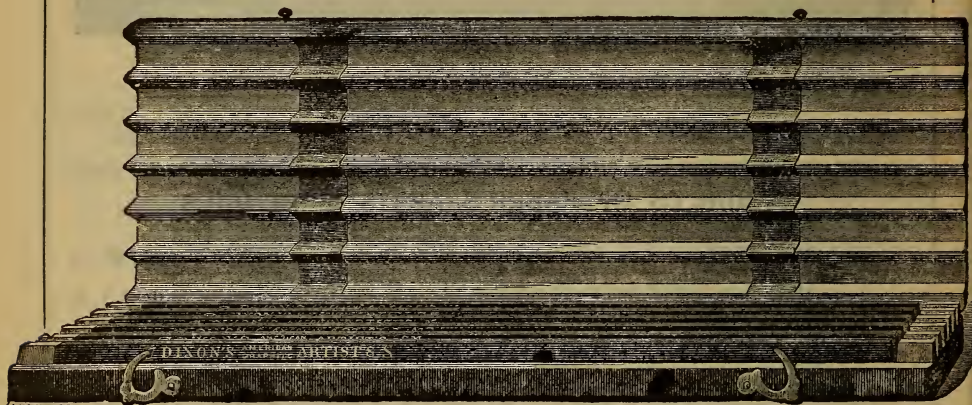
- 16,760. Cabinet containing 10 Faber's Siberian Pencils..... each, \$1.75  
 16,762. Cabinet containing 7 Faber's Siberian Pencils..... " 1.25  
 16,764. Cabinet containing 5 Faber's Siberian Pencils..... " 1.00  
 16,766. Cabinet containing 5 Faber's Siberian Pencils and Knife and Rubber..... " 1.25



## CABINETS OF FABER'S ROUND PENCILS.

16,770. Cabinet containing 10 Faber's Yellow Round Silver Pencils....	each,	.85
16,772. Cabinet containing 7 Faber's Yellow Round Silver Pencils....	"	.75
16,774. Cabinet containing 5 Faber's Yellow Round Silver Pencils....	"	.65
16,776. Cabinet containing 5 Faber's Yellow Round Silver Pencils and Knife and Rubber.....	"	\$1.00

## CABINETS OF DIXON'S ARTISTS' PENCILS.



16,790. Cabinet containing 8 Dixon's Artists' Pencils.....	each,	\$1.50
16,792. Cabinet containing 6 Dixon's Artists' Pencils.....	"	1.12
16,794. Cabinet containing 4 Dixon's Artists' Pencils.....	"	.75

## CASES OF FABER'S WAX CRAYONS.

EACH PENCIL IS POLISHED IN THE COLOR OF THE LEAD.



16,850. Case containing 48 assorted Faber's Wax Crayons.....	each,	\$4.40
16,852. Case containing 36 assorted Faber's Wax Crayons.....	"	3.50
16,854. Case containing 24 assorted Faber's Wax Crayons.....	"	2.50
16,856. Case containing 18 assorted Faber's Wax Crayons.....	"	2.00
16,858. Case containing 12 assorted Faber's Wax Crayons.....	"	1.50
16,860. Case containing 6 assorted Faber's Wax Crayons.....	"	.80

Separate Wax Crayons, see next page.



**A. W. FABER'S WAX CRAYONS—continued.**

- 16,870. A. W. Faber's Wax Crayons, SEPARATE COLORS.. doz., \$1.25, each, .12  
 No. 1, White. 2, Yellow. 13, Dark Blue. 34, Sienna. 38, Vermilion. 41, Black.  
 54, Purple. 62, Orange. 63, Light Green. 69, Dark Green. 75, Carmine. 88, Light  
 Blue.  
 And numerous other colors.

**SMALL BOXES OF COLORED PENCILS.**

- 16,900. Small box containing 12 Short Colored Wax Crayons.....each, .50  
 16,910. Small box containing 12 Short Colored Pencils..... " .35  
 16,914. Small box containing 6 Short Colored Pencils..... " .22

**CARMINE AND BLUE PENCILS.**

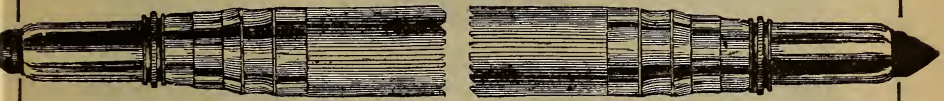
- 16,930. A. W. FABER'S Large Carmine and Blue Pencils, Hexagon..dozen, \$1.25  
 16,940. Carmine and Blue Pencils, Fine Quality..... " 1.00  
 Carmine and Blue are also made in cheaper grades.

**PENCIL POINT PROTECTOR.**



- 16,970. Pencil Point Protector.....dozen, .55 each, .05

**LARGE LUMBER AND MARKING PENCILS.**



- 17,100. A. W. Faber's Thick Red and Blue Artists' Pencil, with Mov-  
 able Leads .....each, .50



- 17,104. A. W. Faber's Thick Blue Artists' Pencil, with Movable Leads..each, .30  
 17,106. A. W. Faber's Thick Red Artists' Pencil, with Movable Leads.. " .30



- 17,110. A. W. Faber's Red Leads, for Nos. 17,100 and 17,106 ..... box, .30  
 Box, containing 12 small boxes.....each, \$3.30  
 17,114. A. W. Faber's Blue Leads for Nos. 17,100 and 17,104..... box, .30  
 Box, containing 12 small boxes .....each, 3.30

*EXTRA HEAVY COLORED PENCILS, see next page.*

**EXTRA HEAVY COLORED PENCILS,**

FOR

Coloring Details, Marking Lumber, etc.



These Pencils are of fine quality. The heavy lead does not break easily, and large surfaces can be colored in a short space of time.

- 17,130. Blue, Red, Yellow, Brown, Green, Black .....dozen, \$1.75 each, .17
  - 17,136. Box, containing Blue, Red, Yellow, Brown, and Green ..... .85
- (Any desired assortment substituted for above box at same price.)

**POCKET LEAD PENCIL POINTER.**



No. 17,250.

Consists of a number of sheets of fine sand-paper pressed into a block; when the upper sheet is used, insert a knife at the uncovered part of the side, and cut all around. To prevent the loose lead which adheres to the sand-paper from soiling the pocket, the block is enclosed in a small, neat, folding case, with rubber band, to keep it closed when not in use.

- 17,250. **POCKET LEAD PENCIL POINTER, Narrow Oblong** .....each, .20
- Package, containing 1 dozen..... \$2.40



No. 17,254.

- 17,254. **Lead Pencil Pointer, with Wooden Handle, Narrow** (List Price, .17) each, .15
- Package, containing 1 dozen..... \$1.80



- 17,260. **Lead Pencil Pointer, Wide Oblong**..... (List Price, .17) each, .15
- Package, containing 1 dozen..... " \$1.80
- 17,264. **Lead Pencil Pointer, Narrow Oblong**..... " .12
- Package, containing 1 dozen..... " 1.30



## AUTOMATIC SHADING PENS AND INKS.

HEAVY AND LIGHT LINES PRODUCED BY A SINGLE STROKE OF THE PEN.

One-half of the lower nib contains small notches which cause more ink to flow on one side and produce the shaded appearance.



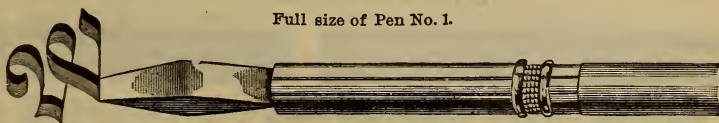
No. 17,300.

### 17,300. Complete Shading Pen and Ink Cabinet.

A neat case, so arranged that each pen is separated from the other, and the inks cannot upset. Containing 6 Pens and 6 assorted Inks, Sample Sheet of Letters and Directions for Use.....each, \$3 00

## AUTOMATIC SHADING PENS. Six Sizes.

Full size of Pen No. 1.



No.	5	4	3	2	1	0	
Width of Nib,	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{4}$	$\frac{2}{16}$	$\frac{1}{8}$	$\frac{1}{16}$	inch.

- 17,310. Box containing above 6 Pens, with Sample Sheet of Letters and Directions for Use.....each, \$1.50
- 17,314. Separate Pens..... " .25

"SHADENE" SHADING INKS, SEE NEXT PAGE.



# THE "SHADENE" SHADING INK.

FOR WRITING WITH THE SHADING PEN.

In Square, Wide Necked Bottles, with Rubber Corks.

PURPLE,

BRILLIANT CARMINE,

BROWN,

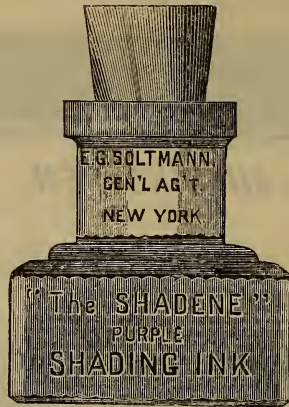
BLUE,

GREEN,

BLACK,

CARMINE.

YELLOW.



- 17,320. "SHADENE" Shading Ink. Any of above 8 colors.  
 Neat Polished Partitioned Box, containing 12 Bottles.....each, \$1.90  
 " " " " " 6 " " " " 1.00  
 Bottle.....(List Price, .17) " .15

## GISBURNE'S RULING PEN.



- 17,324. Gisburne's Ruling Pens. No. 1, Fine. 2, Medium. 3, Broad Point.  
 Card containing 6 Pens .....card, 67c. each, .12

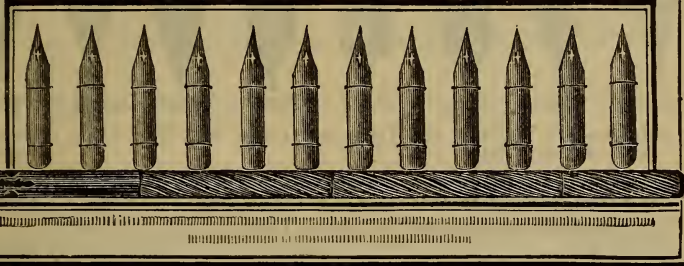
## PENHOLDERS.



- 17,334. Penholders, extra fine, highly finished handle.....dozen, \$1.00  
 17,336. Penholders, fine, " " " " " " " " " " .50  
 17,337. Penholders, medium, well " " " " " " " " " " .40  
 17,338. Penholders, good quality.....dozen, .30  
 17,339. Penholders, plain.....dozen, .20  
 17,340. Penholders, very small, to hold Gillott's Mapping and other small Pens.....dozen, .25

STEEL LETTERING AND WRITING PENS.

**JOSEPH GILLOTT'S MAPPING PEN**



No. 17,354.

- 17,350. Gillott's Extra Fine Long Nib Crow Quills, on Cards with Holder. . doz., .85
- 17,352. Gillott's Crow Quills, on Cards with Holder. . . . . " .65
- 17,354. Gillott's Mapping Pens, on Cards with Holder . . . . . " .65
- 17,356. Gillott's Lithographic Pens, on Cards with Holder . . . . . " .65
- 17,360. French Crow Quills, on Cards, each Pen with Holder. . . . . " .50
- 17,370. Gillott's Lettering Pens . . . . . No. 303, gross box, \$1.50 . " .15
- 17,372. Gillott's Lettering Pens . . . . . No. 170, " " 1.12. " .12
- 17,374. Gillott's Lettering Pens . . . . . No. 404, " " 1.00. " .12



The sticks generally used for Crow Quills are so thin that the hand becomes cramped. This Holder is of the size of a regular pen holder.

- 17,394. Crow Quill Pen Holder, Polished. . . . . each, .10
- Package containing one dozen. . . . . \$1.20

**SPENCERIAN STEEL PENS.**



17,452.



17,454.



17,450.



17,458.



17,456.

- 17,450. Spencerian Lettering Pens, No. 1, "College" fine point. . . . . Box cont. 3 doz. Doz. .38 .15
- 17,452. Spencerian Lettering Pens, No. 2, "Counting House" med. point . . . . . 38 .15
- 17,454. Spencerian Lettering Pens, No. 3, "Commercial" coarse point . . . . . 38 .15
- 17,456. Spencerian Lettering Pens, No. 14, "Artistic," very fine point . . . . . Box cont. 1 gross. 1 50 .15
- 17,458. Spencerian Lettering Pens, No. 15, "Queen," extra fine point . . . . . 1 50 .15
- 17,460. Spencerian Lettering Pens, No. 25, "Drawing," extra fine point. . . . . 1 50 .15
- 17,480. Pickwick Pen, for coarse writing and for marking on rough paper. The end of nib is bent upwards. . . . . Box cont. 3 doz. .38 .15



ESTERBROOK'S STEEL PENS.



No. 17,502.



17,504.



17,524.



17,526.



17,528.



17,520.



17,522.



17,500.

No.	Description	Gross Box.	Doz.
17,500.	Esterbrook's Writing and Lettering Pens, No. 128 "Extra Fine Double Elastic".....	\$1.00	.12
17,502.	Esterbrook's Writing and Lettering Pens, No. 048, "Falcon" medium point .....	1.00	.12
17,504.	Esterbrook's Writing and Lettering Pens, No. 182, "Ladies' Falcon".....	1.00	.12
17,520.	Esterbrook's Engrossing Pens, No. 117, extra fine point....	1.00	.12
17,522.	Esterbrook's Engrossing Pens, No. 122, medium point.....	1.00	.12
17,524.	Esterbrook's Engrossing Pens, No. 161, Short Nib, medium point.....	1.00	.12
17,526.	Esterbrook's Engrossing Pens, No. 239, Chancellor, medium point .....	1.00	.12
17,528.	Esterbrook's Engrossing Pens, No. 267, Franklin, med. point.	1.00	.12



17,536.



17,538.

17,536.	Esterbrook's Double Line Ruling Pen, No. 344, on Cards .....	dozen,	.35
17,538.	Esterbrook's "Red Ink" Pen, of German Silver, 343, on Cards . . .	"	25

ROUND WRITING PENS AND BOOKS.



17,560. Round Writing Combination Pen. Consists of a Holder and nine small Pens. for Ornamental Writing in Double or Treble Lines ...each, \$1.00



17,570.



17,580.

17,570.	Round Writing Pens, Double. Nos. 10, Wide ; 20, Medium ; 30, Narrow.....	Box of 3 dozen, \$1 00; dozen, assorted,	.50
17,580.	Round Writing Pens, Single. Widest, No. 1; narrowest, No. 6. Nos. 1, 2, 3 4, 5, 6.....	box of 3 dozen, .35	dozen, .15
17,594.	Assortment of 25 Single and Double Pens, in Box.....		.35



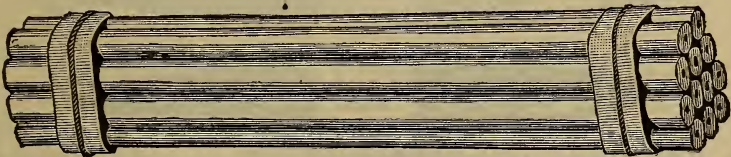
17,600.	Penholder, for Round Writing Pens.....	each,	.10
17,620.	Round Writing Copy Book, with Assortment of 25 Pens.....	"	.90
17,622.	Round Writing Copy Book, without Pens.....	"	.60
	Round Writing Copy Book (same as 20,152).....	(List Price, .28)	.25



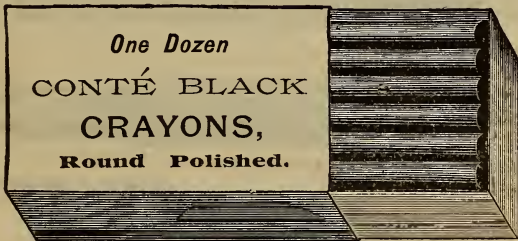
## CRAYON DRAWING OUTFITS.

- 17,750. **Polished Wooden Box**, containing Crayons of various grades, Crayon Pencils, Charcoal, Crayon Sauce, Leather and Paper Stumps, Chamois Palette, Rubbers, Rubber Stumps, Crayon Holders, Tacks, Chamois Leather for Shading, Knife, Pencils, and a Treatise on Crayon Drawing.....each, \$7.50
- 17,754. **Wooden Box** containing Crayons, Crayon Pencils, Charcoal, Crayon Sauce, Stumps, Chamois Leather for Shading, Tacks, Knife, Crayon Holder..... “ 4.00
- 17,758. **Wooden Box** containing a variety of Crayons, Stumps, etc., for general Crayon Drawing... “ 2.50

## CRAYONS, etc.



- |         |                                                                      |        |        |
|---------|----------------------------------------------------------------------|--------|--------|
| 17,780. | Conte Crayons, Black, in Wood, (Pencil Shape) “Velvet,” very soft... | Dozen. | \$1.25 |
| 17,782. | Conte Crayons, Black, in Wood, “ “ No. 3, soft.....                  |        | .90    |
| 17,784. | Conte Crayons, Black, in Wood, “ “ No. 2, medium.....                |        | .60    |
| 17,786. | Conte Crayons, Black, in Wood, “ “ No. 1, hard.....                  |        | .60    |
| 17,792. | Conte Crayons, White, in Wood, “ “ .....                             |        | .60    |

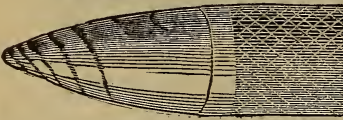


- |         | No. 1, Hard.                                                                              | No. 2, Medium. | No. 3, Soft. |        |     |
|---------|-------------------------------------------------------------------------------------------|----------------|--------------|--------|-----|
| 17,800. | Conte Crayons, Black, in Round Sticks, Polished, Medium Hard, Box containing 1 dozen..... |                |              | box,   | .60 |
| 17,804. | Conte Crayons, Black, in Round Sticks, Nos. 1, 2, 3, Box containing 1 dozen .....         |                |              | “      | .40 |
| 17,808. | Conte Crayons, Black, in Square Sticks, Nos. 1, 2, 3, Box containing 1 dozen .....        |                |              | “      | .20 |
| 17,812. | Conte Crayons, White, in Round Sticks, Box containing 1 dozen .....                       |                |              | “      | .40 |
| 17,816. | Conte Crayons, White, in Square Sticks, “ “ “ .....                                       |                |              | “      | .20 |
| 17,820. | Conte Crayons, Red, in Round Sticks, “ “ “ .....                                          |                |              | “      | .40 |
| 17,830. | Conte Crayon Sauce, in Tin Foil packages. Large, doz., \$1.20. Small, doz., .....         |                |              |        | .75 |
|         | A. W. Faber's Black Chalk Crayons, in Cedar, (same as 16,640) Hard and Soft.....          |                |              | dozen, | .55 |
|         | Red Chalk, same as 16,648, in Polished Cedar.....                                         |                |              | dozen, | .75 |
|         | Red Chalk, same as 16,650, in Cedar.....                                                  |                |              | “      | .55 |

# STUMPS.



Extra  
Large.



