LABORATORY APPARATUS

CHEMISTRY
BIOLOGY
PHOTOGRAPHY
MICROSCOPES
PROJECTION LANTERNS
CHEMICALS
MINERALS
ETC.

4
(1921)

STANDARD SCIENTIFIC COMPANY
NEW YORK

LABORATORY APPARATUS

CHEMISTRY
BIOLOGY
PHOTOGRAPHY
MICROSCOPES
PROJECTION LANTERNS
CHEMICALS
MINERALS
ETC.

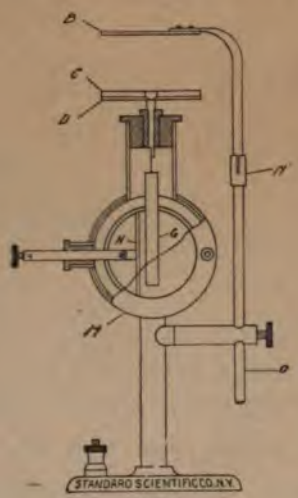
4

(1921)

STANDARD SCIENTIFIC COMPANY
186-192 WEST FOURTH STREET
(SHERIDAN SQUARE)
NEW YORK


160


N65



N65


165

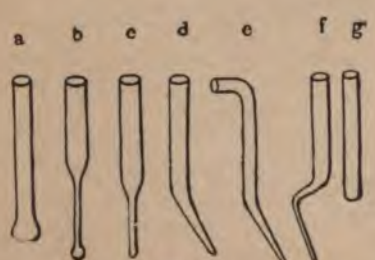

20


170


25


30


155



85


120


115

CHEMICAL APPARATUS

N65 **Stansico-Zeleny Oscillating Electroscope, for Radioactivity and Other Experiments in Ionization.** Designed by Prof. John Zeleny, Yale University. Operates on the novel principle of a swinging leaf of thin foil, the period or rate of oscillation being a measure of the ionization. The sensitivity of the instrument can be varied over wide limits. Invaluable for the study of alpha, beta and gamma rays; conductivity of gases from flames; conductivity by chemical action, splashing water, etc. A special descriptive circular will be sent on request. Complete with attachments in wooden case, but without battery 60.00

10 **Acid Pitchers,** stoneware, with handle:

Capacity, pints	1	2	4	8
Each	.50	.65	.75	1.00

15 **Acid Jars or Pots** of stoneware, round, with covers:

Capacity, gallons	1	2	4	5	6	8
Each	1.00	1.00	1.25	2.25	3.00	5.00

20 **Acid Siphon, Pneumatic,** for handling acids from carboys. A valve is pressed downward, and with a few strokes of the pump, the liquid starts to flow. Release the valve and flow stops. The siphon is not affected by sulphuric acid 12.50

25 **Acid Pump,** for use with bottles and carboys with neck from 1¾ to 2⅝ inside diameter, convenient for transferring acids or other corrosive liquids 8.00

27 **Adapters—Straight** form; light wall, lamp blown; for connecting retorts with receivers:

Length, inches	6	7	8	10
Inside diameter at large end, inches	¾	1	1¼	1½
Each	.20	.22	.27	.33

28 **Adapters—Curved;** light wall, lamp blown; these are made with small ned at 45 degrees, 90 degrees or 135 degrees; angle must be specified:

Length, inches	6	7	8	10
Inside diameter at large end, inches	¾	1	1¼	1½
Each	.20	.22	.27	.33

30 **Air Tester,** Wolpert's, for determining carbon dioxide content of air:
In case, complete with reagents 5.00
Reagents for same ..... Per doz. capsules 3.00

35 **Air Thermometer Tubes,** long stem, capillary bore:

Diam. of bulb, mm	25	50	75
Each	.30	.40	.50

80 **Aprons, Rubber, on Cloth,** for laboratory use:
a Black rubber, light weight 1.00
b Black rubber, heavier quality 1.25
c White rubber 1.35
d Maroon rubber, very durable 1.50

81 **Over-Sleeves, Rubber on Cloth,** to match Rubber Aprons, **No. 80:**
a Black rubber, light weight, pair ..... .60
b Black rubber, heavier quality, pair ..... .70
c White rubber, pair ..... .80
d Maroon rubber, pair ..... .90

83 **Aprons and Oversleeves, of Rubber,** to match, for general laboratory use:
Light Weight, Black:
a **Aprons,** doz. 12.00
b **Oversleeves,** dozen pair 6.00
Medium Weight, Black:
c **Aprons,** doz. 15.00
d **Oversleeves,** dozen pair 7.50
Light Weight, White:
e **Aprons,** doz. 15.00
f **Oversleeves,** dozen pair 7.50
Light Weight, Maroon:
g **Aprons,** doz. 18.00
h **Oversleeves,** dozen pair 9.00

85 **Arsenic Tubes:**

Style	A	B	C	D	E	F	G
Each	.04	.06	.05	.06	.06	.06	.04

198

201

200

ASBESTOS MATERIAL

90 **Asbestos Board,** fire and acid-proof, best quality, in sheet 40 x 40 in. Price from 30c a pound up, according to thickness. Special price in large quantities. Regularly furnished in the following thicknesses:

Thickness, in.	1/32	1/16	1/8	3/16	1/4	3/8	1/2
Weight per sheet, lb	2	4	8	12	16	20	32
Per square foot	.10	.20	.50	.75	.90	1.20	1.70
Per sheet	.60	1.20	3.00	4.50	5.50	7.20	10.20

95 **Asbestos Boards,** cut in square, 1/8 in. thick:

4 x 4 in., per dozen	.30
5 x 5 in., per dozen	.50
6 x 6 in., per dozen	.60
8 x 8 in., per dozen	1.20
12 x 12 in., per dozen	2.40

98 **Asbestos Pads,** 1/8 in. thick, with iron bound edges:

Size, in.	8½x8½	11x11	15x15	10x6
Each	.50	.60	.90	.80

100 **Asbestos Paper** for fitering acids, in rolls 36 inches wide, weighing about 1 pound to the square yard. Thickness, about 0.028 in., lb. ..... .40

102 **Asbestos Board or Slate (Transite),** acid-proof, adapted for use on laboratory tables, or as insulation in heat and electrical work. Readily cut with saw:

	1/8	3/16	1/4	3/8	5/8
42 x 42 in., per sheet	3.00	4.50	6.00	9.00	12.00
42 x 96 in., per sheet	6.00	9.00	12.00	18.00	24.00
Per square foot	.50	.60	.75	1.00	1.50

103 **Asbestos Cloth,** 36 in. wide, unaffected by acid, fire, etc.:

	Fine	Medium	Heavy
Weight per yard, lb	1½	2¼	2½
Per yard	4.00	5.40	6.80

105 **Asbestos Twine** or Cord, in 1 lb. balls for suspending retorts, crucibles, etc., in direct flame. Useful also for wrapping handles of vessels or other apparatus exposed to heat, or for general insulating purposes:

Diameter, in.	1/16	1/8
Per lb.	2.50	2.50

110 **Asbestos Fiber or Wool, unwashed,** lb ..... .60

113 **Asbestos Finger Cots,** to fit thumb and index finger, for use in handling articles when hot, pair ..... .50

115 **Asbestos Mittens,** for protecting hands against burns by heat or acids during laboratory operations, pair 3.25

118 **Asbestos Glove,** with fingers and gauntlet for protecting wrists; medium, **4.50;** large, pair.. 4.75

120 **Asbestos Gloves,** with fingers (without gauntlet); medium, **4.00;** large, pair 4.25

122 **Asbestos Apron,** canvas lined, about 40 in. long by 24 in. wide. Complete with strap and buckles 7.50

125 **Asbestos Cement,** for use in connecting parts of apparatus exposed to heat or acids, 5 lb. can 1.25

155 **Aspirator, Chapman's,** of brass, for producing vacuum:

Size:	Small	Medium	Large
Each:	1.40	1.60	1.80

160 **Aspirator or Filter Pump (Spiral Form),** a new improvement for producing a higher vacuum in less time, and using about 1-3 less water than **No. 155:**

Size:	Small	Medium	Large
Each:	1.50	1.70	2.00

165 **Richards' Aspirator, or Filter Pump,** very powerful:

Size:	Small	Medium	Extra Large
Each:	1.50	2.25	7.00

170 **Couplings of Brass,** for above Aspirators **155, 160** and **165:**

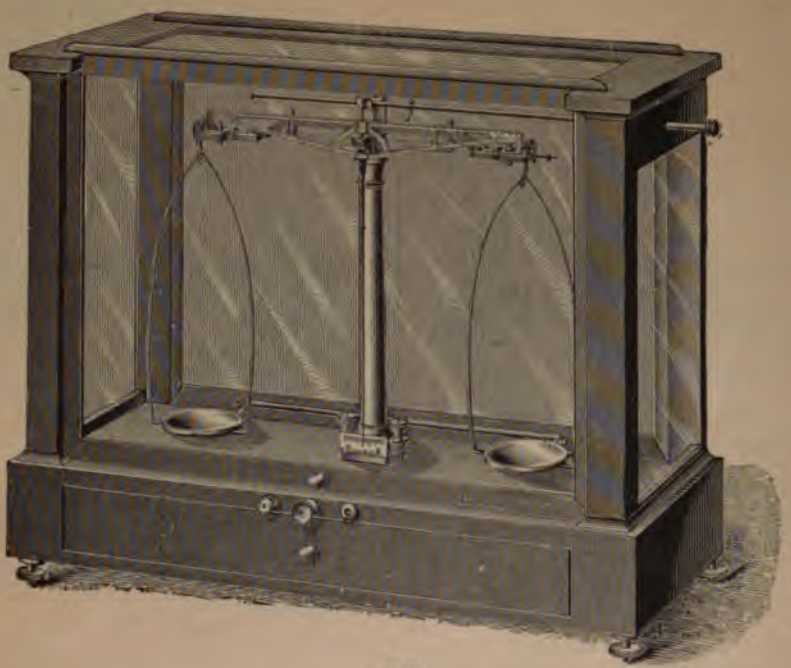
Size:	Small	Medium	Large
Each:	.30	.35	.40

171 **Coupling for Smooth or Unthreaded Faucets,** for attaching Aspirators **155, 160** and **165:**

Size:	Small	Medium	Large
Each:	.50	.60	.70

180 **Autoclav or Pressure Cooker, Aluminum,** substantially built, safe, sanitary and reliable. The cost is considerably less th ther autoclavs. Steam gauge reads to 30 lb. pressure. Equipped with safety val holder for thermometer. It makes use of the principle th der pressure, is hotter than water boiling at atmospheri The temperature increases with the pressure. W eratures:

At atmo sea level	194° F.
At atmo sea level	203° F.
At atm	212° F.
At 5	227° F.
At 10	239° F.



202

204

206

(Continued)

At 15 pounds steam pressure..... 250° F.
At 20 pounds steam pressure..... 259° F.
At 25 pounds steam pressure..... 267° F.

a Capacity 10 quarts 24.00
b Capacity 17 quarts 30.00
c Capacity 25 quarts 35.00

192 **Autoclav or Digester with Vertical Chamber, Gas Heated,** copper boiler, tin lined with seamless bottom and hinged cast brass cover, tested under pressure of 35 lb. per square inch. Size of chamber inside:
a 11 in. diam. by 24 in. deep..... 90.00
b 14 in. diam. by 26 in. deep..... 110.00

193 **Autoclav or Digester, Vertical Chamber, Electrically Heated,** similar to 192. Size of chamber inside:
a 11 in. diam. by 24 in. deep..... 135.00
b 14 in. diam. by 26 in. deep..... 175.00