Large.



Medium.



Small.



- 17,850. Yellow Chamois Leather Stumps.....doz., assorted, \$1.25  
 “ “ “ “ Separate sizes:  
 Each, .25 extra large. .20 large. .15 medium. .12 small. .10 very small.  
 17,860. Extra White Kid Stumps.....doz., assorted, \$1.50  
 17,870. Extra Cork Stumps..... “ “ 1.50  
 17,880. Paper Stumps..... “ “ .35



- 17,900. Miniature Paper Stumps.....doz., .10

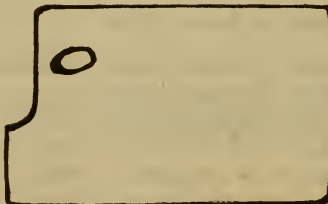


- Rubber Stumps, Wooden Centre, same as 15,120:  
 Each,..... .35 large. .25 medium. .15 small.



- Rubber Stumps. All Rubber, same as No. 15,130:  
 Each,..... .12 large. .09 medium. .06 small.

- 17,910. Fine Chamois Skins for Stumping and Shading and for Cleaning  
 Instruments.  
 Each,..... .30 medium. .20 small size.



- 17,914. Chamois Palettes for holding and mixing crayon ready for stumping.  
 Each,..... .35 large. .25 small.

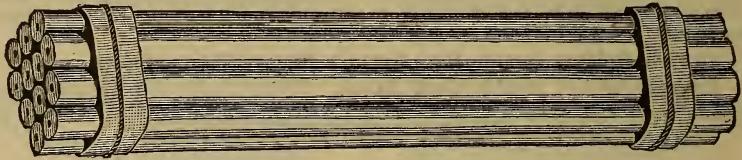




## LITHOGRAPHIC CRAYONS.

THESE CRAYONS CAN ALSO BE USED FOR BOLD, OFF-HAND DETAIL AND ORNAMENTAL DRAWING.

The wax contained in the Crayons prevents the lines from becoming blurred.

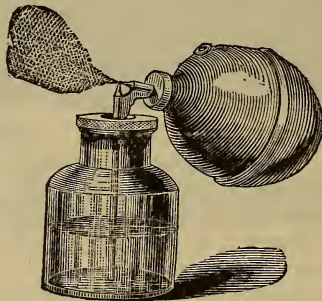


- 18,300. Lithographic Crayons, in Wood, Pencil Shape, 1, 2, 3.....dozen, \$1.00
- 18,310. Lithographic Crayons, Curriers, in Sticks, 1, 2, 3, Package containing 1 dozen..... .35
- 18,314. Lithographic Crayons, French, in Sticks, 1, 2, 3, Box containing 1 dozen. . . . .30

## SCHOOL (CHALK) CRAYONS.

- 18,330. School Crayons, Assorted Colors, for Blackboard use. Box containing 1 gross..... \$1.25
- 18,334. School Crayons, White, for Blackboard use. Box cont'g 1 gross, Blackboards, see 19,500, etc. Blackboard Dividers, see 8,100, etc. .25

**ATOMIZERS,**  
**For Fixing Crayon**  
**Drawings,**



**By blowing a**  
**Spray of**  
**FIXATIVE**  
**over the Drawing.**

- No. 18,850.
- 18,850. Atomizer, Extra Quality, in Box.....each, \$1.12
- 18,856. Atomizer..... " .55
- 18,860. Fixative, Ready for use.....bottle, .50
- 18,864. Preparation for cleaning the tubes of Atomizers..... " .25

The Fixative should not be allowed to remain in the tube any length of time, as it will clog by hardening. A few sprays of the preparation will remove the Fixative from the inside of tube, if attended to promptly, and keep the Atomizer ready for immediate use.

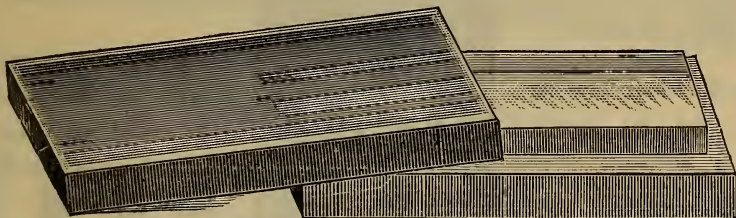
- 18,870. Soehnee's Composition, for fixing Crayon Drawings.....each 30
- J. B. Crocker's Hand Book,  
 "On the Art of Crayon Portraiture in Black and White."..... " .35

This little book gives many useful hints on this class of work.

# ARKANSAS OIL STONES,

Best Quality,

FOR SHARPENING DRAWING INSTRUMENTS, CUTLERY, ETC.



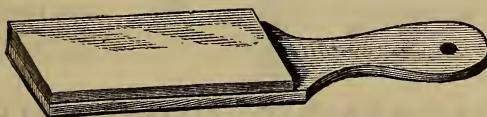
No. 19 000.

19,000. Arkansas Oil Stones, in Wooden Boxes, with Cover.

	8	7	6	5	4	3 inch.
Each,	\$2.80	2.50	2.25	2.00	1.50	1.00

19,010. Arkansas Oil Stones.

Each,	\$2.00 large.	1.50 medium.	1.00 small.
-------	---------------	--------------	-------------



No. 19,012.

19,012. Arkansas Desk Oil Stones, on Wood, with Handle .....each, .75



No. 19,015.

19,015. Arkansas Oil Stone Slips, for Instruments, Knives, etc.

Each,	.50 large.	.40 medium.	.30 small.
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No. 19,020.

19,020. Arkansas Wedge Shape Oil Stones.....each, .35



No. 19,030.

19,030. Arkansas Pointed Oil Stones.....each, .25

“PAR EXCELLENCE” GUM.

For stretching Drawing Paper, and for general Office use.

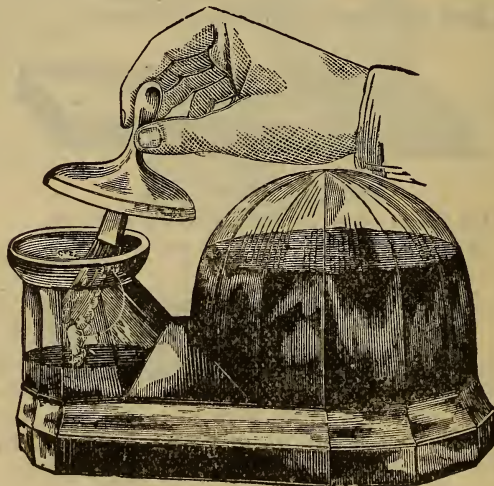


It is strictly pure ; is made very thick, and can be diluted with water, and still retain binding qualities equal to mucilage.

19,110. “PAR EXCELLENCE” GUM.

Large bottle (large quart) .....	(List Price, \$1.12) each,	\$1.00
Medium “ (large pint) .....	(List Price, .55) “	.50
Small “ (large half-pint) .....	(List Price, .28) “	.25

RESERVOIR GUM POTS.



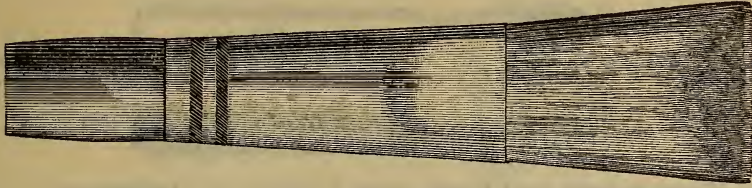
19,120. Reservoir Gum Pots, with Brush, for using “Par Excellence” Gum or Mucilage.....	.55 large.	.35 small.
-----------------------------------------------------------------------------------------	------------	------------

MOUTH GLUE.

19,128. MOUTH GLUE, in thin cakes .....	dozen,	.40
-----------------------------------------	--------	-----

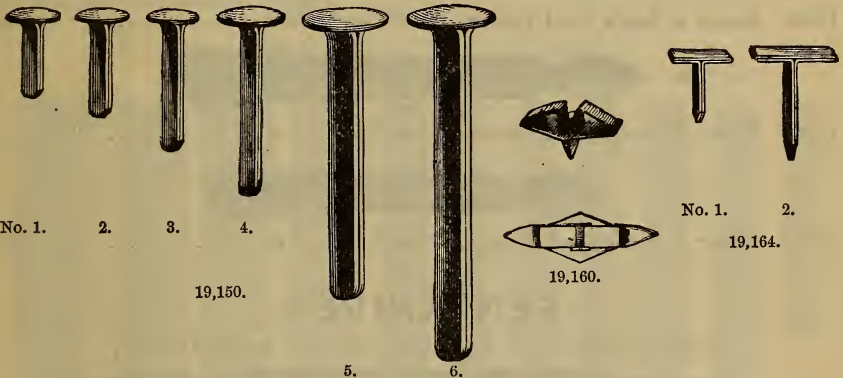


**BRUSHES FOR "PAR EXCELLENCE" GUM,  
Long Handles.**



Brushes for "Par Excellence" Gum. Same as No. 13,700.  
Each, .20 large. .15 medium. .12 small.

**PAPER FASTENERS.**

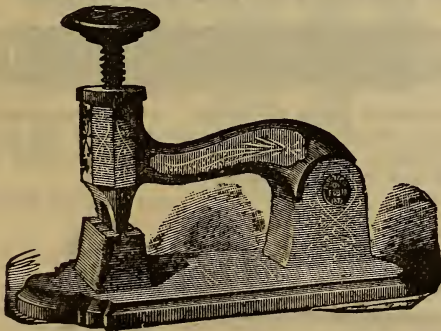


Above cuts represent full size of each number.

19,150. Paper Fasteners, Round Heads, best quality.						
No.	6	5	4	3	2	1
Box,	\$1.12	.90	.55	.43	.38	.38
19,160. Paper Fasteners, "Excelsior Eyelet".....					box,	.35
19,164. Paper Fasteners, "Flat Heads, No. 1, 2....."						.30

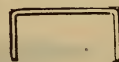
Specification Papers, see No. 19,820, etc.

**SINGLE STROKE STAPLE BINDER.**



**WIRE BINDERS**

for No. 19,170.



No. 19,170. The machine is easily manipulated. A wire is placed into the jaw, forced through the paper by a stroke of the hand, and is bent over at the same time

19,170. Single Stroke Staple Binder, complete with Wire Staple Binders, in Box.....	each,	\$2.75
19,174. Wire Staple Binders, Box containing 500 Binders .....		.33

## STEEL INK ERASERS.

No. 19,200.



19,200. Roger & Son's Steel Eraser, White Handle, 5½ in., knife shape. . each, .65

No. 19,202.



19,202. Roger & Son's Steel Eraser, Ebony Handle, 5½ in., knife shape, " .55

No. 19,204.



19,204. Roger & Son's Steel Eraser, White Handle, 5 in. .... " .50

No. 19,208.



19,208. Roger & Son's Steel Eraser, Cocoa Handle, 5 in. .... " .45

No. 19,210.



19,210. Roger & Son's Steel Eraser, Cocoa Handle, 4 in. .... " .40

## PEN KNIVES,

For Sharpening Pencils and for general use.



- 19,220. English Pen Knife, 4 blades.....each, \$1.35
- 19,225. English Pen Knife, 3 " ..... " 1.12
- 19,230. English Pen Knife, 2 " ..... " .85

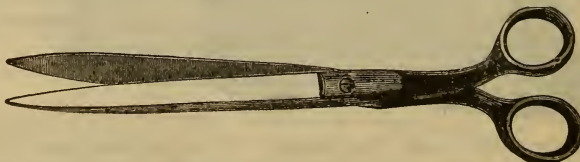
## AUTOMATIC POCKET PEN KNIFE.



The knife blade is concealed within the handle. By a slight pressure on a knob at the end, the blade drops out to the required length, and is held in position by a self-acting clamp. The same pressure in an inverted position causes the blade to drop back into the handle.

19,240. Automatic Pocket Pen Knife..... (List Price, .28) each, .25

PAPER



SHEARS.

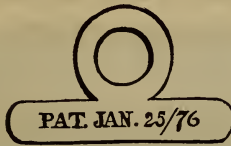
19,250. Paper Shears, Best Quality, carefully ground :

	12	10	9	8 inch.
Each,	\$1.75	1.25	1.00	.80

## SUSPENSION RINGS

FOR HANGING UP

No. 19,300.

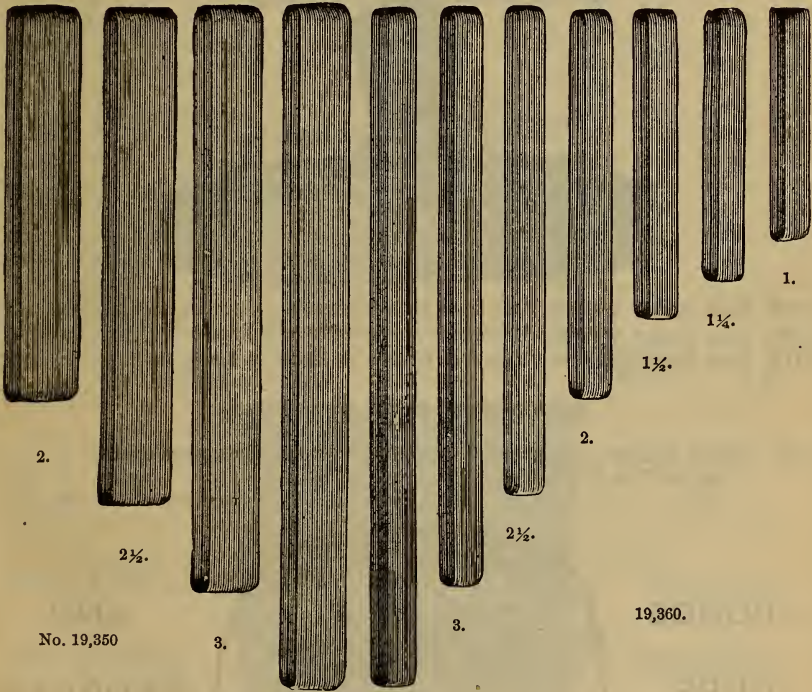


DRAWINGS, ETC.

19,306.

- 19,300. Extra Tough Gummed Paper Suspension Rings ... Box cont'g 100, 25  
 These rings or holders are attached to a drawing or sheet of paper by wetting the gummed sides and pressing them together, with the paper between the lower part.
- 19,306. Brass Suspension Rings..... Box containing 250, .75

## RUBBER BANDS.



No. 19,350

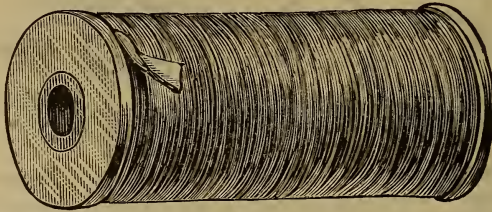
19,360.

- 19,350. Rubber Bands, Best Quality.  $\frac{1}{4}$  inch Wide.  
 Gross Box,  $3\frac{1}{2}$  3  $2\frac{1}{2}$  2 inch long. Assorted sizes.  
 \$1.75 1.50 1.25 1.00 1.50
- 19,360. Rubber Bands, Best Quality.  $\frac{1}{8}$  inch Wide.  
 Gross Box,  $3\frac{1}{2}$  3  $2\frac{1}{2}$  2  $1\frac{1}{2}$   $1\frac{1}{4}$  1 in. long. Assorted sizes.  
 \$1.00 .90 .80 .70 .65 .60 .50 .85
- 19,375. Rubber Bands, Best Quality.  $\frac{1}{16}$  inch Wide.  
 Gross Box,  $2\frac{5}{8}$   $2\frac{1}{8}$   $1\frac{3}{4}$   $1\frac{3}{8}$  1 inch long. Assorted sizes.  
 .35 .30 .25 .20 .15 .25



**PINK TAPE,**

For Binding Documents, Specifications, etc.



- 19,390. Pink Tape.  
 Each..... .55 large. .28 small spool.

**IRON PAPER WEIGHTS.**

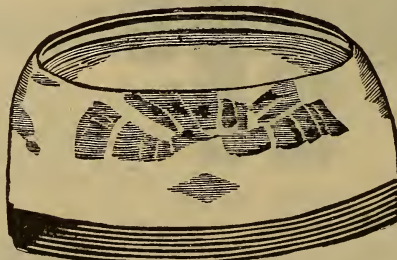


- 19,404. Iron Paper Weight, Oblong, with Knob, about 3 lbs.....each, .80  
 19,408. Iron Paper Weight, Round, " " 1½ lbs..... " .40  
 19,412. Iron Paper Weight, Round or Oval, with Knob, about ¾ lb ..... " .25

**PAPER FOLDERS.**

- 19,430. Paper Folders, convenient for pressing down the edges, when stretching drawing paper, etc.  
 Each..... .75 fine. .50 medium. .25 plain.