196 **Becker Analytical Balance (8-A), Standard Short Beam.** Beam graduated both sides in 1-10 milligram. Independent arrest for pans with automatic stop. Width of pan support 4 in.; wider if specified. Polished mahogany and glass case, glass top, front sliding frame counterpoised, mounted on plate glass. Dimensions of case: 16¼ in. long, 9 in. wide, 18½ in. high. Specific gravity support and holder for weighing test tubes, with counterpoise.
Capacity 200 grams, sensitiveness 1-20 milligram, diameter of pans 2⅜ inches, length of beam 7 inches, agate planes and knife-edges 135.00
a With adjustable shelf for supporting beaker when taking specific gravities..... 150.00

197 **Becker Analytical Chainomatic Balance (8-A), with Vernier.** It is the same as the Becker Balance 196 equipped with chain, and gives direct rapid reading without rider or small weights. Polished mahogany case, front sliding frame, counterpoised. Mounted on plate glass. Capacity 200 grams, sensitiveness 1-20 milligram, diameter of pans 2⅜ inches, length of beam 7 inches, agate planes and knife-edges. Capacity of bar and vernier 50 mg to 1-10 mg 175.00

198 **Becker Analytical Balance (15).** Aluminum beam graduated in 1-10 milligram, with white graduations on black background. Independent arrest for pans with automatic stop. Width of pan support 4 in.; wider if specified. Polished mahogany and glass case, glass top, front sliding frame counterpoised. Dimensions of case: 16¼ in. long, 9 in. wide, 18½ in. high. Capacity 200 grams, sensitiveness 1-10 milligram, or capacity 100 grams, sensitiveness 1-20 milligram, diameter of pans 3 inches, length of beam 6 inches, agate bearings and knife-edges 90.00
a Mounted on plate glass..... 100.00

199 **Becker Analytical Chainomatic Balance (15), with Vernier,** a popular model for routine laboratory work. It is the regular Becker Balance 198 equipped with chain, and gives direct rapid reading without rider or small weights. Polished mahogany case, front sliding frame counterpoised. Mounted on plate glass. Capacity 200 grams, sensitiveness 1-10 milligram, or capacity 100 grams, sensitiveness 1-20 milligram, diameter of pans 3 inches, length of beam 6 inches, agate bearings and knife-edges, capacity of bar and vernier 50 mg to 1-10 mg..... 130.00

200 **Balance, Analytical, Troemner's Model No. 10.** Capacity 200 g, sensitive to 1-20 mg. Short beam of aluminum, graduated full length in 1-10 mg. Agate knife edges and bearings. Bows and pans of aluminum, other metal parts gold plated. Mounted on heavy glass plate. Complete with 5 mg rider in polished mahogany and glass case 180.00

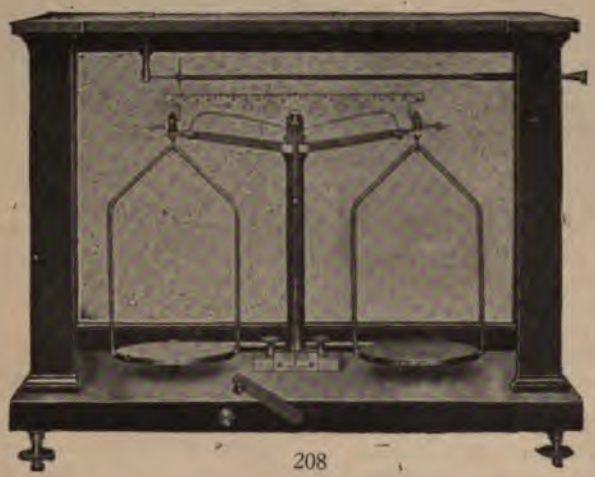
201 **Balance, Analytical, Short Arm, Aluminum Beam.** Capacity 200 grams, sensibility 1/20 mg, with rider arm. Metal parts gold plated. Beam graduated both sides. Agate knives and bearings. In mahogany case, glass side, with drawer and leveling screws. Complete with apparatus for specific gravity weighings, and a high grade set of platinum plated weights 100 grams to 1 mg, including 3 riders..... 175.00

202 **Balances, Analytical, Long Beam, Graduated,** with rider carrier. In mahogany case, with glass sides, drawer and leveling screws. Apparatus included for specific gravity weighings. Agate bearings and steel knives:
a Capacity 500 grams, sensibility 1/10 mm, pans 4 in. diam..... 175.00
b Capacity 200 grams, sensibility 1/20 mg, pans 3 in. diam..... 142.00
c Capacity 100 grams, sensibility 1/20 mg, pans 2½ in. diam..... 116.00
(Note: Agate knives instead of steel will be supplied at $13.50 extra.)

203 **Becker Analytical Balance (7).** Beam graduated in 1-10 milligram. Independent arrest for pans with automatic stop. Polished mahogany and glass case, glass top, front sliding frame counterpoised. Dimensions of case: 19½x9¼x16¼ in. Specific gravity support, holder for weighing test tubes with counterpoise. Capacity 200 grams, sensitiveness 1-20 milligram, diameter of pans 2⅜ inches, length of beam 10 inches, agate planes and knife-edges..... 130.00

207

210



208

209

218

204 **Balance, Analytical, Short Arm, Gold Plated,** aluminum beam, capacity 100 grams, sensibility 1/10 mg. Agate knives and bearings. Space between bows 3 in., with aluminum pans 3 in. diam. Apparatus for specific gravity included; also a set of high grade analytical weights, gold plated, 50 grams to 1 mg, with 3 riders. Mahogany case, glass sides, drawer and leveling screws 105.00

05 **Balance, Analytical,** capacity 200 g, sensibility 1-10 mg. Aluminum beam, 6 in. long, graduated into 50 parts each side of zero. Agate knives and bearings. Carrier for rider, with two 5-mg riders included. Mahogany case, sliding door, with drawer in base. Three-inch scale pans 100.00

If case is furnished with heavy black plate-glass base, add **$15.00** to above price.

06 **Balance, Analytical, Troemner,** beam 7 in. made of aluminum alloy, divided on right hand into 50 divisions, capacity 200 g in each pan, sensibility 1-10 mg, agate knife-edges and bearings. Pans 2½ in. diam. Mahogany case with glass sides, leveling screws and drawer in base 93.00

207 **Balance, Analytical,** capacity 100 grams, sensibility 1/4 mg, with agate bearings. Graduated beam and carrier for rider. Pans 3 in. Arranged for specific gravity. Mahogany case, glass sides, drawer and leveling screws 70.00

08 **Demonstration Analytical Balance,** especially adapted for exact weighings on lecture table. Small sizes useful for students' laboratory work. The beam and knife-edges are made of agate, mounted on mahogany base with glass sides, provided with leveling screws and level. A hook is attached to the hanger for specific gravity weighing. The beam is graduated into 100 divisions on both sides from the center. Regularly supplied in the following sizes:

a Cap. 100 g, sensibility 0.5 mg, length beam 6 in., diam. pans 3 in., clearance inside of bows 7x3⅛ in. 50.00

b Cap. 200 g, sensibility 1.0 mg, length of beam 8 in., diam. pans 3.5 in., clearance inside of bows 9x3¾ in. 56.00

c Cap. 500 g, sensibility 1.5 mg, length o beam 9 in., pans 4 in., clearance inside of bows 11x4⅛ in. 72.00

d Cap. 1,000 g, sensibility 2.5 mg, length of beam 11 in., diam. pans 5 in., clearance inside of bows 13x5 ⅛ in. 86.00

e Cap. 2,000 g, sensibility 3.5 mg, length of beam 12 in., diam. pans 6 in., clearance inside of bows 15x6⅛ in. 115.00

f Cap. 5,000 g, sensibility 5.0 mg, length of beam 15 in., diam. pans 7 in., clearance inside of bows 17x7⅛ in. 145.00

09 **Balance, Analytical, Short Arm,** capacity 200 grams, sensibility 1/5 mg. Graduated beam and carrier for rider. Agate bearings. Pans 3 inch. Includes apparatus for specific gravity. Mahogany case, glass sides, drawer and leveling screws 85.00

0 **Balance, Analytical, Stansico** Model H., aluminum short beam. Carrying capacity 100 g in each pan. Sensible to 1-10 mg. Agate knife edges and bearings. Extra wide bows and pans, will accommodate 4-in. dish. Automatic pan arrest. Fine mahogany case, glass top 90.00

1 **Balance, Analytical,** short arm, capacity 100 g, sensibility 1-10 g, graduated beam, agate bearings, including set of high grade weights 50 grams to 1 mg with 3 riders.... 100.00

5 **Balance, Analytical,** 200 g capacity, 1-5 mg sensibility. Sub-divisions on beam in fifths. Aluminum beam, 6 in. long, graduated into 50 parts each side of zero. Agate knives and bearings. Rider-carrier with two 5-mg riders. One pair 3-in. watch glasses. Mahogany case 75.00

If furnished with plate-glass base, add **$6.00.**

8 **Analytical Balance,** sensibility 1-4 mg, capacity 200 g, aluminum alloy beam 8 in., graduated on one side into 50 divisions, steel knife-edges and agate planes; pans 3 in. diam., made of nickel silver. The arch supports for the pans are also made of nickel silver wire, 3¼x7½ in. high. The rest of the balance is made of brass coated with a special acid-proof preparation rendering it almost as efficient as gold plating. Furnished in mahogany case with glass sides and drawer 70.00

4 **Becker Balance (18).** Eccentric for lifting beam. Removable pans. Beam arrests. Leveling screws. Spirit level. Polished mahogany and glass case, front sliding frame counterpoised.

Capacity, grams	75	150	300
Capacity, ounces	2½	5	10
Sensitiveness, milligrams	1	2	3
Sensitiveness, gram	1-50	1-30	1-20
Diameter of pans, inches	2¾	3⅜	4
Length of beam, inches	7	7½	10

Steel bearings and knife-edges.

Case 75 grams, 14 in. long, 6¾ in. wide, 12⅛ in. high 47.00

Case 150 grams, 17¾ in. long, 8 1-16 in. wide, 15 in. high 52.00

Case 300 grams, 19½ in. long, 9¼ in. wide, 16½ in. high 59.00

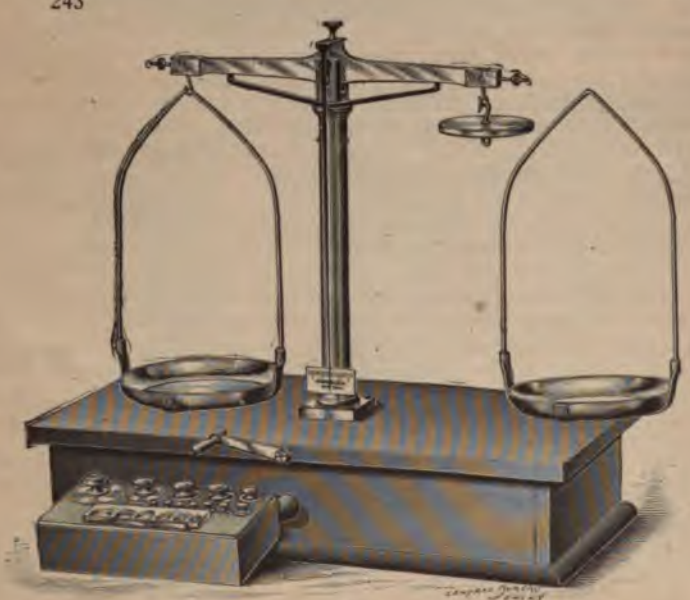
232

233

248

243

245



240

230 **Balance, Student's Chemical,** in mahogany case with glass sides, leveling screws and level; also drawer in base. A high grade balance. Beam provided with adjusting screws; agate or steel bearings.