**SPONGE  
 CUPS**



**AND  
 SPONGES.**

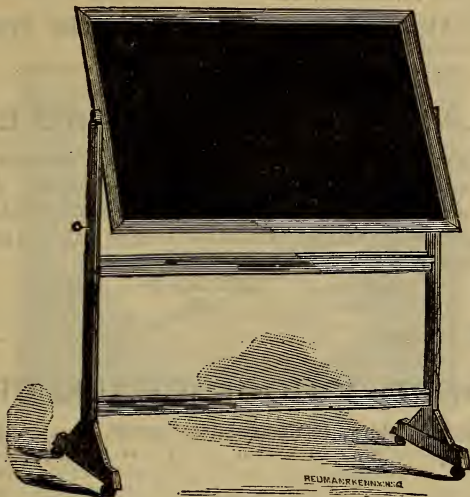
- 19,440. Sponge Cups, Plain Glass, without Sponges.  
 Each..... .25 large. .20 medium. .15 small.  
 19,450. Sponges for Sponge Cups .... .25 " .20 " .15 "  
 19,454. Sponges for Wetting Drawing Papers, Stretching, etc.  
 Fine Quality, various sizes..... from 25c. to \$1.00.  
 Water Glasses, see No. 11,690, etc.

# LIGHT WOODEN BLACKBOARDS,

Coated with Liquid Slating.

Sold at Manufacturer's Prices.

For laying out ornamental and other work, a board of this kind is often of great advantage. They are made very light but strong, and are easily transported or handled. Can be used on either side.



No. 19,500.

19,500. Blackboards Mounted on Revolving Rack, with Rollers.

Each.....	4x5	3½x4½	3x4 feet.
	\$18.00	15.50	13.00

19,510. Blackboard in Wooden Frame, to hang up.

Each.....	4x5	3½x4½	3x4	2½x3½	2x3 feet.
	\$12.00	9.50	7.00	5.25	2.50



No. 19,520.

PORTABLE  
ROLLING

BLACK-  
BOARDS.

19,520. Portable Rolling Blackboards, on Map Rollers.

Each.....	3x4	2½x3½	2x3 feet.
	\$2.00	1.50	1.00

*See* BLACKBOARDS AND MATERIALS continued on next page.

### FLEXIBLE BLACKBOARD CLOTH.

Can be rolled up and carried like a drawing. For lectures, etc., or in cases where a board is only occasionally used, it supplies all requirements. Tack it to the wall, and it is ready for use.

- 19,524. **Flexible Blackboard Cloth, 46 inches wide, Both Sides Prepared.**  
 Roll containing 12 yards..... \$24.00  
 Yard..... 2.00
- 19,526. **Flexible Blackboard Cloth, 36 inches wide, One Side Prepared.**  
 Roll containing 12 yards..... 15.00  
 Yard..... 1.25

### LIQUID SLATING & BLACKBOARD ERASERS.

19,530. **Liquid Slating**, for repainting old Blackboards, or painting on any wooden or plaster wall, with an ordinary paint brush. A quart will cover about 40 to 50 square feet with three coats, or about 100 square feet with one coat, and transform a white wall into an excellent Blackboard.

	Gallon.	Half Gallon.	Quart.	Pint Tin Can.
Each.....	\$6.00	3.25	1.75	1.00

19,540. **Blackboard Erasers**.....each, .25

### BLACKBOARD SCHOOL (CHALK) CRAYONS.

- Same as 18,330, Assorted Colors, Box containing 1 gross..... \$1.25
- “ 18,334, White, “ “ 1 “ ..... 25

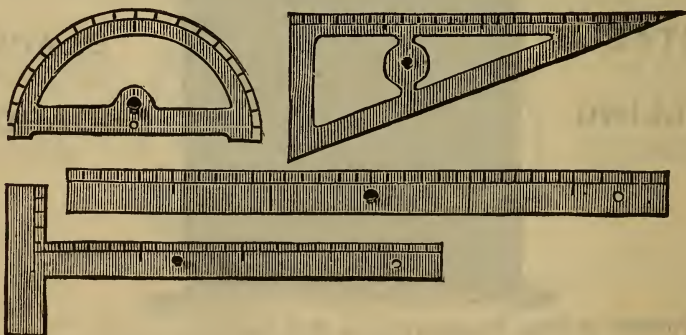
### WOODEN BLACKBOARD DIVIDERS.



Wooden Blackboard Dividers, Same as No. 8,100.

	30	24	18	15 inch.
Each.....	\$2.00	1.60	1.25	1.00

### WOODEN BLACKBOARD DRAWING SET.



Wooden Blackboard Drawing Set, Same as No. 8,120, consisting of 24 inch T Square, 36 inch Straight Edge, 24 inch Triangle, all divided into inches, and 15½ inch Protractor.....set, \$5.00



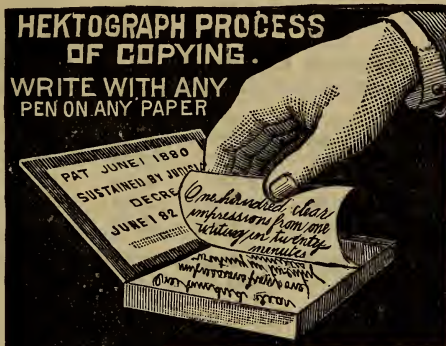
# HEKTOGRAPHS,

FOR

Copying Drawings, Specifications, Legal Documents,  
Letters, Etc.

*Fifty to One Hundred Copies can be produced from the Original.*

SOLD AT MANUFACTURER'S PRICES.



Hektographs are of great service for copying Drawings, Specifications, or any written matter rapidly. The original is carefully drawn or written with the prepared ink; moisten the preparation with a sponge or brush, and remove the superfluous water by blotting with ordinary newspapers (not blotting paper); the original is then placed on the adhesive surface (face down), and removed after a few minutes. The greater portion of the highly concentrated ink remains on the pad, from which numerous copies can be produced by successively placing sheets of white paper on the adhesive surface.

The pad is cleaned with a sponge saturated with warm or cold water; warm water preferred.

## EXTRA LARGE HEKTOGRAPHS,

FOR COPYING DRAWINGS,

Or numerous pages of written matter.

*Any size made to order at 5 cents per square inch of surface.*

19,600. Hektographs, Large Sizes, Strong Cases, Extra Deep Filling.

	36×42	30×36	27×40	26×34	23×31	20×24 inches.
Each,	\$75.60	54.00	54.00	44.20	35.65	24.00

### SMALL HEKTOGRAPHS.

19,606, Hektographs, Small Sizes, Deep Filling, for Copying Letters, Specifications, etc.

Folio Size, 12×18 inches.....	each,	\$9.50
Specification or Legal Cap Size, 10×15 inches.....	"	8.00
Large Letter Size, 10×12½ inches.....	"	6.00
Large Note Size 6¼×10 inches.....	"	4.00

Hektographs are also made in other grades.

TRAYS REFILLED AT HALF PRICE.

19,608. Hektograph Composition, put up in Tin Cans for Export, with directions for use.....pound, \$1.00

19,610. Hektograph Inks, Prepared Ready for Use. Violet, Carmine, Blue, Green.....bottle, .25

HEKTOGRAPH PAPERS, see next page.

## HEKTOGRAPH PAPERS.

FOR COPYING DRAWINGS, WRITING, ETC.

**“VULCAN” Hektograph Roll Papers, Best Quality, Smooth Finish.**

	100	50	30	20	10 Yard Roll.
42 inches wide,	\$17.50	8.75	6.00	4.25	2.20
36 “ “	15.30	7.65	5.00	3.25	1.85
27 “ “	11.50	5.75	3.70	2.50	1.35
20 “ “	9.00	4.50	3.00	2.15	1.15

**“DRAGON” Hektograph Roll Papers, Extra Thin, Extra Tough.**

Can be folded repeatedly without breaking, and is a desirable paper for mailing, causing a saving on postage.

	100	50	30	20	10 Yard Roll.
42 inches wide,	\$17.50	8.75	5.95	4.25	2.20
36 “ “	15.30	7.65	4.80	3.25	1.85
30 “ “	13.00	6.50	4.15	2.85	1.50
27 “ “	11.50	5.75	3.60	2.50	1.35
20 “ “	9.00	4.50	2.85	1.15	1.15

**“ARGAND” Hektograph Roll Paper, Smooth Finish, Medium Quality.**

	200	100	50	30	20 Yard Roll.
36 inches wide,	\$15.50	7.75	4.00	2.50	1.75

**Hektograph Sheet Papers, Smooth Finish.**

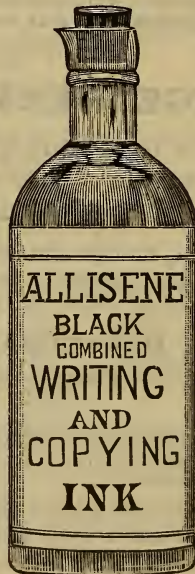
Imperial, 23×31 in., quire, \$1.50 Super Royal, 22×28 in., quire, \$1.00

Other sizes furnished at short notice.

Papers in Pads, Nos. 19,660-19,670, are suitable for Hektograph Copies.

## “ALLISENE” WRITING INK.

**COPIES  
CLEARLY.**



**TURNS  
DEEP BLACK.**

19,615. **“ALLISENE” Combined Writing and Copying Ink.**

This Ink flows evenly, copies clearly, turns deep black and possesses all the good qualities of a first-class ink.

.85 large (Quart)

.50 medium (Pint)

.35 small (½ Pint) Bottle.

## SPECIFICATION PAPERS.

- 19,620. **NUMBERED Specification Legal Cap**, Extra Large Size,  $8\frac{1}{2} \times 14$  inches, best quality. Each page contains lines numbered consecutively from 1 to 32, which greatly assists in referring to any portion of specification.
- Package, containing 1 Ream (480 sheets).....\$5.50  
 " "  $\frac{1}{4}$  " ..... 1.50  
 Quire..... .33
- 19,624. **Specification Legal Cap**, Extra Quality.
- |                          |                     |             |              |
|--------------------------|---------------------|-------------|--------------|
| Ream.....                | \$4.75 extra heavy. | 4.25 heavy. | 3.75 medium. |
| Package cont'g 5 quires. | 1.25 " "            | 1.12 " "    | 1.00 " "     |
- PRINTED COVERS FOR SPECIFICATIONS, SEE 19,700-19,702.*

## PRINTED SPECIFICATIONS

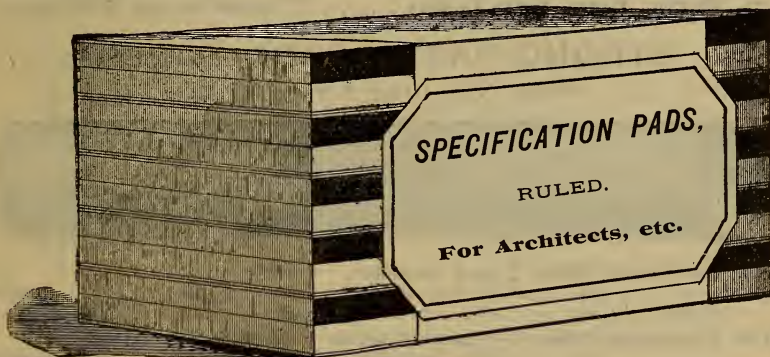
Are in the form of regular Specifications, giving a printed heading for every part of the work connected with a building, with blank space opposite for extra remarks.

- 19,635. **Printed Specifications, LARGE.** For structures \$5,000 and over. each. .50  
 19,637. **Printed Specifications, SMALL.** For structures less than \$5,000. " .40

## PRINTED BUILDING AGREEMENTS.

- 19,640. **Printed Building Agreements**.....dozen, 40

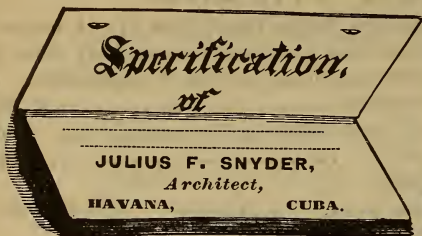
## WRITING AND FIGURING PADS.



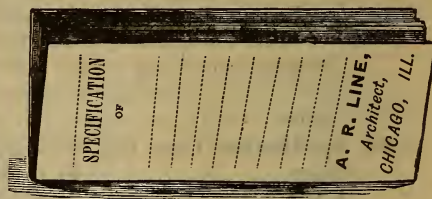
- 19,660. **Pads, White Paper, Extra Quality, Ruled.**
- |                                       |               |       |     |
|---------------------------------------|---------------|-------|-----|
| Specification or Legal Cap size ..... | dozen, \$4.25 | each, | .38 |
| Large Letter Size .....               | " 3.60        | "     | .33 |
| Large Note Size .....                 | " 2.15        | "     | .20 |
- 19,670. **Pads, White Paper, Good Quality, not Ruled.**
- |                         |        |   |     |
|-------------------------|--------|---|-----|
| Large Letter Size ..... | " 2.85 | " | .28 |
| Large Note Size .....   | " 1.80 | " | .17 |
- 19,680. **Pads, Light Buff Paper, Ruled.**
- |                                                    |        |   |     |
|----------------------------------------------------|--------|---|-----|
| Specification or Legal Cap Size, extra thick ..... | " 5.50 | " | .50 |
| Specification or Legal Cap Size .....              | " 3.00 | " | .28 |
| Large Letter Size .....                            | " 2.40 | " | .22 |
| Large Note Size .....                              | " 1.20 | " | .12 |
- 19,690. **Pads, Light Buff Paper, not Ruled.**
- |                         |        |   |     |
|-------------------------|--------|---|-----|
| Large Letter Size ..... | " 1.80 | " | .17 |
| Large Note Size .....   | " 1.10 | " | .10 |



**PRINTED COVERS FOR SPECIFICATIONS.**



Part of inside view of cover.



Part of outside view of cover.

- 19,700. Printed Covers for Written Specifications, large enough to cover back and front of sheets..... \$2.20 gross package. .20 dozen.
- 19,702. Printed Covers for Written Specifications, with Purchaser's Name, Business and Address Printed on each.....gross, \$2 95

When ordering Specification Covers, send sample sheet of the paper for which covers are required, or state exact size of sheet.

**SPECIFICATION LEGAL CAP, SEE PREVIOUS PAGE.**

Paper Fasteners, see Nos. 19,150 to 19,174.

**BLOTTING PAPER.**

- 19,720. Blotting Paper in Large Sheets, Extra Quality, Royal, 19x24 inches .....quire, \$2.00 sheet, .10
- 19,722. Blotting Paper, Extra Quality .....small package of one dozen, .10

**STRONG PASTEBOARD TUBES,**

For Mailing Drawings.



- 19,740. Pasteboard Tubes, 2 inch diameter.
 

	38	30	24	18	15	12 inches long.
Dozen, \$	1.00	.80	.60	.50	.40	.30
- 19,750. Pasteboard Tubes, 1½ inch diameter.
 

	38	30	24	18	15	12 inches long.
Dozen, .	.80	.65	.50	.40	.30	.25

Other sizes furnished at short notice.

**TIN BOXES, WITH SLIP COVER,**

For Tracing Cloth, Drawings, etc.



- 19,770. Tin Boxes, with Slip Cover, 3¼ inch diameter, to keep Tracing Cloth and Paper free from moisture, etc.
 

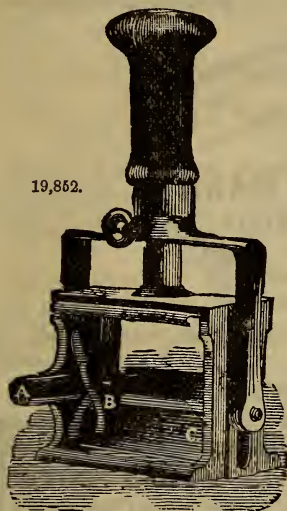
	60	50	45	40	35	31	25 inches long.
Each, \$	3.30	3.00	2 60	2 20	1 80	1.40	1.00

Other sizes furnished at short notice.

## RUBBER STAMPS.

In ordering Rubber Stamps, state the Catalogue Number or describe as definitely as possible.  
 ANY SIZE FURNISHED AT SHORT NOTICE.

### SELF-INKING STAMPS WITH RUBBER DIES.



RECEIVED PAYMENT

JULY 1 1885

E. G. SOLTMANN

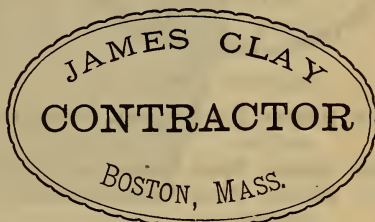
Per.....

DRAWING EXAMINED  
 AND  
 APPROVED

JUNE 1 1885

JOHN SMITH

Per.....



These stamps are made of brass, nickel plated, and have polished wooden handles. In using this stamp it requires a firm downward pressure (*not a sudden jar*), which gives the impression, and on releasing it, it revolves back, inks the die, and is immediately ready for use.