	Capacity	Sensibility	Diam. Pans	Length Beam	Steel Bearings	Agate Bearings
a	62.207 g	1 mg	3 in.	6 in.	28.00	30.75
b	155.517 g	2 mg	3.5 in.	8 in.	33.00	35.75
c	311.035 g	5 mg	4 in.	9 in.	45.00	47.50
d	622.010 g	5 mg	5 in.	11 in.	56.00	59.25
e	1,555.175 g	10 mg	6 in.	12 in.	68.75	74.75
f	3,110.350 g	20 mg	7 in.	15 in.	97.00	114.00

232 **Balance, Prescription (Class "A"),** made of brass, mounted on mahogany base, nickel plated scale pans and adjusting screws on ends of beam. Base provided with leveling screws.

a Capacity ½ oz., sensibility 1-65 grain, pans 2¾ in. diam 25.00
b Capacity 2 oz., sensibility 1-32 grain, pans 3¼ in. diam 30.00

233 **Balance, High Grade,** made of aluminum alloy to prevent corrosion, agate bearings, graduated beam to facilitate use of a rider, mounted on aluminum alloy base provided with leveling screws.

a Capacity 100 grams, sensibility 2 mg, diam. pans 3 in. 30.00
b Capacity 250 grams, sensibility 5 mg, diam. pans 4 in. 35.00

235 **Balance, on Polished Mahogany Base With Drawer, High Grade Workmanship.** Adapted for fine work, such as weighing gold, jewelry, ore, sugar, etc. Beam provided with adjusting screws; steel or agate bearings. Easily taken apart and put in drawer. (When ordering specify what kind of bearings are desired.)

Capacity	Sensibility	Diam. Pans	Length of Beam	Steel Bearings	Agate Bearings
62.207 g	1 mg	3 in.	6 in.	18.00	19.50
155.517 g	2 mg	3.5 in.	8 in.	20.00	21.50
311.035 g	5 mg	4 in.	9 in.	30.25	31.75
622.070 g	5 mg	5 in.	11 in.	37.50	39.00

240 **Balance, Hydrostatic, with Counterpoise,** designed for general or specific gravity weighings. Beam 10 inches, pans 5½ in. diam. Capacity 1000 grams, sensibility 1 centigram. On mahogany base with drawer. An excellent type for laboratory, lecture demonstrations, or commercial use:

a With set of weights 500 grams to 1 cg 36.50
b Without weights 30.00

243 **Balance, Cream Testing, Agate Bearings,** provided with graduated side beam having twelve parts, each representing 9 grams. Including side beam and sliding tare weight. Accommodates 6 bottles. Sensibility 100 mg 18.00

245 **Balance, Metric Solution,** for rapidly making up reagents or other composite solutions. The ungraduated side beam and sliding weight is used to counterbalance the bottle or container. Sensibility 0.5 g. Including weights:

a Pans 5½ in. diam., capacity 1 kg to 1g 30.00
b Pans 9 in. diam., capacity 5 kg to 1 g 35.00

248 **Balance, Dispensing Scale,** upright indicator, side beam graduated in two systems: one to 120 grains in one grain divisions; and 1-10 gram to 8 grams by 1-10 gram divisions. Brass weights included, avoirdupois, or metric: 50-20-20-10-5 grams.

Weights	Capacity	Sensibility	Diam. Pans	Bearings	
Troy	4 ozs.	1 grain	3¾ in.	Steel	12.25
Troy	4 ozs.	1 grain	3¾ in.	Agate	19.25
Metric	110 grams	1-10 gram	3¾ in.	Steel	12.25
Metric	110 grams	1-10 gram	3¾ in.	Agate	19.25
Avoirdupois	4 ozs.	1 grain	3¾ in.	Steel	12.25
Avoirdupois	4 ozs.	1 grain	3¾ in.	Agate	19.25

250 **Balance,** on mahogany base with drawer, beam provided with adjusting screws. A high grade and durable balance. Beam provided with adjusting screws; either steel or agate bearings.

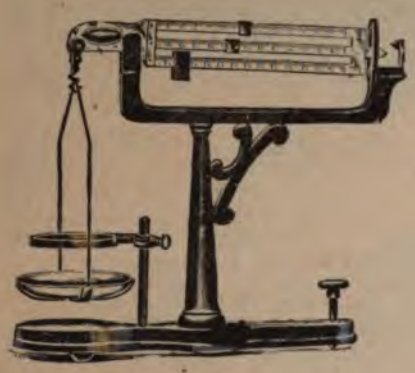
a Capacity 62.207 g, sensibility 1 mg, diam. pans 3 in., length beam 6 in., steel bearings 18.00
b Ditto, but with agate bearings 19.50
c Capacity 155.517 g, sensibility 2 mg, diam. pans 3.5 in., length beam 8 in., steel bearings 20.00
d Ditto, but with agate bearings 21.50
e Capacity 311.035 g, sensibility 5 mg, diam. pans 4 in., length beam 9 in., steel bearings 30.25
f Ditto, but with agate bearings 31.75

255 **Triple Beam Laboratory Balance, Metric,** with graduated aluminum beam, three riders and hardened steel bearings. Capacity 111 grams by centigrams. Convenient and time-saving. Obviates the handling of separate weights. Adjustable shelf for specific gravity. Provided with spirit level and leveling screw 24.00

260

263

264



255

265

270

261

268

274

276

260 **Balance, Student's Chemical or Prescription,** beam 9 inches long with adjusting screws. Nickel plated pans 3 in. diam. Sensibility 2 mg. On mahogany base with drawer:
- a Without weights 13.50
- b With Set of Metric Weights, 20 grams to 1 cg 17.50
- c With Set of Troy Weights, 1 oz. to ½ grain 17.50

261 **Balance, Student's Chemical,** with 2½ inch scale pans, on mahogany base with drawer. Sensitive to about 5 mg 9.00

263 **Balance, Laboratory Type,** vertical indicator, steel or agate bearings, including weights. Beam graduated, provided with adjusting screws and rider. (Can be supplied with graduations and weights for Troy or Avoirdupois.)
- a Steel bearings, capacity 310 grams, sensibility 1-10 gram, pans 6 in. diam. 18.00
- b Agate bearings, capacity 310 grams, sensibility 1-10 gram, pans 6 in. diam. 25.75

264 **Balance, Army Prescription Type,** box base, vertical indicator, including set of weights, 2 drachms to ½ grain.
- a Capacity ½ oz., sensibility ¼ gr., pans 2¾ in. diam. 8.50
- b Capacity ½ oz., sensibility ¼ gr., pans 2½ in. diam. 7.00
- c Capacity ½ oz., sensibility ¼ gr., pans 2 in. diam 5.00

265 **Balance, Stansico Dissectible Laboratory Balance.** This is a dependable and accurate balance, being substantially made to withstand constant and hard usage. All parts are perfectly formed from brass and steel, heavily nickel plated. The drawer and base are made of finished oak.

It has three polished steel knife-edges resting against V-shaped steel bearings, especially hardened so as to wear indefinitely, and insure high sensibility.

Capacity 500 g, or 16 oz. Sensibility 0.01 g, or .15 grain. Beam length, overall, 9 in. Scale pans, 3 in. diameter. Height of balance, overall, 11¼ in. Base, 3x5½x11¼ in. Beam lift by knurled screw and cam. White celluloid scale with black lines and figures.

In less than one minute the balance can be completely assembled or taken apart and put in the drawer of the base. This feature greatly enhances its value since it occupies less space when "knocked-down," and may be much more easily and safely transported. When the balance is not in use and is packed in drawer, much greater protection of the delicate parts is secured, thus prolonging the life and efficiency of the balance 10.00

268 **Balance, Pocket Type, Folding (Class B),** in wooden carrying case, including weights and forceps. Brass weights from 4 drachms to 1-10 grain, or metric weights 20 grams to 1-10 gram can be furnished as desired.
- a Capacity 1 oz. sensibility 1-10 grain, diam. pans 2 in. 17.00
- b Capacity 50 grams, sensibility 1-100 gram, diam. pans 2 in. 17.00

270 **Balance, Robervahl Scales,** brass scale pans, vertical indicator:
- a Capacity 1 lb. sensibility 10 grains, pans 5½ in. diam 9.50
- b Capacity 2 lbs., sensibility 15 grains, pans 8 in. diam. 10.75
- c Capacity 5 lbs., sensibility 20 grains, pans 9 in. diam. 13.00

272 **Balance, Counter Scale,** nickel plated scale pans, 8 in. diam., marble top. Capacity 5 lbs., sensibility 20 grains 18.00

274 **Balance, Counter Scales,** for druggists, manufacturers and chemists. Steel bearings, pan 16 in. diam., capacity 25 lbs., sensibility ¼ oz. 21.00

276 **Balance, Photographers' Scale,** with one removable brass pan 5¾ in. diam., graduated beam divided from 1-64 oz. to 1 oz. Troy. Capacity 14 oz.; sensibility 1-64 oz. (Can be supplied with Avoirdupois weights and graduations if desired) 10.75

300 **Balance, Hand Scales,** horn pans, 3 in diam., beam about 7½ inches long 2.50

305 **Balance, Pocket Hand Scales (Class "C"),** including tin box with cover, and full set of accurate weights, adapted for carrying in pocket:
- a Capacity ½ oz., sensibility ½ grain, diam. of pans 2¼ in. 3.00
- b Capacity 2 oz., sensibility ½ grain, diam. of pans 3 in. 3.50
- c Capacity 4 oz., sensibility ½ grain, diam. of pans 4 in. 4.50

325 **Balance, Specific Gravity, Mohr's,** for liquids or solids. Complete with riders and plummet:
- a For liquids only 28.75
- b For both liquids and solids 32.50

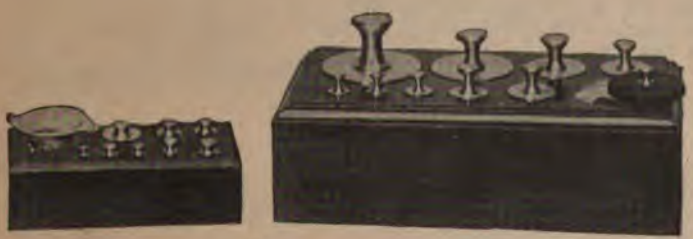
328 **Balance, Specific Gravity, Westphal,** for liquids, measuring densities to the fourth decimal place; including jars, riders, plummet, forceps, weight and wooden case with cover 26.25
- a Plummet only 10.00
- b Set of riders 2.50

330 **Glass Scale Pans,** in pairs, for **Analytical balances:**
- a Without Handles, 2½ in. diam., pair 1.10
- Without Handles, 2¾ in. diam., pair 1.10
- Without Handles, 3 in. diam., pair 1.10
- b With Handles, 2½ in. diam., pair 1.10
- With Handles, 2¾ in. diam., pair 1.10
- With Handles, 3 in. diam., pair 1.10

335 **Balance, Photographic,** sensitive to ½ grain, including set of weights ½ grain to 2 ounces. Interchangeable pans 3½ in. diam. Steel bearings 4.50

328

350



415

325

380

300

350 **Balance, Personal Scales,** with two graduated beams and sliding weights, also adjustable rod for measuring height, as used in schools, gymnasia, bath-rooms and by physicians. Capacity 300 lbs.; total height of measuring rod 6 feet 6 inches:

a White enamel finish 48.00

b Black, with brass rod and beam..... 66.00

380 **Weights, Analytical, Precision (Grade "A"),** polished and lacquered brass, or gold plated; the fractional weights from 500 mg to 50 mg are made of platinum; below that they are made of aluminum; the riders are also made of aluminum. Mahogany block with cover, including ivory tipped forceps:

	Lacquered	Gold Plated Velvet Lined Holes In Block	Gold Plated, Double Checked, Velvet Lined Holes In Block
10 grams to 1 mg	31.75	33.50	45.50
20 grams to 1 mg, and 3 Riders	33.00	37.50	52.00
50 grams to 1 mg, and 3 Riders	34.50	40.25	54.50
100 grams to 1 mg, and 3 Riders	36.00	45.00	59.00
200 grams to 1 mg, and 3 Riders	39.00	50.00	66.00
500 grams to 1 mg, and 3 Riders	45.50	64.00	81.50
1,000 grams to 1 mg, and 3 Riders	59.00	77.25	98.75