### DATING STAMPS.

- 19,850. Self-Inking DATING Stamp, with Rubber Die,  $1\frac{3}{4} \times 2\frac{1}{2}$  inches, containing several lines of descriptive matter, including box of rubber dating type (good for ten years) and can of ink..... each, \$7.75
- 19,852. Self-Inking DATING Stamp, same as No. 19,850, with Rubber Die,  $1\frac{1}{4} \times 2\frac{1}{8}$  inches ..... " 6.60
- 19,854. Self-Inking DATING Stamp, same as No. 19,850, with Rubber Die,  $1\frac{1}{8} \times 1\frac{1}{2}$  inches ..... " 5.50

### STAMPS WITH BUSINESS CARD.

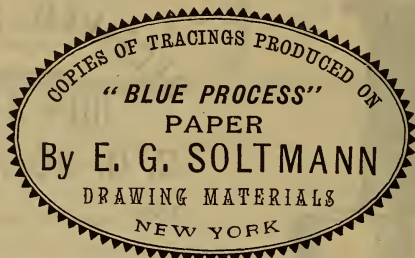
- 19,860. Self-Inking Stamp, with Rubber Die,  $1\frac{3}{4} \times 2\frac{1}{2}$  inches, containing several lines of descriptive matter, including box of rubber dating type (good for ten years) and can of ink..... each, \$6.60
- 19,862. Self-Inking Stamp, same as No. 19,860, with Rubber Die,  $1\frac{1}{4} \times 2\frac{1}{8}$  inches ..... " 5.50
- 19,864. Self-Inking Stamp, same as No. 19,860, with Rubber Die,  $1\frac{1}{8} \times 1\frac{1}{2}$  inches ..... " 4.40

# RUBBER HAND STAMPS.

CONTAINING PURCHASER'S BUSINESS CARD OR OTHER LETTERING.

ANY SIZE FURNISHED AT SHORT NOTICE.

Style of Descriptive Matter similar to following samples.

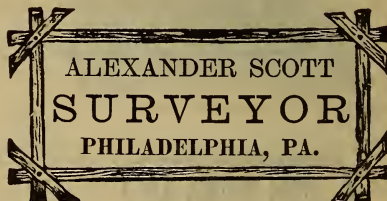


Nos. 19,890. 19,892.

- 19,890. Rubber Hand Stamp, Complete, in wooden Case, including Ink and Pad.....each, \$2.50
- 19,892. Rubber Hand Stamp, only, without Case, etc.....“ 2.00

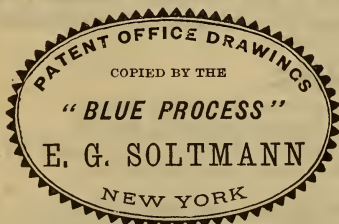


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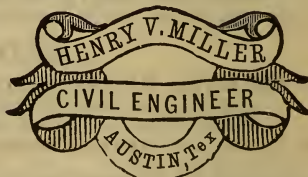


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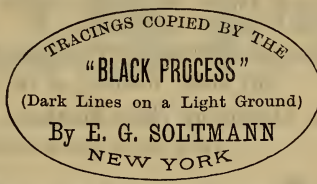


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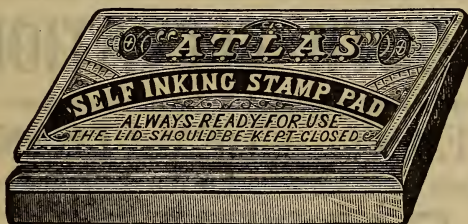
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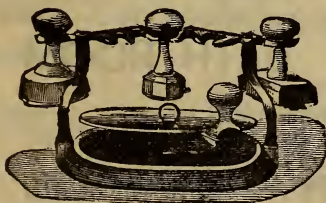
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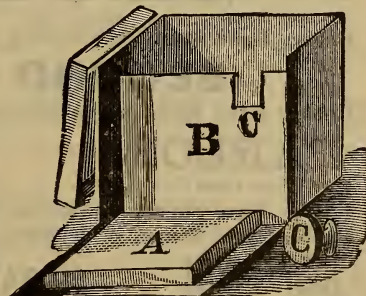
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Iron Stamp Rack, with Pad.



19,954.

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19,988. Rubber Hand Stamp, any lettering of above style and size ..... " .50

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" .....Light shading.	" .....Light shading.
" .....Deep shading.	" .....Deep shading.
<i>Human Figures and Heads</i> ..Outline.	<i>Flowers</i> .....Outline.
" " " " ..Light shading.	" .....Light shading.
" " " " ..Deep shading.	" .....Deep shading.
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
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COMPLETE INDEX OF AUTHORS, CONTRIBUTORS, COMPILERS, EDITORS, *etc.*, Page 254.

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☞ COMPLETE INDEX OF AUTHORS, SEE NEXT PAGE.



## INDEX OF AUTHORS, CONTRIBUTORS, COMPILERS, EDITORS, ETC.

	PAGE		PAGE
<b>A</b> BBOTT.....	251*, 254*	Bartlett.....	237, 238
Abel.....	237	Bashforth.....	217, 221
Aberdeen.....	208	Baumann.....	215
Abernathy.....	229, 237	Bayles.....	250
Adams.....	208, 213*, 221, 250	Bayma.....	238
Ainslee.....	221	Beach.....	246
Airy.....	246	Beardmore.....	251
Alban.....	233	Beardslee.....	217
Alden.....	237	Beaton.....	215
Aldis.....	246	Bell.....	219, 229, 246
Alexander.....	237	Bemrose, Jr.....	219
Allan.....	217, 233, 237	Bender.....	217
Allen.....	208	Benjamin.....	244*
Anderson.....	208, 229, 231*	Benson.....	226
Andre.....	225, 237	Bernolet.....	234*
Angell.....	229	Besant.....	238, 251
Ansted.....	250	Bezold.....	226
Appleby.....	237	Bicknell.....	209
Appleton.....	228*, 243	Biddle.....	244
Argand.....	246	Bilgram.....	238
Armengaud.....	243	Billings.....	251
Armoroux.....	243*	Binns.....	226
Armstrong.....	222*, 229*, 233	Birch.....	251
Ashenhurst.....	237	Bishop.....	226
Atkinson.....	231, 250	Black.....	243
Atwood.....	208	Blanchet.....	248*
Auchincloss.....	237	Bland.....	217, 244
Audsley.....	208, 225, 243	Bledsoe.....	246
Austin.....	213, 215	Blinn.....	238
Aveling.....	219	Bloomer.....	229
Axon.....	237	Blenkarn.....	209
Ayrton.....	229	Bloxam.....	209
<b>B</b> ABBAGE.....	248*	Boileau.....	246
Babcock.....	208	Boller.....	217
Backus.....	213*	Bond.....	229
Bacon.....	225, 233	Boole.....	246
Badenoch.....	225	Booth.....	226
Baigent.....	225	Borden.....	221
Baile.....	229	Bottomley.....	238
Baily.....	247*	Bourdon.....	247*
Baird.....	237	Bourne.....	222*, 233, 244
Baker.....	217, 221, 233, 237, 246	Bow.....	215, 217
Baldwin.....	250	Bowditch.....	244
Bale.....	233	Bower.....	229
Ball.....	237	Bowler.....	209
Bamber.....	224*, 240*	Bowser.....	246
Barlow.....	217*, 237, 246	Box.....	238, 251
Barnard.....	209, 225, 226	Boyce.....	227*
Barnes.....	245*	Bradley.....	246
Barr.....	233, 246	Brande.....	243
Barry.....	221, 244	Brandon.....	209
		Bremiker.....	250*
		Briggs.....	251
		Brigham.....	213*
		Brisse.....	253*
		Brook.....	246
		Brookes.....	243
		Brooks.....	209
		Brown.....	215, 222, 234*, 238, 251
		Browne.....	238, 251*, 251
		Bruhns.....	246
		Brunner.....	210*
		Buchan.....	251
		Buchanan.....	238, 243
		Buck.....	209, 217, 222
		Buckmaster.....	229
		Buel.....	223*, 233, 238, 244*
		Bullock.....	209
		Burchett.....	226, 246
		Burckard.....	236*
		Burgh.....	233, 238
		Burn.....	226
		Burnam.....	215
		Burnell.....	215, 222*
		Burns.....	209, 210, 215, 226, 233 238, 243, 251
		Burr.....	217, 222
		Burt.....	222
		Bury.....	210
		Bushnell.....	214*
		Butler.....	251
		Butts.....	215
		Byerly.....	246
		Byrne.....	222, 238, 243
		<b>C</b> ABOT.....	213*
		Cady.....	213*
		Cain.....	218
		Callon.....	251
		Cameron.....	215
		Camp.....	210
		Campin.....	218, 219, 221, 238, 246
		Cargill.....	218
		Carpenter.....	222
		Carr.....	246
		Carrington.....	246
		Carter.....	226
		Cassell's Manuals*.....	210, 211, 219 220, 226, 227, 228, 237, 240, 241
		Cave.....	226
		Caveler.....	210
		Cavendish.....	229
		Cayley.....	246

\* Name appears in the text, or after the first name.



Index of AUTHORS, CONTRIBUTORS, COMPILERS, EDITORS, Etc., continued.

	PAGE		PAGE		PAGE
Challes.....	247	Cupper .....	219	Ernst .....	222
Chalmers.....	222	Cuthbert .....	226, 227*	Esterbrook.....	219*
Chambers.....	210, 243	<b>D</b> AHLSTROM.....	234	Evarts .....	210
Chambers' Series*.....	247, 248	ana.....	238	Eveleth.....	211, 213*
Chandler.....	249*	D'Anvers.....	243	Everett.....	230
Chandler, Jr.....	213*	Daryl.....	226	Ewbank.....	251
Chanute.....	218	D'Auores.....	210	<b>F</b> ACEY, Jr.....	236
Chapman.....	226	Davids.....	245*	Fajia.....	216
Charles.....	236	Davidson.....	210, 220, 226, 227*	Fairbairn.....	238, 245
Chauvenet.....	247	Davis.....	221*, 222, 226, 238, 247	Fairholt.....	244
Chevreul.....	226	Davis.....	215, 222, 229	Fairley.....	251
Christy.....	215	Day.....	226, 229, 230*	Falke.....	208*, 236*
Church.....	226, 247	Dean.....	210	Fanning.....	251
Clark, 213*, 215, 234*, 235*, 238, 247		DeBaun.....	247	Faraday.....	230
Clarke.....	218, 222, 229, 247	DeForest.....	226	Farey.....	234
Clarkson.....	210	DeFourcy.....	247	Favart.....	227
Clausius.....	251	DeGraff.....	220	Fawkes.....	211
Cleeman.....	222	DeLaRive.....	229	Fehmer.....	213*
Clerk.....	233	DeLaRue.....	229	Fenwick.....	222
Cleveland.....	210, 213*	DeMorgan.....	249*	Ferguson.....	211
Clevenger.....	222	Dempsey.....	218, 222, 234	Ferrers.....	247
Clifford.....	238	Denton.....	251	Fesquet.....	228*, 240*
Coar.....	253*	DeRoos.....	238	Field.....	227, 230
Codrington.....	222	Deschanel.....	229	Fincham.....	245
Colburn.....	222, 223*, 233, 251	DeVarona.....	251	Fishback.....	231*
Cole.....	238	Diedrichs.....	218	Fisher.....	247
Collange.....	243	Dix.....	222	Fiske.....	230
Collett-Sandars.....	213*	Dixon.....	234, 238	Fitzgerald.....	239
Colling.....	210	Dobson.....	216	Fletcher.....	211, 216
Collings.....	219	Dodd.....	244	Flynn.....	251
Collins.....	226, 251	Dohme.....	236*	Foggett.....	211
Colton.....	243	Dolbear.....	229	Folkard.....	251
Constantine.....	251	Donald.....	244	Forney.....	234, 243*
Cook.....	210, 227*, 229	Donaldson.....	218, 234, 245, 247, 251	Foster.....	231*, 247
Cooke.....	230*	Douglas.....	229	Fox.....	251
Cooley.....	243	Dowling.....	218, 247	Francis.....	230, 251
Corfield.....	251	Downing.....	210, 251	Frankland.....	252
Corthell.....	252*	Dredge.....	222, 230*	French.....	252
Cotsell.....	244	Dresser.....	227	Frise.....	252
Cotterill.....	233	Drew.....	247	Frome.....	247
Coulthard.....	234	Drinker.....	222	Frost.....	229*, 247
Courtney.....	234	Drysdale.....	253*	Fryer.....	211
Couture.....	226	Du Bois.....	218, 234, 238, 251	Fuller.....	211
Cox.....	243*, 247	Duckett.....	247	Furgusson.....	230
Coxe.....	242*	Du Moncel.....	229, 230	<b>G</b> ALBRAITH.....	221*
Craig.....	247, 251	Duncan.....	222	Galloway.....	247
Craik.....	238	Dyer.....	247	Galton.....	211, 252
Crane.....	234, 238	<b>E</b> ADS.....	251, 252*	Garbett.....	211
Cresswell.....	219	Assie.....	216, 251	Gardner.....	211
Cresy.....	243	Eastlake.....	236	Garnett.....	231*, 239
Crocker.....	222	Ebbetts.....	238	Gaudard.....	218
Croff.....	210	Eddy.....	230, 247	Geldard.....	239
Croft.....	210	Ede.....	222*	Gerhard.....	210*, 252
Cross.....	222	Edis.....	236	Gibbens.....	246*
Cubitt.....	210	Edwards.....	234	Giesler.....	222
Cullen.....	238	Eidlitz.....	210	Gillespie.....	222, 223
Culley.....	229	Ekin.....	251	Gilmore.....	216, 223
Cumming.....	229	Elliott.....	210, 236	Gladstone.....	230
Cummings.....	210	Ellis.....	251	Glen.....	230*
Cunningham.....	222	Enthoffer.....	227	Glynn.....	239, 252
Cunynghame.....	229				

\* Name appears in the text, or after the first name.

## Index of AUTHORS, CONTRIBUTORS, COMPILERS, EDITORS, Etc., continued.

	PAGE		PAGE		PAGE
Godwin	236	Higgs	230, 248	Kittredge	216
Goodeve	234, 239	Hildenbrand	218	Klein	242*
Goodwin	236, 247	Hipsley	248	Klippart	252
Gordon	230, 234*	Hoare	239	Knight	234, 239, 244
Gore	230	Hobbs	211	Knowles	245
Gould	220	Hodgson	216, 220, 236	Koehler	236*
Graham	223, 234	Holley	211, 223	Kohlrausch	231
Grantham	245	Holly	220	Kugler	236*
Gray	230	Holmes	230	Kutter	251*
Greene	218, 247	Holtzapfel	239		
Gregg	211	Hood	252	<b>LACROIX</b>	236*, 248
Gregory	247	Hope	220, 230	Lakey	212
Grierson	230	Hopkinson	230, 234	Lamb	248
Griffin	248	Horton	220	Langdon	231
Grimshaw	220, 239	Hoskiaer	230	La Nicca	222*
Gripper	223	Hoskold	223	Laplace	239
Griswold	223	Hospitalier	230, 233*	Larabee	231
Grover	218, 223	Howard	223	Lardner	231, 234
Guillaume	211, 214*	Howe	213*	Latham	252
Gullik	227	Hughes	211, 239, 252	Latimer	224*
Gurden	223	Hulme	220, 227, 236, 243, 248	Law	222*, 248, 250*
Gurley	242	Humber	218, 246*, 252	Lea	221
Guthrie	230	Humphrey	251*, 252	Leaning	223
Gwilt	210*, 212*, 214*, 244	Hunt	211, 214*, 244*	Le Chatelier	234
		Huntington	223, 224*	Le Doux	239
<b>HACKWOOD</b>	223*	Hurst	216, 225*	Le Duc	214, 223
Haddon	248	Hussey	211	Lee	223
Hall	248	Hutchinson	218	Leed	223, 252
Hallatt	211	Hutton	248	Leeds	210*, 212
Hallett	216	Hyde	218, 239	Lees	252
Hallowell	248	Hymers	248	Le Fèvre	212
Hammersly	244			Lefel	212, 239
Hamilton	220, 223, 227	<b>ISHERWOOD</b>	234, 239	Legendre	247*, 248
Hammond	216, 230	<b>JACKSON</b>	223, 248, 252	Leitch	226*, 227
Hann	248	Jacob	216, 252	Leland	216
Harding	213*, 227	Jacques	211	Leuchers	252
Hardy	248	Jamieson	239	Levander	231
Harney	211	Jeffers	223	Lewis	213*, 227
Harris	230, 252	Jenkins	231	Lienard	237
Harrison	234, 239	Jervis	223	Linfoot	212
Hart	218	Johnson	210*, 244, 248, 249*	Lintern	223
Harvey	245	Johnston	239	Livingston	223
Haskins	230	Jones	220, 231, 237	Lloyd	231
Haskoll	208*, 218, 223	Jonquet	237	Lockwood	231
Haslett	244	Joynson	239	Long	223
Hasluck	239			Loring	231
Haswell	239	<b>KEAM</b>	227	Loudon	212, 244
Hatfield	216, 220	Keller	227	Lowndes	224
Haupt	218, 223, 227	Kemp	211	Lubke	227, 236*
Hayter	227	Kempe	245, 245*	Lukin	221
Hayward	253*	Kennedy	223, 239*	Lützon	236*
Heather	242, 248	Kent	217*, 239	Lyford	227
Hedges	230	Kentish	243		
Hellyer	252	Kerr	211, 239	<b>MACCORD</b>	239
Hemming	248	Kersey	210*	Macgregor	224
Henck	223	Kidder	211	Mackrow	245
Henrici	218	King	234*, 234	Maguire	227
Herrick	227	Kinsley	220	Mahan	224, 227, 239, 244*, 248
Herschel	218, 248*, 248	Kipping	245	Mahon	231
Hewson	252	Kirkman	223, 248	Main	234
Hibbard	236	Kirkwood	252	Malepeyre	228*

\* Name appears in the text, or after the first name.

Index of AUTHORS, CONTRIBUTORS, COMPILERS, EDITORS, Etc., continued.

	PAGE
Mallet .....	216*, 234
Maloney .....	221
Mann .....	252
Mansford .....	248
Marks .....	234
Marshall .....	227
Martin .....	239
Mascart .....	231
Mason .....	212
Masury .....	227
Matheson .....	224
Matthews .....	252
Maw .....	234
Maxton .....	240
Maxwell .....	229*, 231, 232*, 240
May .....	231
McClure .....	231
McCulloch .....	234
McGregor .....	231
McMasters .....	218, 252
Meade .....	245
Mendell .....	224
Merrett .....	224
Merrifield .....	248
Merrill .....	218
Merriman .....	218, 248
Merwin .....	231
Metcalfe .....	243
Michell .....	240
Millar .....	235*, 240, 248
Minchin .....	248
Minifie .....	228
Mitchell .....	212
Molesworth .....	224, 248
Monckton .....	219*, 221, 249
Moore .....	240
Morris .....	224, 228
Morrison .....	218*
Morton .....	231
Mullaly .....	231
Muller .....	229*
Munroe .....	231
Murdock .....	231, 232*
Murray .....	224, 245
Myers .....	219
<b>N</b> APIER .....	231, 245*
Neison .....	245
Neville .....	252
Newberry .....	228
Newcomb .....	249
Newdigate .....	249
Newlands .....	221
Newton .....	212
Niaudet .....	231
Nicholls .....	224
Nichols .....	234, 252
Nicholson .....	212, 221, 244
Noad .....	230*, 231
Noble .....	228, 240

	PAGE
Nolan .....	243
Norris .....	224
Northcott .....	240
Nystrom .....	235, 240, 245
<b>O</b> GDEN .....	212
leer .....	224
Olver .....	235
O'Neil .....	228
O'Reilly .....	230*
Orlander .....	240
Overbeck .....	236*
Overend .....	231
Overman .....	240
<b>P</b> AGET .....	240
Paine .....	240
Pallett .....	240
Palliser .....	212
Pambour .....	235
Papworth .....	244*
Parker .....	212, 244
Parkinson .....	231, 240
Parnell .....	231
Parry .....	253
Parsloe .....	224
Pattison .....	212
Peabody .....	213*
Peacock .....	243*
Peake .....	245
Pearse .....	242*
Peirce .....	240
Pellegrin .....	228
Pemberton .....	240
Perkins .....	208*, 240
Perry .....	229*, 235, 240
Pewtner .....	216
Philbrick .....	253
Phin .....	216
Phusin .....	212
Pickering .....	212
Plum .....	232
Plummer .....	217
Plympton .....	224
Pochet .....	240
Pole .....	233*
Pook .....	245
Pope .....	232, 232*
Porter .....	235
Powell .....	212
Preble .....	235
Preece .....	229*, 230*, 232
Prescott .....	232
Prideaux .....	247*
Puckle .....	249
Pugin .....	212, 213
Pullen .....	249
Putnam .....	213
Pyne .....	213, 228
<b>Q</b> UINBY .....	249

	PAGE
<b>R</b> EA .....	229*
after .....	253
Rankine .....	213, 224, 232, 235, 240 245, 245*
Rawlinson .....	240, 253
Reed .....	213, 217, 224, 240, 245
Reeve .....	213*
Reid .....	217, 240, 252*, 253
Rennie .....	218*
Renwick .....	213*
Reynolds .....	224, 235
Rice .....	224, 249
Richards .....	240
Richardson .....	213, 253*
Riddell .....	213, 217, 221, 240
Riffault .....	228
Ritch .....	213
Ritchie .....	253
Ritter .....	219, 219*
Robert .....	228
Robertson .....	224
Robinson .....	213, 219, 224, 235*, 241
Robson .....	213
Roebbling .....	219
Rogers .....	208*, 213, 221, 232
Ronalds .....	229*
Rontgen .....	234*
Rood .....	228
Roper .....	235
Rose .....	241, 244*
Rosengarten .....	213
Rossiter .....	228, 244
Rotch .....	213*
Rotrou .....	253*
Routh .....	241
Routledge .....	229*
Rowan .....	235
Runtz-Rees .....	236*
Ruskin .....	212*, 213, 228
Russell .....	245
Rutherford .....	248*
Ryan .....	228
<b>S</b> ABINE .....	229*, 230*, 232
Salltzer .....	253
Salmon .....	249
Sandell .....	228
Sankey .....	219*
Sargent .....	210*
Sauer .....	232
Sawyer .....	232
Saxby .....	235
Schoolbred .....	230*, 232
Schrön .....	249*
Schumann .....	213, 253
Schwendler .....	232
Science Series* .....	216, 217, 218, 219 222, 224, 229, 230, 231, 232, 233 234, 235, 237, 238, 239, 240, 241 242, 243, 248, 249, 250, 251, 252 253

\* Name appears in the text, or after the first name.



Index of AUTHORS, CONTRIBUTORS, COMPILERS, EDITORS, Etc., continued.

	PAGE
Scott.....	213, 228, 249, 253
Scribner.....	241, 249
Searles.....	224
Seaton.....	224
Sennett.....	235
Sewell.....	235
Sharpe.....	210*
Shaw.....	213, 213*, 232
Shields.....	224
Shock.....	235
Sholl.....	213
Shortrede.....	249
Shreve.....	219, 241*
Shulze.....	213
Shunk.....	225
Siemens.....	241
Silloway.....	213*
Simms.....	225, 243
Simson.....	249
Sivewright.....	232*
Slagg.....	253
Sloan.....	213
Small.....	237
Smeaton.....	217
Smiles.....	225
Smith.....	214, 225, 228, 232, 241 247*, 248*, 249, 253
Snowball.....	249
Sommerfeldt.....	245
Sopwith.....	253
Spang.....	232
Spangenberg.....	241
Spare.....	249
Spiller.....	248*
Spofford.....	237
Spon.....	225, 241, 244
Spooner.....	225
Sprague.....	232
Stafford.....	217
Stahl.....	241
Staley.....	222*, 223*
Stanley.....	243
Stearns.....	213*
Steele.....	241*
Steuart.....	226*
Stevenson.....	214, 225, 241, 253
Stillman.....	235
Stokes.....	249
Stone.....	213*, 253
Stoney.....	219
Stowe.....	240*
Strickland.....	214
Stuart.....	214, 225, 245
Stuckle.....	253
Sturgeon.....	232
Sturgis.....	213*
Swindell.....	253
Sylvester.....	221
Symons.....	231*
TAIT.....	235*, 241, 249
Talbert.....	237

	PAGE
Tarn.....	217, 219, 221*
Tate.....	219, 241
Taylor.....	228, 249
Teale.....	253
Tegg.....	232
Templeton.....	235, 241
Thearle.....	246
Thomas.....	228
Thompson.....	208*, 215*, 227* 230*, 231*, 232
Thomson.....	232*, 232
Thurston.....	235, 239*, 244*
Tidy.....	253
Tilden.....	213*
Timbs.....	227*
Timmins.....	219
Todhunter.....	241, 249, 250
Tolhausen.....	235*
Tomlinson.....	217, 241, 244, 253
Tonkes.....	241
Toplis.....	239*
Torlonia.....	253
Tottie.....	214
Toussaint.....	228*
Tower.....	219
Towle.....	214*
Townsend.....	250
Tracy.....	253
Trautwine.....	225
Tredgold.....	221, 235, 253
Trendall.....	214
Tribe.....	230*
Trowbridge.....	219, 235, 242
Tunner.....	242
Turnbull.....	232, 235
Turner.....	214, 242
Tuson.....	243*
Tuthill.....	214, 236*
Twisden.....	242
Tyndall.....	232, 242
UHLAND.....	235
Unwin.....	242
Upjohn.....	213*
Ure.....	244
Urquhart.....	232, 233
VAILE.....	217
van Brunt.....	213*, 214*
Vander Weyde.....	244*
Van Wagenen.....	253
Vaux.....	214
Vega.....	250
Verdet.....	234*
Vergnaud.....	228*
Very.....	246
Violet Le Duc.....	214, 228
Vitruvius.....	214
Vivarez.....	230*
Vodges.....	214
Vose.....	225, 250

	PAGE
WAHL.....	233
Walker.....	217, 228, 229*, 233, 242
Ware.....	213*, 214
Waring.....	253
Warr.....	242
Warren.....	228, 242
Watson.....	242, 250
Watt.....	233
Watts.....	244, 245*
Weale.....	214, 219, 225, 244
Weale's Series*.....	208, 209, 210, 211 212, 213, 214, 215, 216, 217, 218 219, 220, 221, 222, 223, 225, 226 227, 228, 229, 230, 231, 233, 234 235, 236, 237, 238, 239, 241, 242 243, 244, 245, 246, 247, 248, 250 251, 252, 253
Webb.....	229*, 232*
Webber.....	242
Weidenmann.....	214
Weisbach.....	242
Weissenborn.....	225
Wells.....	213*
Wharton.....	229*
Wheeler.....	213*, 214, 224*, 225
Whipple.....	219
Whitworth.....	240*
Wigan.....	233
Wiggins.....	253
Wightwick.....	214
Wilkins.....	219
Wilkinson.....	214
Williams.....	225, 229, 247*, 253
Williamson.....	250
Willis.....	242
Wilson.....	236, 246, 253
Winter.....	250
Winton.....	236
Wise.....	230*
Withers.....	215
Wolstanholme.....	250
Woltmann.....	236*
Wood.....	{ 213*, 215, 217, 219 224*, 236, 242, 250
Woodbury.....	219
Woodward.....	215, 219
Woollett.....	215
Woolhouse.....	250
Wormell.....	253
Wormold.....	241*
Worsan.....	242
Worthen.....	243*
Wostenholme.....	247*
Wren.....	215
Wright.....	215, 228*
YOUNG, 215, 216*, 217, 236, 244, 246, 250	
ZAHNER.....	242
Zehfuss.....	253
Zeriffi.....	229
Zeuner.....	234*, 242

\* Name appears in the text, or after the first name.

INDEX OF AUTHORS OF SCIENTIFIC BOOKS—PAGE 254.

## ALPHABETICAL INDEX

OF

DRAWING MATERIALS, ARCHITECTS AND ENGINEERS' SUPPLIES.

	PAGE		PAGE
<b>A</b>		Baths for Blue Prints .....	30
Abney's Hand Levels.....	137	Bayonet Slides—Instruments with .....	54
Adjustable Curve Rulers .....	121	“Bayonet” Tacks.....	85
Adjustable Drawing Tables.....	115	Beam Compasses.....	44-76
Adjustable Instrument Keys.....	63	Beam Compass Bars .....	104
Agreement—Printed Building.....	197	Beam Compass Wheel Attachments.....	44
“Alexis” Blue Print Papers .....	28	Beveled Edge Rulers.....	96
“Allisene” Copying and Writing Inks.....	196	Binders—Paper Fasteners.....	189
Alphabets.....	203	Binocular Telescopes .....	140
Alphabetical List of W. & N. Colors .....	154	Black Boards.....	193, 194
Altener Style Instruments .....	37, 38	Black Board Dividers .....	116
Ames Alphabets.....	203	Black Board Drawing Sets.....	116
“Anchor” Drawing Papers.....	14	Black Board Erasers.....	194
“Anchor” Drawing Papers, cloth-backed...	15	Black Chalk Pencils.....	174
Aneroid Mining Barometers.....	139	Black and other Crayons.....	183-186
Animal Studies .....	203-206	“Black Prints”—Prices of .....	24
Angle Books .....	34	Black Round Pencils—Faber's.....	171
“Antler” Drawing Papers .....	6	Black Rubbers .....	169
“Antler” Sketching Blocks for Charcoal...	165	Black Sable Brushes .....	159-161
“Arcadia” Detail, Tracing Paper.....	18	Black Walnut Cases—Empty.....	72
Architects' and Builders' Levels.....	134	Blocks for Sketching... ..	164, 165
Architects' Diagram Books .....	31	Block and Book—Combined Sketching .....	166
Architects' Drawing Scales .....	89-95	Blocks, Cross Section Sketching... ..	165
Architects' Rubber Stamps.....	199-202	Blondeau's Alphabets .....	203
Architects' Slant and Basin.....	147	Blotting Papers.....	198
Architects' Specifications—Covers for .....	198	Blotting Papers for Drying Blue Prints...	30
“Argand” Blue Print Papers .....	28	Blue and Carmine Pencils.....	177, 178
“Argand” Hektograph Papers.....	196	Blue Pencils.....	178
Arkansas Oil Stones.....	187	Blue Print Baths.....	30
Arrows or Marking Pins.....	128	Blue Print Blotting Papers for drying...	30
“Artistic” Pens—Spencerian .....	181	Blue Print Frames.....	28, 29
Artists' Gum or Rubber.....	168	Blue Print—Heavy Felt.....	30
Artists' Pencils .....	172-177	Blue Print Ink—“Crystalline” Ink .....	24, 149
Artists' Pencils in Cabinets.....	175	Blue Print Papers—“Alexis”.....	28
Artists' Water Glasses.....	148	Blue Print Papers—“Argand”.....	28
Assortment of Round Writing Pens.....	182	Blue Print Papers—“Congress”.....	27
“Atlas” Blue Process Papers.....	25	Blue Print Papers—“Diamond”.....	28
“Atlas” Rubber Stamp Pads .....	201	Blue Print Papers—“Dragon”.....	27
Atomizers.....	186	Blue Print Papers—“Linola”.....	27
Autographic or Stipple Papers—Ross .....	9	Blue Print Papers—“Velveteen”.....	27
Automatic Pencils No. 16,620.....	174	Blue Print Papers—“Vulcan”.....	27
Automatic Pen Knives.....	190	“Blue Prints”—Prices of .....	23
Automatic Shading Pens and Inks .....	179, 180	Blue Process Papers—“Atlas”.....	25
A. W. Faber's Pencils.....	171-177	Blue Process Papers—Brushes for prepar- ing .....	26, 163
A. W. Faber's Rubbers.....	168, 169	Blue Process Papers—“Congress” .....	25
		“Blue Process” Papers—Directions for using	24
<b>B</b>		Blue Process Papers—“Dragon”.....	25
Bands—Rubber .....	191	Blue Process Papers—“Imperial”.....	25
Bank Note or Bond Papers .....	10	Blue Process Papers—“Star”.....	25
Barometers—Aneroid .....	139	Blue Process “Par Excellence” Gum.....	26
Bars for Beam Compasses .....	104	Boards—Black Boards.....	193, 194
Bartholomew's Drawing Copies.....	205	Boards, Bristol—Bristol Boards .....	6-8

*Index of DRAWING MATERIALS, ARCHITECTS AND ENGINEERS' SUPPLIES, continued.*

	PAGE		PAGE
Boards—Chagrine.....	9	Bristol Board Scales.....	95
Boards—"Chalk or Scratch".....	8	Bristol Boards, "Triumph" White.....	6
Boards—Drawing.....	112-114	Bristol Boards, Turnbull's.....	7
Boards—Easel or Lap.....	167	Brown Pencils.....	178
Boards for Mounting.....	8, 9	Brush Rests, China.....	148
Boards—Horses for.....	114	Brushes for preparing Blue Proc. Papers, 26, 163	
Boards—Monochromatic.....	9	Brushes for Water Color, etc.....	159-163
Boards—"Oriole" Sketching and Mounting.....	8	Buff Papers—Detail Papers.....	10, 11
Boards—Pastel.....	9	Buff Paper Pads.....	197
Bobs—Plumb Bobs.....	128	Building Agreements Printed.....	197
Bond or Bank Note Papers.....	10	Builders' Levels.....	134, 135
Books—Angle.....	34		
Books—Architects' Diagram.....	31	<b>C</b>	
Book and Block—Combined Sketching.....	166	Cabinet Saucers, Nests of.....	146
Books—Cross Section.....	31	Cabinets of Pencils.....	175, 176
Books—Engineers' Field.....	32	Cabinets, Shading Pen and Ink.....	179
Books—Engineers' Level.....	32	Cakes of Gold and Silver for Water Color'g..	151
Books—Engineers' Note.....	31	Caliper Rules.....	98
Books—Engineers' Transit.....	32	Camel Hair Brushes.....	160-163
Books—Hydrographic Surveying.....	34	"Canary," Tracing Papers.....	18
Books—Metallic Sketching.....	166	Cap, Legal.....	197
Book on Crayon—J. B. Crocker's.....	186	Carbon or Impression Papers.....	9
Books—Profile.....	36	Cards—Mechanical Drawing.....	8
Books and Pens—Round Writing.....	182	Carmine and Blue Pencils.....	177
Books—Rowney's on Art.....	207	Carpenters' Pencils.....	177, 178
Books, Scientific—Index of.....	208	Carriage and Sleigh Builders' Curves.....	107
Books—Sounding.....	34	Cases for Instruments, Empty.....	72
Books—Students' Drawing.....	167	Cases of Crayon Materials.....	183
Books—Tide.....	34	Cases of Faber's Pencils.....	175, 176
Books—W. & N. on Art.....	207	Cases of Faber's Wax Crayons.....	176
Border Pens.....	43	Cases of French Instruments.....	76-83
Boston Leveling Rods.....	130	Cases of German Instruments.....	64-72
Bottles—Japanned Tin.....	159	Cases of Swiss Instruments.....	46-48
Bound Sketching Blocks.....	164	Ceiling Measuring Rods.....	99
Bow Instruments.....	37-76	Centre or Box Ink Slabs.....	147
Box for Rubber Stamps.....	201	Centres—Horn.....	85
Box or Centre Ink Slab.....	147	Chagrin Boards and Papers.....	9
Boxes for Specification Papers.....	198	Chains, Surveyors'.....	126, 127
Boxes of Crayon Materials.....	183	Chalk Pencils, Black and Red.....	174, 175
Boxes of Imperial Water Colors.....	152	"Chalk" or "Scratch" Boards.....	8
Boxes of Water Colors.....	156-158	Chalk—School Crayons.....	186
Boxes with Slip Cover—Tin.....	198	Chamois Palettes.....	184
Boxwood Plotting Scales.....	94	Chamois Skins.....	184
Boxwood Protractors.....	89	Chamois Stumps.....	184
Boxwood Scales.....	90-94	"Champion" Tracing Papers.....	16
Boxwood Scales—Triangular.....	93	"Chancellor" Pens—Esterbrooks.....	182
Boxwood Sectors.....	95	Charcoal for Drawing.....	185
Braided Bristol Boards—Turnbull's.....	7	Charcoal Paper—"Antler".....	6
Braided Linen Plumb Bob Lines.....	129	Chemically Pure Solar Printing Paper— Steinbach's.....	14
Brass Crayon Holders.....	185	Chesterman's Tapes.....	123
Brass Protractors.....	88	China Brush Rests.....	148
Brass Suspension Rings.....	191	China Color or Ink Slabs.....	146-148
Brass Thumb Tacks.....	84, 85	China Palettes.....	148
Brass Thread Counters.....	142	Chinese or India Inks.....	142-145
Brazed Steel Chains.....	126	"Chinese Vase," India Ink.....	143
Bristle, Gum Brushes.....	163	Chinese White, Liquid.....	150
Bristol Boards, "Florence," Cream Tinted.....	7	Christman's Alphabets.....	203
Bristol Boards, French, Tinted.....	7	City Transits or Theodolites.....	131
Bristol Boards, French, White.....	7	Classified Index.....	4
Bristol Boards, "Patent Office".....	6, 7	Clinometer or Hand Level.....	137
Bristol Board Protractors.....	89	Cloth Back Drawing Papers.....	15
Bristol Boards, Reynold's English White.....	6		