380a **Weights, Metric, Separate (Grade "A")** Lacquered Brass, as used in sets No. 380:

Grams:	1,000	500	200	100	50	20	10	5	2	1
Single Check, each:	7.15	5.00	3.75	2.90	2.15	1.85	1.50	1.40	1.20	1.10
Double Check, each:	8.60	6.35	5.10	4.30	3.60	3.25	2.90	2.75	2.65	2.60

Milligrams:	1,000	500	200	100	50	20	10	5	2	1	.5	.2	.1
Single Check, each:	12.90	8.00	5.25	4.00	3.65	.75	.75	.75	.75	.75	.75	.75	.75
Double Check, each:	15.80	10.75	7.25	5.25	4.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75

(If gold plated, add about $2.00 to above prices.)

381 **Weights, Precision Analytical, Brass,** similar to No. 380, except that the box is velvet lined and cover hinged. The fractional weights are in removable tray with glass cover; ivory tipped forceps included:

a

Set From	GRADE "A" Polished Brass And Lacquered	Gold Plated	Gold Plated, Double Check
1 mg to 10 g	33.00	36.75	50.50
1 mg to 20 g	34.75	39.00	53.25
1 mg to 50 g	35.75	41.75	56.50
1 mg to 100 g	37.50	46.00	60.25
1 mg to 200 g	40.25	51.75	67.50
1 mg to 500 g	50.50	66.00	83.00
1 mg to 1,000 g	60.25	78.75	100.00

b

Set From	GRADE "B" Polished Brass	Gold Plated
1 mg to 10 g	10.25	13.75
1 mg to 20 g	11.50	16.00
1 mg to 50 g	13.00	18.75
1 mg to 100 g	14.50	23.25
1 mg to 200 g	18.75	30.25
1 mg to 500 g	27.25	43.00
1 mg to 1000 g	31.75	51.75

(Prices for separate weights listed under 380a.)

388 **Weights, Analytical (Grade "B"),** polished and lacquered brass, mahogany block, including brass forceps:

	In Block Without Cover	In Block With Cover
1 mg to 1000 grams	23.25	25.00
1 " " 500 "	18.25	20.25
1 " " 200 "	14.50	16.50
1 " " 100 "	11.50	13.60
1 " " 50 "	10.25	12.15
1 " " 20 "	9.00	10.75
1 " " 10 "	8.00	9.00

388a **Weights, Brass, Separate (Grade "B"),** as used in sets No. 388:

Grams:	1000	500	200	100	50	20	10	5	2	1	.5	.2
Each:	5.10	3.60	2.55	2.20	1.85	1.75	1.50	1.25	1.15	.95	.58	.51

Grams:	.1	.05	.02	.005	.002	.001
Each:	.43	.37	.29	.25	.25	.25

395 **Riders (Grade "A"),** as used in best quality analytical weights:

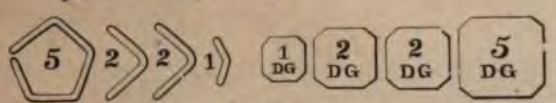
Milligrams:	12	10	6	5	3	2	1.2	1	.6	.5
Double check, each:	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Single check, each: ..	.50	.50	.50	.50	.70	.70	.70	.70	.85	.85

467

381

468

400



412

448

462

443

464

Weights, Metric, Lacquered Brass (Grade "C"), in block with hinged cover, including forceps. Small weights made of aluminum:

20 grams to 1 mg	10.75
50 grams to 1 mg	12.15
100 grams to 1 mg	13.60

Weights Separate, (Grade "C"), as used in sets No. 400:

Milligrams:	500	200	100	50	20	10	5	2	1
Each:	.55	.45	.30	.25	.25	.25	.25	.25	.25
Grams:	100		50		20	10		5	2	1
Each:	1.50		1.25		1.20	1.00		.75	.65	.60

Weights, Single (Grade "B"):

Milligrams:	500	200	100	50	20	10	5	2	1
Each:	.60	.50	.45	.40	.30	.30	.30	.30	.30

Weights, Metric, in paper boxes:

a 1 cg to 10 g	1.25
b 1 cg to 1 g	.75

Weights, Metric, Single, as used in sets **No. 412:**

Grams:	10	5	2	1
Each:	.37	.29	.22	.15
Decigrams:		5	2	1
Each:		.15	.15	.15
Centigrams:		5	2	1
Each:		.15	.15	.15

Weights, Metric, Brass (Grade "T"), in block:

20 g to 1 cg, total..... 40 g	1.75
50 g to 1 cg, total.....100 g	2.25
100 g to 1 cg, total.....200 g	2.85
200 g to 1 cg, total.....400 g	4.30
500 g to 1 cg, total.....1 kilo	7.15
1 kilo to 1 cg, total.....2 kilo	10.75
2 kilo to 1 cg, total.....4 kilo	14.30

Weights, Metric, Brass, Single (Grade "T"), as used in sets 415:

Grams:	2000	1000	500	200	100	50	20	10	5	2	1
Each:	5.50	4.00	3.00	1.60	1.00	.80	.60	.53	.47	.37	.37
Milligrams:			500		200		100		50	20	10
Each:			.30		.30		.28		.24	.17	.17

Weights, Metric (Grade "T"), Brass, in blocks with covers, and pair of forceps:

10 grams to 1 cg	4.30
20 grams to 1 cg	4.75
50 grams to 1 cg	5.00

Weights, Iron, Metric (Grade "T"), with sealing adjustment:

20, 10, 5, 2, 1 kilo	to 10 g, total..... 2 kilo	3.50
2 kilo	to 10 g, total..... 4 kilo	4.65
2, 1 kilo 1 kilo	to 10 g, total..... 5 kilo	5.40
5, 2, 1 kilo 1 kilo	to 10 g, total.....10 kilo	8.90
10, 5, 2, 1 kilo 1 kilo	to 10 g, total.....20 kilo	14.25
20, 10, 5, 2, 1 kilo 1 kilo	to 10 g, total.....40 kilo	24.50