## Index of DRAWING MATERIALS, ARCHITECTS AND ENGINEERS' SUPPLIES, continued.

	PAGE		PAGE
Cloth, "Imperial" Tracing.....	16	Cream Tinted Bristol Boards—"Florence".....	7
Cloth, "Reliance" Tracing.....	16	Cream Tinted "Honeycomb" Mounting Board.....	9
Cloth, "Sagars" Tracing.....	16	"Crescent" Detail Papers.....	10
Coddington Magnifiers.....	141	Creswick—(Imitation) Drawing Papers.....	5
Cold Pressed Detail Papers "Victor".....	11	Crocker's, J. B.—Handbook on Crayon Port.....	186
Cold Pressed "Honeycomb" Mount. Boards.....	9	Cross Section Blocks.....	165
Collections of Alphabets.....	203	Cross Section Books—Engineers'.....	31
"College Pens"—Spencerian.....	181	Cross Section Papers.....	19-22
Color Brushes.....	159-163	Crosses—Surveyors'.....	136
Color Cups, China.....	148	"Crown" Tinted Drawing Papers.....	6
Colored Drawing Inks.....	149, 150	Crow Quill Penholders.....	181
Colored Drawing Papers and Boards.....	6-14	Crow Quill Pens.....	181
Colored India Inks.....	145	"Crystalline" Ink for Blue Prints.....	24, 149
Colored Pastel Crayons.....	185	Crystal Rubbers.....	170
Colored Pencils.....	176-178	"Crystal" Tracing Papers.....	17
Colored Shading Inks.....	179, 180	Cups for Colors and Inks.....	146-148
Colored Studies for Beginners.....	205	Cups for Sponges.....	192
Colors—for Tracing Cloth—Turck's.....	149	Cups of Gold and Silver.....	151
Colors—"Imperial," Moist.....	152	Cups or Pans of Moist Water Colors.....	152-155
Colors—Winsor & Newton's.....	153-157	Curve Pens.....	43, 55
Combination Curves.....	109	Curve Rulers, Adjustable.....	110, 121
Combination Round Writing Pens.....	182	Curves, Carriage and Sleigh Builders.....	107
Combination Rules.....	96	Curves—Combination.....	109
Combination Triangular Scales.....	93	Curves—Copenhagen Ship.....	106, 107
Combined Sketch Book and Block.....	166	Curves—Irregular.....	108
Combined Writing and Copying Ink.....	196	Curves—Mechanical Drawing Set.....	107
"Commercial" Pens—Spencerian.....	181	Curves—Railroad.....	111, 112
Comparing Scales.....	90	Curves—Spiral.....	109
Compasses—Drawing Instruments.....	37-72	Curves—Wooden Irregular.....	109
Compasses—Lithographers'.....	61	Cutlery.....	190
Compasses—Magnetic.....	135-138		
Compasses—Pillar.....	52	<b>D</b>	
Compensating Handles.....	124	Darling, Brown & Sharpe's Goods.....	122
Complete Shading Pen and Ink Cabinet.....	179	D. B. & S. Metallic Triangular Scales.....	93
Composition for Hektographs.....	195	Dating Stamps—Rubber.....	199
Condensed Classified Index.....	4	Davidson's Velvet Rubbers.....	168
"Congress" Blue Print Papers.....	27	Dearborne's Alphabets, Scrolls, etc.....	203
"Congress" Blue Process Papers.....	25	Decimal Scales.....	91
Conte Crayons.....	183	Delamotte's Alphabets.....	203
Copenhagen Ship Curves.....	106, 107	Design Papers for Weavers.....	22
Copies for Drawing.....	203-206	Desk Oil Stones.....	187
Copies for Painting.....	205	Details—Palliser's Useful.....	206
Copies of Tracings by the "Black Process".....	24	Detail Papers—"Crescent".....	10
Copies of Tracings by the "Blue Process".....	23	Detail Papers—"Griffin".....	14
Copley's Alphabet.....	203	Detail Papers—"Standard".....	11
Copy Books—Round Writing.....	182	Detail Papers—"Victor".....	11
Copying Brushes.....	163	Detail Tracing Papers—"Arcadia".....	18
Copying Ink—"Allisene".....	196	Detail Tracing Papers—"Canary".....	18
Copying Pencils and Leads.....	174	"Diagram" Books—Architects'.....	31
Cork Stumps.....	184	"Diamond" Blue Print Papers.....	28
"Counting House" Pens—Spencerian.....	181	"Diamond" Drafting Inks—Turcks.....	149
Covers for Specifications—Printed.....	198	"Diamond" Hektograph Papers.....	196
Crayons and Crayon Materials.....	183-186	Dipping Needles.....	137
Crayon Drawing Outfits.....	183	Directions for using "Blue Process" Papers.....	24
Crayon Fixative.....	186	Dividers—Black Board.....	116
Crayons—Lithographic.....	186	Dividers—Drawing Instruments.....	32-83
Crayon Papers—Drawing Papers.....	5-14	Dividers—Whole and Half.....	62
Crayon Papers in Rolls—"Saturn" and Steinbach's.....	14	Dixon's Artists' Pencils, in Cabinets.....	176
Crayon Sauce.....	183	Dixon's Lead Pencils.....	172, 176
Crayons—Faber's Wax.....	176, 177	"Double Elastic" Pens—Esterbrook's.....	182
Crayons—Pastel.....	185	Double End Brushes.....	160, 162
Crayons—School (Chalk).....	186	Double End Crayon Holders.....	185

## Index of DRAWING MATERIALS, ARCHITECTS AND ENGINEERS' SUPPLIES, continued.

	PAGE		PAGE
"Double Golden Dragon" India Inks.....	142	Drawing Papers—"Victor" Detail.....	11
Double Line Ruling Pens—Esterbrook's.....	182	Drawing Papers—Whatman's.....	5
Double Round Writing Pens.....	182	Drawing Pens—Ruling Pens.....	42-75
Dotting Instruments.....	118	"Drawing" Pens—No. 25, Spencerian.....	181
Dotting Pens—Drawing Instruments.....	43-60	Drawing Pencils.....	171-178
Drafting Inks—Turck's "Diamond".....	149	Drawing Scales.....	89-95
"Dragon" Blue Print Papers.....	27	"Drawing School"—Hermes.....	203
"Dragon" Blue Process Papers.....	25	Drawing Set for Black Board.....	116
"Dragon" Hektograph Papers.....	196	Drawing Tables—Adjustable.....	115
"Dragon" India Inks.....	142-144	Drawing Studies.....	203-206
Drawing Boards.....	112-114	"Drawing Teacher"—Hermes.....	203
Drawing Boards—Horses for.....	114	Drawings—Tubes for Mailing.....	198
Drawing Books and Blocks.....	164-167		
Drawing Cards—Mechanical.....	8	<b>E</b>	
Drawing Charcoal.....	185	"Eagle" Drawing Papers.....	13
Drawing Copies.....	203-206	Eagle Pencils.....	173
Drawing and Crayon Papers "Saturn" and Steinbach's.....	14	Easels.....	114
Drawing Inks and Colors—Liquid.....	149, 150	Easel or Lap Boards.....	167
Drawing Instrument Cases—Empty.....	72	Ebony Lined Straight Edges.....	103
Drawing Instruments—English.....	54, 55	Ebony Lined Triangles.....	104
Drawing Instruments—Extra Fine Swiss.....	37-48	Ebony Lined T Squares.....	101
Drawing Instruments—French.....	73-83	Ebony Parallel Rulers.....	100
Drawing Instruments—German.....	56-72	Eccentro-Lineads.....	119
Drawing Instruments in Cases.....	46-83	Eddy's Tapes,—Paine's Steel Tapes.....	123, 124
Drawing Instruments—Repairs of.....	63	Elastic Rubber Bands.....	191
Drawing Instruments for Schools.....	73-83	"Elephant" India Inks.....	144
Drawing Instruments—Swiss Pivot Joint.....	37, 38	"Elephant Vellum" Tracing Papers.....	17
Drawing Outfits for Crayon.....	183	Ellipses.....	110
Drawing Papers—"Anchor".....	14	Ellipsographs.....	120
Drawing Papers—"Antler".....	6	Elliptic Rubbers—A. W. Faber's.....	168
Drawing Papers—Bond.....	10	Emery Pads—Pencil Pointers.....	178
Drawing Papers—Cloth Backed, "Anchor".....	15	"Empire" Drawing Papers.....	6
Drawing Papers—Cloth Backed, "Hercules".....	15	"Empire" Sketching Blocks and Books.....	165, 166
Drawing Papers—Cl. Backed, "New Leona".....	15	Empty Cases for Instruments.....	72
Drawing Papers—Cl. B'kd, "Par Excellence".....	15	Empty Japanned Tin Color Boxes.....	158
Drawing Papers—Cloth Backed "Sovereign".....	15	Empty Wooden Color Boxes.....	159
Drawing Papers—Cloth Backed, Whatman's.....	15	Enameled "Scratch or Chalk" Board.....	8
Drawing Papers—"Crescent," Detail.....	10	Engineers' Cross Section Books.....	31
Drawing Papers—"Crown" Tinted.....	6	Engineers' Cross Section Papers.....	19-22
Drawing Papers—"Eagle".....	13	Engineers' Drawing Scales.....	91-95
Drawing Papers—"Empire".....	6	Engineers' Field Books.....	32
Drawing Papers—"Falcon".....	6	Engineers' Level Books.....	32
Drawing Papers—"Griffin".....	14	Engineers' Note Books.....	31
Drawing Papers—Harding's.....	6	Engineers' Transit Books.....	32
Drawing Papers—"Hercules".....	13	English Bristol Boards.....	6
Drawing Papers—Imitation Creswick.....	5	English Instruments.....	54, 55
Drawing Papers—"Jullien" Tinted.....	6	English Knives and Erasers.....	190
Drawing Pap's—"Leona," see "New Leona".....	5, 15	English Parchment.....	9
Drawing Papers—"Linnien".....	12	English Patent Office Bristol Boards.....	6, 7
Drawing Papers—"Linola".....	13	English Patent Office Imperial Paper.....	6
Drawing Pap's—"Monitor," see "Sovereign".....	13, 15	Engravers' T Squares.....	103
Drawing Papers—"New Leona".....	5, 15	Engrossing Pens.....	182
Drawing Papers—"Par Excellence".....	12	Erasers—Blackboard.....	194
Drawing Papers—"Queen" Tinted.....	6	Erasers—Rubber Ink and Pencil.....	168-170
Drawing Papers—"Roman" Tinted.....	6, 14	Erasers—Steel, Ink.....	190
Drawing Papers—"Saturn".....	14	Esterbrook's Steel Pens.....	182
Drawing Papers—"Saxon".....	13	"Excelsior" Paper Fasteners.....	189
Drawing Papers—"Sovereign".....	13	Extra Fine Swiss Instruments.....	39-48
Drawing Papers—"Standard" Detail.....	11	Extra Heavy Colored Pencils.....	178
Drawing Papers—Steinbach's.....	14	Eyelet Paper Fasteners.....	189
Drawing Papers—"Velveteen".....	13		



## Index of DRAWING MATERIALS, ARCHITECTS AND ENGINEERS' SUPPLIES, continued.

F	PAGE	PAGE	
Faber's Lead and Colored Pencils .....	171-177	Glue—Mouth or Lip. ....	188
Faber's Rubbers.....	168, 169	Gold in Cakes, Cups and Shells .....	151
"Falcon" Drawing Papers .....	6	Gold Ink—Winsor & Newton's .....	150
"Falcon" Pens—Esterbrook's.....	182	Gold Paint.....	151
Fasteners—Paper Fasteners .....	189	"Golden Dragon" India Inks .....	142
Fastening Pins or Tacks.....	84-85	"Golden Stork" India Ink.....	143
Felt, for Blue Print Frames .....	30	Graduated Compensating Handles.....	124
Field Books—Engineers' .....	32	Green Pencils .....	178
Field and Marine Glasses .....	140	Grey Paper Stumps .....	184
Figure Studies .....	203-206	"Griffin" Drawing Paper .....	14
Figuring and Writing Pads .....	197	Guard—Triangular Scale .....	93
Filled Jap. Tin Boxes of "Imperial" Colors.	152	Gum Brushes.....	163
"Fine Arts" Pencils—Eagle.....	173	Gum or Rubber.....	168-170
Firm Sponge Rubber—Soltmann's.....	170	Gum—"Par Excellence".....	188
Five Foot Measuring Rods.....	99	Gum—"Par Excellence" for Blue Process Solution.....	26
Fixative .....	186	Gum Pots—Reservoir .....	188
Fixative—Preparation for Cleansing Tubes of Atomizer .....	186	Gum Water—Winsor & Newton's .....	150
Flag or Leveling Poles .....	130	Gummed Paper Suspension Rings.....	191
Flat Camel Hair Brushes .....	162	Gunter Scales.....	94
Flat Head Paper Fasteners .....	189		
Flexible Black Boards .....	194	<b>H</b>	
"Florence" Cream-Tinted Bristol Boards....	7	Handbook—J. B. Crocker's on Crayon .....	186
Flower and Fruit Studies .....	203-206	Handbooks on Art .....	207
Folders—Paper .....	192	Hand-Divided Scales.....	94
Folding Easels .....	114	Hand Levels and Clinometer.....	137
Folding Scale Rules.....	96	Hand Stamps—Rubber.....	199-202
Foster's, Vere—Drawing Copies .....	204	Handles, Compensating, for Tapes.....	124
Four-Foot Measuring Rods .....	99	Harding's Drawing Papers.....	6
Framed Drawing Boards .....	113	Hard Pastel Crayons.....	185
Frames for Blue Printing.....	28, 29	Hardwood Splines.....	110
"Franklin Pen"—Esterbrook's.....	182	Hardwood Straight Edges.....	103
French Crayons and Materials.....	183-186	Hardwood Triangles.....	105
French Crow Quill Pens.....	181	Hardwood T Squares.....	102
French Instruments .....	73-83	Hard Rubber Combination Curve.....	109
French Lithographic Crayons .....	186	Hard Rubber Irregular Curves.....	108
French Monochromatic Boards.....	9	Hard Rubber Mechanical Drawing Curves..	107
French Pencils—Gilbert's.....	172, 173	Hard Rubber Parallel Rulers.....	100
French Tinted Bristol Boards .....	7	Hard Rubber Railroad Curves.....	111
French Water Color Boxes .....	157, 158	Hard Rubber Roof Pitches.....	105
French White Bristol Boards.....	7	Hard Rubber Ship Curves.....	106, 107
		Hard Rubber Spiral Curve.....	109
<b>G</b>		Hard Rubber Splines.....	110
Gauging and Wantage Rods.....	99	Hard Rubber Straight Edges.....	103
Gelatine or Glass Papers.....	9	Hard Rubber Triangles.....	104
Gelatine Pads—Hektographs .....	195	Hard Rubber T Squares.....	101
"General" Drawing Ink—Higgins's.....	150	Heavy Colored Pencils.....	178
German Instruments.....	56-72	Hektographs.....	195
German Silver Horn Centres.....	85	Hektograph Papers.....	196
German Silver Protractors.....	86, 87	Heliographic or "Blue Process" Papers....	25
German Silver Tacks .....	84	"Hercules" Drawing Papers.....	13
Gilbert's Lead Pencils.....	172, 173	"Hercules" Drawing Papers, Cloth-backed, 15	
Gilding—Ruby's Royal .....	151	Hermes' Drawing Copies.....	203
Gillott's Pens.....	181	Hexagon India Inks.....	143
"Gilt Sword" India Ink.....	144	Hexagon Pencils.....	171-173
Gisburne's Ruling Pens.....	180	Higgins' Liquid Drawing Inks.....	150
Glass Ink Slab .....	146	Holders for Crayons.....	185
Glass Paper—Gelatine.....	9	Holders—Penholders.....	180, 181
Glasses—Field and Marine.....	140	"Honeycomb" Cream Tinted Mtg. Boards. 9	
Glasses—Pocket Magnifying.....	141	Horn Centres.....	85
Glasses—Reading.....	141	Horn Protractors.....	88
Glasses for Water with Lips.....	148	Horses for Drawing Boards.....	114
		Hydrographic Surveying Books .....	34



## Index of DRAWING MATERIALS, ARCHITECTS AND ENGINEERS' SUPPLIES, continued.

	PAGE
<b>I</b>	
Imitation Creswick Drawing Papers .....	5
"Imperial" Blue Process Papers .....	25
"Imperial" Moist Water Colors .....	152
Imperial Paper—English Patent Office .....	6
"Imperial" Tracing Cloth .....	16
Impression or Transfer Papers .....	9
Impr. Steel Nickel Pl. Tape Chains—Roe's ..	127
Indelible Drawing Inks .....	149, 150
Indelible Pencils .....	174
Index of Entire Catalogue, Condensed and Classified .....	4
Index of Authors of Scientific Books .....	254
Index of Classification of Scientific Books ..	208
India Inks .....	142-145
India Inks—Liquid .....	149, 150
India Proof Paper—"Kan-Sune" .....	10
Inlaid Edge Rulers .....	95
Ink—"Allisene" Writing and Copying .....	196
Ink—Automatic Shading .....	179, 180
Inks—Chinese or India .....	142, 145
Ink—"Crystalline" for Blue Prints .....	24, 149
Ink or Color Slabs .....	146-148
Ink Erasers—Rubber .....	169
Ink Erasers—Steel .....	190
Inks—Hektograph .....	195
Inks—India or Chinese .....	142-145
Inks—Japanese .....	145
Ink and Pencil Erasers—Rubber .....	168-170
Inks—Rubber Stamp .....	201
Ink Stones—Slate .....	146
Inks—Turck's Diamond Drafting .....	149
Inks—Winsor & Newton's .....	150
Instrument Cases Empty .....	72
Instruments for Dotting .....	118
Instruments, Drawing—Repairs of .....	63
Instruments—English .....	54, 55
Instruments—French .....	73-83
Instruments—German .....	56-72
Instrument Key—Adjustable .....	63
Instruments—Measuring .....	121
Instruments—Paper Cutting .....	122
Instruments—Swiss .....	39-53
Instruments—Swiss, Pivot Joint .....	37, 38
Instruments—Engineers' Surveying .....	131-134
Iron Paper Weights .....	192
Iron Rubber Stamp Rack .....	201
Irregular Curves .....	108, 109
"Ivory" Tracing Papers .....	18
Ivory Pocket Artists' Pencils .....	174
Ivory Parallel Rulers .....	100
Ivory Protractors .....	88, 89
Ivory Rules .....	96-98
Ivory Scales .....	92-94
Ivory Sectors .....	95
<b>J</b>	
Jacob Staffs .....	136
Japanese Inks .....	145
Japanned Tin Boxes of "Imperial" Colors ..	152
Japanned Tin Color Boxes, Empty .....	158
Japanned Tin Water Bottles .....	159
<b>K</b>	
"Jullien" Tinted Drawing Papers .....	6
"Jullien" Tinted Sketching Blocks .....	165, 166
<b>L</b>	
Ladies' "Falcon" Pens—Esterbrook's .....	182
Landscape Studies .....	203-206
Lap or Easel Boards .....	167
Large Hektographs .....	195
Lead Pencil Pointers .....	178
Lead Weights for Splines .....	110
Leads—A. W. Faber's Artists' .....	174
"Leatherine" Tracing Papers .....	17
Leather Stumps .....	184
Legal Cap .....	197
"Leona" Drawing Papers—"New Leona" ..	5, 15
"Leona" Sketching Blocks and Books .....	165, 166
Lettering and Engraving Pens .....	179, 182
Lettering—Rubber Stamps .....	202
Lettering Triangles .....	105
Level Books—Engineers' .....	32
Levels—Abney's Hand .....	137
Levels—Locke's Hand .....	137
Leveling Instruments .....	134, 135
Leveling Poles or Rods .....	130
Lifters—Tack Lifters .....	85
Light Buff Pads .....	197
Light Drawing Boards .....	114
Lineads—Eccentro .....	119
Lineads—Perspective .....	119
Linear Drawing Studies .....	203-206
Linen Plumb Bob Line .....	129
Linen Provers or Thread Counters .....	142
Linen Tapes .....	125
"Linnien" Drawing Papers .....	12
"Linola" Blue Print Papers .....	27
"Linola" Drawing Papers .....	13
Lion Head India Inks .....	145
"Lion" Parchment Tracing Papers .....	17
Lip or Mouth Glue .....	188
Liquid Drawing Inks .....	149, 150
Liquid Gold and Silver Paint .....	151
Liquid Slating for Black Boards .....	194
Lithographers' Compasses .....	61
Lithographic Crayons .....	186
Lithographic Pens .....	181
Locke's Hand Levels .....	137
Logarithmic Spiral Curve .....	109
Long Nib Crow Quill Pens .....	181
Lumber and Marking Pencils .....	177, 178
<b>M</b>	
Machine-Divided Scales .....	89-93
Mailing Tubes of Pasteboard .....	198
Magnetic Pocket Compasses .....	138
Magnifying Glasses—Pocket .....	141
Mahogany, Ebony-lined Straight Edges .....	103
Mahogany, Ebony-lined Triangles .....	104

## Index of DRAWING MATERIALS, ARCHITECTS AND ENGINEERS' SUPPLIES, continued.

	PAGE		PAGE
Mahogany, Ebony-lined T Squares.....	101	"New Leona" Drawing Papers—Cl. Backed..	15
"Mammoth" Tracing Papers.....	17	Newton's Colors—see Winsor & Newton's 153-157	
Maple T Squares.....	101	New York Leveling Rod.....	130
Mapping Pens.....	181	Nickel Plated Case—Steel Tapes.....	124, 125
Marine and Field Glasses.....	140	Nickel Plated Steel Tape Chains—Roe's.....	127
Marine Studies.....	203-206	Not Prepared Blue Print Papers.....	27, 28
Marking Pencils.....	175, 178	Note Books—Engineers.....	31
Marking Pins or Arrows.....	128		
Marsching's Gold and Silver Paint.....	151	<b>O</b>	
Mat Paper for Pictures—"Roman".....	6, 14	Oblong and Oval China Palettes.....	148
Materials for Crayon Drawing.....	183-186	Odontographs.....	120
Mathematical Drawing Instruments.....	37-83	Offset Scales.....	91-93
Mathematical Instruments—English.....	54, 55	Oil Stones—Arkansas.....	187
Mathematical Instruments—French.....	73-83	"Oriole" Sketching and Mounting Boards..	8
Mathematical Instruments—German.....	56-72	Ornamental Alphabets.....	203
Mathematical Instruments—Swiss.....	39-53	Ornamental Studies.....	203-206
Mathematical Insts.—Swiss, Pivot Joint...37, 38		Outfits—Mathematical Instruments.....	37-83
Mathematical Inst.—Pencils and Leads..171, 174		Outfits for Crayon Drawing.....	183
McLee's Alphabets.....	203	Outfits for Engineers.....	123-140
McGill's Paper Fasteners.....	189	Outfits for Pencil Drawing.....	171-178
Measuring Instruments.....	121	Outfits for Sketching.....	164-167
Measuring Rods—Ceiling.....	99	Outfits for Water Color Painting.....	152-163
Measuring Rods and Yard Sticks.....	99	Oval and Oblong China Palettes.....	148
Measuring Tapes and Chains.....	123-127	Oval Pocket Magnifying Glasses.....	141
Mechanical Drawing Cards.....	8	Ox Gall.....	150
Mechanical Drawing Curves.....	107		
Mechanical Drawing Scales.....	89-95	<b>P</b>	
Megilp for Water Colors.....	150	Pads—"Atlas" Self Inking.....	201
Metal Parallel Rulers.....	100	Pads of Hektograph Papers.....	197
Metal Suspension Rings.....	191	Pads—Writing and Figuring.....	197
Metal Triangles.....	105	Paine's Steel Tapes.....	123, 124
Metallic Paper Sketch Blocks and Books..165, 166		Paint—Gold and Silver.....	151
Metallic Pencils.....	174	Painting Copies.....	205
Metallic Tapes.....	123, 124	Palettes—Chamois for Crayon.....	184
Metric Cross Section Papers.....	20	Palettes—China.....	148
Metric Scales.....	90, 92	Palliser's Printed Specifications.....	197
Metric Tapes and Chains.....	123-127	Pans of Colors.....	152-155
Microscopes—Three-Legged.....	142	Pantographs.....	118
Miner's Compass and Dipping Needle.....	137	Paper Cutting Instruments.....	122
Miniature India Ink, No. 11,198.....	143	Paper Fasteners.....	189
Miniature Paper Stumps.....	184	Paper Folders.....	192
Mining Lamps or Plummets.....	129	Paper in Pads.....	197
Mining and Leveling Rods.....	130	Paper Protractors.....	89
Mining and Mountain Barometers.....	139	Paper Scales.....	95
Moist Water Colors.....	152-155	Paper Shears.....	190
"Monarch" Tracing Papers.....	17	Paper Suspension Rings.....	191
"Monitor" Drawing Pap's—see 'Sovereign' 13, 15		Paper Stumps.....	184
Monochromatic Boards.....	9	Paper Tacks.....	84, 85
Mountain and Mining Aneroid Barometers..	139	Paper Tubes.....	198
Mounted Drawing Papers.....	15	Paper Weights.....	192
Mounting Boards—"Honeycomb," Cream..	9	Papers—Blotting.....	198
Mounting Boards—"Oriole".....	8	Papers—Blotting for drying Blue Prints....	30
Mounting Boards—Tinted.....	8, 9	Papers—Chagrin.....	9
Mounting Boards—White.....	8, 9	Papers—Cross Section.....	19-22
Mouth Glue.....	188	Papers—Detail.....	10, 11
Mucilage—see "Par Excellence" Gum.....	188	Papers—Drawing, see Drawing Papers.....	5-18
Murillo Water Color Boxes.....	157	Papers for Hektographs.....	196
Muslin—Tracing.....	16	Papers—Glass, see Gelatine.....	9
		Papers—India Proof, "Kan-Sune".....	10
<b>N</b>		Papers—Metallic Sketch. Blocks & Books, 165, 166	
Natural Rubbers—Black Rubbers.....	169	Papers—Mounted on Muslin.....	15
Nests of Cabinet Saucers.....	146	Papers—Pastel.....	9
"New Leona" Drawing Papers.....	5	Papers—Profile.....	18, 19



*Index of DRAWING MATERIALS, ARCHITECTS AND ENGINEERS SUPPLIES, continued.*

	PAGE		PAGE
Papers—Specification.....	197	Pocket Compasses and Dividers.....	52-76
Papers—Stipple or Autographic.....	9	Pocket Compasses—Magnetic.....	138
Papers—Tracing.....	16-18	Pocket Japanned Tin Boxes of Colors.....	157
Papers—Transfer or Impression.....	9	Pocket Magnifying Glasses.....	141
Papers—Weavers' Design.....	22	Pocket Mountain Aneroid Barometers.....	139
Para Pencil Rubbers.....	168	Pocket Pencil Pointers.....	178
Parallel Rulers.....	100	Pocket Pen Knives.....	190
Parchment, English.....	9	Pocket Profile Books.....	36
Parchment, Paper—"Elephant Vellum".....	17	Pocket Rubber Stamps.....	201
Parchment Paper—"Lion" Tracing.....	17	Pocket Rules.....	96-98
"Par Excellence" Drawing Papers.....	12	Pocket Rules, with Spring.....	97
"Par Excellence" Draw'g Papers, Cl. B'ked.....	15	Pocket Scale—Drawing.....	90
"Par Excellence" Gum.....	188	Pocket Tapes.....	125
"Par Excellence" Gum for preparing Blue Process Paper.....	26	Pointed Rubbers.....	169, 170
Paste Board Tubes.....	198	Pointed Oil Stones.....	187
Paste or Gum Brushes.....	189	Point Protectors for Pencils.....	177
Pastel Boards.....	9	Poles—Leveling and Flag.....	130
Pastel Crayons.....	185	Portable Black Boards.....	193
Pastel Papers.....	9	Portable Drawing Tables.....	115
Patent Ink Slabs.....	146	Portfolios.....	167
Patent Office Bristol Boards.....	6, 7	Positive Section Liners.....	117
Pearl India Ink, No. 11,240.....	142	Pots—Reservoir Gum.....	188
Pebbled or Chagrin Papers and Boards.....	9	Powdered Charcoal.....	185
Pencil Point Protectors.....	177	Practical Pocket Rules.....	97
Pencil Pointers.....	178	Prang's Alphabets.....	203
Pencil Rubbers.....	168-170	"Premium" Tracing Paper.....	17
Pencil Sharpeners or Pointers.....	178	Prepared Blue Process Papers.....	25
Pencil Tips—Rubber.....	170	Prickers.....	44, 55
Pencils.....	171-178	"Princess" Tracing Papers.....	167
Pencils in Cabinets.....	175, 176	Printed Building Agreements.....	197
Pencils—Colored.....	176-178	Printed Covers for Specifications.....	198
Pencils—Crayon.....	183-186	Printed Patent Office Bristol Boards.....	7
Penholders.....	180, 181	Printed Specifications.....	197
Penholders for Crow Quills.....	181	Printed Tints for Photo-Engraving.....	9
Penholders—Round Writing.....	182	Printing Frames for Blue Prints.....	23, 29
Pen Knives.....	190	Process Reproduction Boards and Papers.....	8, 9
Pens—Automatic Shading.....	179	Process Reproductions—Blue and Black.....	23, 24
Pens—Border.....	43	Profile Books.....	36
Pens—Curve.....	43, 55	Profile Papers.....	18, 19
Pens—Drawing Instruments.....	42-75	Proof Paper—"Kan-Sune," India.....	10
Pens—Gisburne's Ruling.....	180	Proportional Dividers.....	52-75
Pens—Round Writing.....	182	Protectors—Pencil Point.....	177
Pens—Ruling, Drawing Instruments.....	42-75	Protractors—Boxwood.....	89
Pens—Steel, Writing and Lettering.....	181, 182	Protractors—Brass.....	88
Pentograph—see Pantographs.....	118	Protractors—German Silver.....	86, 87
Perspective Lineads.....	119	Protractors—Horn.....	88
Philadelphia Leveling Rods.....	130	Protractors—Ivory.....	88, 89
Photo-Engraving Printed Tints.....	9	Protractors—Paper.....	89
Photo-Engr. "Scratch or Chalk" Boards.....	8	Protractors—Swiss.....	86, 87
"Pickwick" Pens—Spencerian.....	181	Provers—Linen or Thread Counters.....	142
Picture Mat Paper—"Roman".....	6, 14		
Pillar Compasses—Swiss.....	52	<b>Q</b>	
Pink Tape.....	192	"Queen" Pens—Spencerian.....	181
Pins or Arrows.....	128	"Queen" Tinted Drawing Papers.....	6
Pins or Thumb Tacks.....	84, 85	"Queen" Tinted Sketching Blocks.....	165
Pivot Joint Instruments.....	37, 38	Quill Brushes.....	160, 161
Plain and Ornamental Alphabets.....	203		
Planimeters.....	119	<b>R</b>	
Plotting Scales.....	94	Racks for Rubber Stamps.....	201
Plumb Bobs.....	128, 129	Railroad Curve Protractors.....	88
Plumb Bob Lines—Braided.....	129	Reading Glasses.....	141
Plummet or Mining Lamps.....	129	Red and Blue Pencils.....	177, 178
		Red Chalk Pencils.....	175



## Index of DRAWING MATERIALS, ARCHITECTS AND ENGINEERS' SUPPLIES, continued.

	PAGE		PAGE
Red and other Crayons.....	183-186		
Red Hexagon Pencils—Faber's.....	171		
“Red Ink” Pen—Esterbrook's.....	182		
Red Ink Ruling Pen, No. 2190.....	60		
Red Pencils.....	178		
Red Sable Brushes.....	159, 160		
Red Tape—Pink Tape.....	192		
Reflecting Hand Levels.....	137		
“Reliance” Tracing Cloth.....	16		
Rembrandt Water Color Boxes.....	157		
Repairing Drawing Instruments.....	63		
Reservoir Gum Pots.....	188		
Rests for Brushes (China).....	148		
Reynold's English White Bristol Boards.....	6		
Rings—Suspension.....	191		
Robinson's Templet Odontographs.....	120		
Rods—Gauging and Wantage.....	99		
Rods—Leveling.....	130		
Rods—Measuring.....	99		
Roë's Tape Chain, Nickel Plated.....	127		
Rogers & Sons Erasers.....	190		
Rolling Black Boards.....	193, 194		
Rolling Parallel Rulers.....	100		
“Roman” Tinted Papers.....	6, 14		
Roof Pitches.....	105		
Rosewood Cases, Empty.....	72		
Ross' Autographic or Stipple Papers.....	9		
Rouget Charcoal.....	185		
Rough Bristol Boards.....	7		
Round Head Paper Fasteners.....	189		
Round Pastel Crayons.....	185		
Round Pencils.....	171-178		
Round Tin Boxes, Slip Covers.....	198		
Round Writing Alphabets.....	182, 203		
Round Writing Penholder.....	182		
Round Writing Pens.....	182		
Rowney Hand Books on Art.....	207		
Rowney's Liquid Chinese White.....	150		
Ruby's Royal Gilding.....	151		
Rubber T Squares, Straight Edges, Triangles and Curves.....	101-109		
Rubber Bands.....	191		
Rubber Stamps.....	199-202		
Rubber Stumps.....	170		
Rubber Tip Pencils—Dixon's.....	172		
Rubber Tips for Pencils.....	170		
Rubbers.....	168-170		
Rubbers—Soltmann's Firm Sponge.....	170		
Ruled Cross Section Papers.....	20-22		
Ruled Pads.....	197		
Rulers—Adjustable Curve.....	110, 121		
Rulers—Brass Inlaid Edges.....	95		
Rulers—Rolling Parallel.....	100		
Rulers—See Straight Edges.....	103		
Rules—Beveled Edge, Pocket.....	96		
Rules—Combination.....	96		
Rules—School.....	95		
Rules—Shrinkage.....	95		
Rules—Skeleton.....	97		
Rules—Slide.....	99		
Ruling Pens.....	42-75		
Ruling Pens—Gisburne's.....	180		
		S	
“Sabelene” Brushes.....	159-161		
Sable Brushes—Black and Red.....	159-161		
“Sagars” Tracing Cloth.....	16		
Sand Paper Pads.....	178		
“Saturn” Drawing and Crayon Papers.....	14		
Sauce—Crayon.....	183		
Saucers for Ink and Color.....	146-148		
“Saxon” Drawing Papers.....	13		
Scale Guards.....	93		
Scale Rules—Folding.....	96		
Scales—Comparing.....	90		
Scales—Gunter.....	94		
Scales—Hand Divided.....	94		
Scales—Machine Divided.....	89-93		
Scales—Metallic.....	93		
Scales—Meter and Inch.....	90-92		
Scales—Offset.....	91-93		
Scales—Paper.....	95		
Scales—Plotting.....	94		
Scales—Triangular Boxwood.....	93		
Schoenfeld's Liquid Chinese White.....	150		
School Crayons (Chalk).....	186		
School Instruments.....	73-83		
School Rules.....	95		
Scientific Books—Index of.....	208		
Scissors—Paper Shears.....	190		
“Scratch” or “Chalk” Boards.....	8		
Section Liners.....	116, 117		
Section (Cross) Papers.....	19-22		
Sectors—Ivory and Boxwood.....	95		
Self Inking Rubber Stamp Pads.....	201		
Self Inking Rubber Stamps.....	199		
Set, for Black Board Drawing.....	116		
Set Squares—Triangles.....	104, 105		
Shading Pens and Inks—Automatic.....	179, 180		
Sharpener—Pencil.....	178		
Shears for Paper.....	190		
Shells—Gold and Silver.....	151		
Ship Curves—Copenhagen.....	106, 107		
Shrinkage Rules.....	95		
Siberian Leads—Artists'.....	174		
Siberian Pencils in Cabinets.....	175		
Siberian Pencils and Leads.....	171-175		
“Silk” Tracing Papers.....	18		
Silver in Shells, Cups and Cakes.....	151		
Single End Wash or Sky Brushes.....	162		
Single Stroke Staple Binder.....	189		
Six Foot Measuring Rods.....	99		
Skeleton Rules.....	97		
Sketch Block T Squares.....	102, 165		
Sketching Blocks—Cross Section.....	165		
Sketching Blocks—Metallic.....	165		
Sketching Blocks and Books.....	164-167		
Sketching Boards—“Oriole”.....	8		
Sketching Book and Block—Combined.....	166		
Sketching Books—Metallic.....	166		
Skins—Chamois.....	184		
Sky or Wash Brushes—Camel Hair.....	161, 162		
Slabs—Ink or Color.....	146-148		
Slant and Basin—Architects'.....	147		

## Index of DRAWING MATERIALS, ARCHITECTS AND ENGINEERS' SUPPLIES, continued.

	PAGE
Slanting Tiles.....	147
Slate Ink Stones.....	146
Sleigh and Carriage Builders' Curves.....	107
Slide Rules.....	99
Slip Cover—Tin Boxes.....	198
Slips—see Oil Stones.....	187
Small Collection of Alphabets.....	203
Small Jap. Tin Boxes of Water Colors.....	157
Søhnee's Composition for Fixing Crayon Drawings.....	186
Solar Printing Paper—Steinbach's.....	14
Soldered Steel Chains.....	126
Soltmann's Firm Sponge Rubbers.....	170
Soltmann's "Par Excellence" Gum.....	188
Soltmann's "Par Excellence" Gum for Blue Process Solution.....	26
Soltmann's Patent Section Liner.....	116
Sounding Books.....	34
" Sovereign " Drawing Papers.....	13
" Sovereign " Drawing Papers, Cloth Backed.....	15
Specification Covers, Printed.....	198
Specification Paper Boxes.....	198
Specification Papers and Pads.....	197
Specifications, Printed.....	197
Spencerian Steel Pens.....	181
Spiral Curve.....	109
Spiral Wire Tacks.....	85
Splines & Lead Weights.....	110
Sponges and Sponge Cups.....	192
Sponge Rubbers—Soltmann's Firm.....	170
Spring Balance Tape Chains.....	127
Spring Pocket Tapes.....	126
Squares, T and Triangles.....	101-105
Staff—Jacob.....	136
Stamps—Rubber.....	199-202
" Standard " Detail Papers.....	11
Standard Wedge Rubber.....	169
Staple Binders.....	189
" Star " Blue Process Paper.....	25
Star Pencils.....	173
Steel Chains.....	126
Steel Erasers.....	190
Steel Pens.....	181, 182
Steel Straight Edges.....	103
Steel Tapes.....	123-125
Steel Tape Chains—Roe's Nickel Plated.....	127
Steel Triangles.....	105
Steel T Squares.....	103
Steinbach's Drawing and Crayon Papers.....	14
Stenographic Pencils.....	174
Stipple or Autographic Paper, Ross.....	9
Stones—Arkansas Oil.....	187
" Stork " (Golden) India Ink.....	143
Straight Edges.....	103
Strong Paste Board Tubes.....	198
Students Drawing Books.....	167
Studies for Drawing.....	203-206
Stumps.....	184
Stumps—Rubber.....	170, 184
Super India Inks, Polished.....	144
Surveyors' Chains.....	126, 127
Surveyor's Cross.....	136
Surveyors' Instruments.....	131-134

	PAGE
Surveyors' and Pocket Compasses.....	135-138
Surveyors' Tapes.....	123-125
Surveying Books—Hydrographic.....	34
Surveying or Mining Barometers.....	139
Suspension Rings.....	191
Swan Quill Brushes.....	160
Swiss Instruments.....	39-53
Swiss Pivot Joint Instruments.....	37, 38
Swiss Protractors.....	86, 87
Swivels for T Squares.....	103
" Sword " (Gilt) India Ink.....	144

## T

Tables—Adjustable for Drawing.....	115
Tablets—Gold and Silver Cakes.....	151
Tacks or Fastening Pins.....	84, 85
Tack Lifters.....	85
Tape Chains, Steel.....	127
Tape—Pink for Binding.....	192
Tapered T Squares.....	102
Tapes—Linen.....	125
Tapes—Measuring.....	123-125
Telescopes.....	140
Telescope Tripods.....	140
Templet Odontograph.....	120
Theodolites, Transits and Levels.....	131-135
Thick Colored Pencils.....	178
Thread Counters or Linen Prover.....	142
Three Foot Measuring Rods.....	99
Three Legged Microscopes.....	142
Thumb Tacks.....	84, 85
Tide Books.....	34
Tiles or Color Slabs.....	146-148
Tin Boxes of "Imperial" Colors.....	152
Tin Boxes with Slip Cover.....	198
Tinted Bristol Board (Cream) "Florence".....	7
Tinted Bristol Board—French.....	7
Tinted Charcoal Papers—"Antler".....	6
Tinted Drawing Papers—"Crown".....	6
Tinted Drawing Papers—"Jullien".....	6
Tinted Drawing Papers—"Queen".....	6
Tinted Drawing Papers—"Roman".....	6, 14
Tinted Mounting Boards.....	8
Tints—Printed for Photo-Engraving.....	9
Tin Water Bottles—Japanned.....	159
Tips for Pencils—Rubber.....	170
Tortillons—Miniature Stumps.....	184
Tracers.....	44, 55
Tracing Cloth or Muslin.....	16
Tracing Cloth Colors—Turck's.....	149
Tracing Cloth—Tin Boxes for.....	198
Tracing Paper Protractors.....	89
Tracing Papers—"Arcadia" Detail.....	18
Tracing Papers—"Canary" Detail.....	18
Tracing Papers—"Champion".....	16
Tracing Papers—"Crystal".....	17
Tracing Papers—"Elephant Vellum".....	17
Tracing Papers—"Ivorine".....	18
Tracing Papers—"Leatherine".....	17
Tracing Papers—"Lion" Parchment.....	17
Tracing Papers—"Mammoth".....	17
Tracing Papers—"Monarch".....	17
Tracing Papers—"Premium".....	17

*Index of DRAWING MATERIALS, ARCHITECTS AND ENGINEERS' SUPPLIES, continued.*

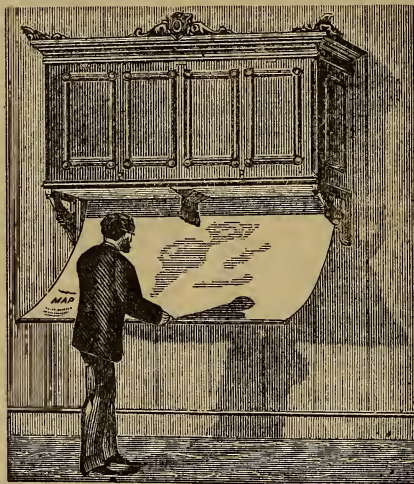
	PAGE		PAGE
Tracing Papers—"Princess".....	16	Water Mat Gold Size.....	150
Tracing Papers—"Silk".....	18	Wax Crayons.....	176-178
Tracing Papers—"Victoria".....	17	Weaver's Design Papers.....	22
Tracings Copied by the "Black Process".....	24	Wedge Rubbers.....	169
Tracings Copied by the "Blue Process".....	23	Wedge Shape Oil Stones.....	187
Trammel Heads.....	122	Weights for Paper.....	194
Transfer or Impression Papers.....	9	Weights for Splines.....	110
Transit Books—Engineers'.....	32	Whatman's Drawing Papers.....	5
Transits, Theodolites and Levels.....	131-135	Whatman's Drawing Papers, Cloth Backed.....	15
Trestles for Drawing Boards.....	114	Whatman's Sketching Blocks and Books.....	164-166
Triangles.....	104, 105	Wheel Attachments for Beam Compasses... ..	44
Triangles—Lettering.....	105	White Bristol Boards—French.....	7
Triangular Scales.....	93	White Bristol Boards—Reynolds' English... ..	6
Tripod, with Jacob Staff Top.....	135	White Bristol Boards—"Triumph".....	6
Tripod for Telescopes.....	140	White Kid Stumps.....	184
"Triumph" White Bristol Boards.....	6	White Mounting Boards.....	8, 9
<b>T</b> Squares.....	101-103	White and Other Crayons.....	183-186
<b>T</b> Squares—Engravers'.....	103	White Paper Pads.....	197
<b>T</b> Squares for Sketch Blocks.....	102, 165	White and Tinted Papers.....	5-15
<b>T</b> Square Swivels.....	103	White Sketching Boards.....	6-8
Tubes—Paste Board.....	198	Whole and Half Cakes of Colors.....	154-157
Tubes—see Tin Boxes.....	198	Whole and Half Dividers.....	62
Tubular Beam Compasses.....	45	Williams' Gold and Silver Paint.....	151
Turck's "Diamond" Drafting Ink.....	149	Willis' Odontograph.....	120
Turck's Tracing Cloth Colors.....	149	Willow Charcoal.....	185
Turnbull's Bristol Board.....	7	Winsor & Newton's Handbooks on Art.....	297
<b>U</b>			
Unprepared Blue Print Papers.....	27, 28	Winsor & Newton's Gold Ink.....	150
<b>V</b>			
Vera Surveyors' Chains.....	126, 127	Winsor & Newton's Liquid Water Colors... ..	150
Various Pencils.....	171-178	Winsor & Newton's Water Colors.....	153-157
"Velvet" Crayons, No. 17,780.....	183	Wire Spiral Tacks.....	85
Velvet Rubber—Davidson's.....	168	Wire Staple Binders.....	189
"Velveteen" Blue Print Papers.....	27	Wooden Bars for Beam Compasses.....	104
"Velveteen" Drawing Papers.....	13	Wooden Black Boards.....	193
Vere Foster's Drawing Copies.....	204	Wooden Black Board Dividers.....	116, 194
Vernier Protractors.....	86	Wooden Black Board Drawing Set.....	116, 194
"Victor" Detail Papers.....	10, 11	Wooden Color Boxes—Empty.....	159
"Victor" Sketching Blocks.....	10, 164	Wooden Curves.....	109-112
"Victoria" Tracing Papers.....	17	Wooden Ellipses.....	110
Virgin Rubbers.....	169	Wooden Rail Road Curves.....	112
"Vulcan" Hektograph Papers.....	196	Wooden <b>T</b> Squares, Straight Edges and Triangles.....	101-105
"Vulcan" Blue Print Papers.....	27	Wood's Monochromatic Boards.....	9
<b>W</b>			
Waffle Rubbers.....	168	Woodward's Alphabets.....	203
Walnut Cases, Empty.....	72	Works on Scientific Subjects.....	208
Wantage and Gauging Rods.....	99	Writing Inks.....	196
Wash or Sky Brushes.....	161, 162	Writing Pads.....	197
Watch Charm Measuring Instruments.....	121	Writing Pens.....	181, 182
Water Bottles—Japanned Tin.....	159	Writing—Round Writing.....	182
Water Color Brushes.....	159-163	Written Specifications—Covers for.....	198
Water Color Papers.....	5-15	<b>Y</b>	
Water Colors.....	152-158	Yard Sticks.....	99
Water Colors—"Imperial" Moist.....	152	Yellow Chamois Stumps.....	184
Water Colors—Winsor and Newton's.....	153-157	Yellow Pencils.....	178
Water Glasses.....	148	Yellow Round Pencils—Faber's.....	171
<b>Z</b>			
		Yellow Round Pencils in Cabinets.....	176
		Zinc-Lined Blue Print Baths.....	30

*CONDENSED CLASSIFIED INDEX OF DRAWING MATERIALS, Etc., Page 4.*  
*INDEX OF CLASSIFICATION OF SCIENTIFIC BOOKS, - - Page 208.*  
*INDEX OF AUTHORS OF SCIENTIFIC BOOKS, - - Page 254.*



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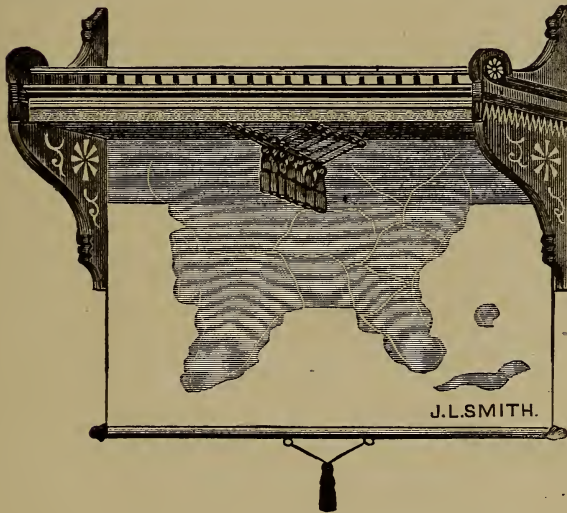
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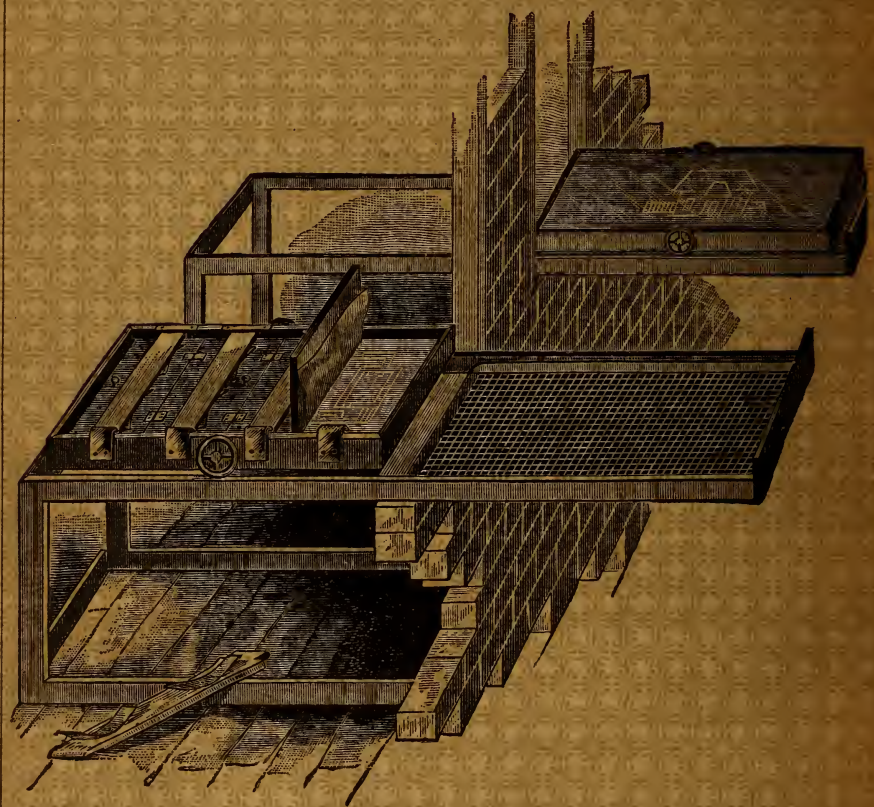


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# “Blue \* Process”

\* PAPERS. \*



# “Blue \* Process”

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