Weight, Iron, Metric, Single (Grade "T"), as used in sets **No. 443:**

Kilos	20	10	5	2	1
Each	10.75	5.40	3.60	1.32	.72
Grams	500	200	100	50	20	10
Each	.58	.43	.37	.29	.22	.22

Weights, Iron, Avoirdupois (Grade "T"), adjusted with lead cap over adjustment for sealer's stamp:

Set	Total Weight	Enameled	Galvanized	Nickel Plated
½ oz. to 1 lb.	2 lbs.	1.80	2.30	3.60
½ oz. to 2 lbs.	4 lbs.	2.35	3.30	5.20
½ oz. to 4 lbs.	8 lbs.	3.55	5.15	7.15
½ oz. to 5 lbs.	10 lbs.	5.25	7.60	7.60
½ oz. to 7 lbs.	15 lbs.	6.10	9.00	10.75
½ oz. to 10 lbs.	20 lbs.	9.00	13.30	12.35
½ oz. to 14 lbs.	29 lbs.	10.75	17.85	16.45
½ oz. to 20 lbs.	40 lbs.	14.50	22.90	20.75
½ oz. to 25 lbs.	50 lbs.	17.70	26.85	25.00
½ oz. to 50 lbs.	100 lbs.	29.50	48.60	41.50

448a Weights, Iron, Avoirdupois, Single (Grade "T"), as used in sets **No. 448:**

	Enameled	Galvanized	Nickel Plated
½ oz.	.26	.37	.41
1 oz.	.28	.41	.47
2 oz.	.32	.51	.54
4 oz.	.37	.58	.65
8 oz.	.43	.72	.75
1 lb.	.58	.90	1.08
2 lbs.	.80	1.20	1.60
4 lbs.	1.37	2.40	2.15
5 lbs.	2.15	3.15	2.60
7 lbs.	2.59	4.00	3.60
10 lbs.	3.80	5.90	4.55
14 lbs.	4.62	7.60	5.75
20 lbs.	5.50	9.50	8.30
25 lbs.	6.82	11.85	10.75
50 lbs.	11.85	21.50	16.50

462 Weights, Avoirdupois, Brass (Grade "C"), in wooden block. Standard commercial quality:

Sets from	Total Weight	In Block	Nickel Plated In Block
¼ oz. to 1 lb.	2 lbs.	8.50	10.00
¼ oz. to 1 lb.	4 lbs.	11.50	14.75
¼ oz. to 4 lbs.	8 lbs.	14.25	17.25

464 Weights, Brass, Avoirdupois (Grade "T"), in wooden block:

Sets from	Total Weight	In Block	Nickel Plated In Block
1–128 oz. to 1 oz.	2 oz.	1.75	2.15
1–128 oz. to 4 oz.	4 oz.	2.50	3.00
1–128 oz. to 4 oz.	8 oz.	3.50	4.25
1–128 oz. to 8 oz.	16 oz. = 1 lb.	5.00	6.00
⅛ oz. to 1 oz.	2 oz.	1.60	2.00
⅛ oz. to 2 oz.	4 oz.	2.30	2.85
⅛ oz. to 4 oz.	8 oz.	3.30	3.75
⅛ oz. to 8 oz.	16 oz. = 1 lb.	4.25	5.25
⅛ oz. to 1 lb.	2 lbs.	5.50	6.75
⅛ oz. to 2 lbs.	4 lbs.	7.25	9.25
⅛ oz. to 4 lbs.	8 lbs.	10.00	12.50

464a Weights, Single, in Ounces (Grade "T"), separate from full sets as used in **No. 464:**

Size, oz.	⅛	¼	½	1	2	4	8
Brass	.31	.41	.48	.57	.80	.95	1.10
Nickel Plated	.41	.48	.57	.66	.86	1.00	1.25

464b Single Weight, in Pounds, separate from full sets, as used in **No. 464:**

Size, oz.	1	2	4	5	7	10	14	20	25	50
Brass	1.60	2.55	4.30	7.15	11.85	15.75	18.60	30.00	37.80	72.00
Nickel Plated	2.00	3.05	4.75	8.60	10.25	13.25	17.35	26.85	34.00	66.00

467 Weights, Nickel Plated Drawn Steel. The larger weights are cupped and provided with handles, but free from projecting parts in order that they may be stacked if necessary. Not easily injured, and are adjusted within the tolerance requirements of the Bureau of Stanrdards. Lead plug driven into hole a ttop of each weight for affixing seal:

a Metric Weights (Grade "C"):

Set including 20, 10, 5, 2, 2, 1 kilograms..... 86.

Single 20 kilograms.....	29.00		
Single 10 kilograms.....	23.50	Single 2 kilograms.....	11.25
Single 5 kilograms.....	19.75	Single 1 kilogram.....	8.75

b Avoirdupois Weights (Grade "C"):

Set including 50, 25, 10, 5, 5, 2, 2, 1 lbs..... 113.

Single 50 lbs.....	32.00	Single 4 lbs.....	11.25
Single 25 lbs.....	25.75	Single 3 lbs.....	11.25
Single 10 lbs.....	22.25	Single 2 lbs.....	10.25
Single 5 lbs.....	12.50	Single 1 lb.....	8.25

468 Weights, Iron Test, Single (Grade "T"), large weights cupped at top and provided with handle rod, but having no projections so as to be easily stacked. Adjusted by means of lead plug driven into hole at top where seal can be affixed:

50 lbs.	11.00	5 kilograms	8.75
25 lbs.	9.75	2 kilograms	6.00
10 lbs.	8.75	1 kilogram	5.50
5 lbs.	6.00	500 oz. Troy	11.00
4 lbs.	5.75	200 oz. Troy	9.75
2 lbs.	5.50	100 oz. Troy	8.75
1 lb.	4.00	50 oz. Troy	5.75
20 kilograms	11.00	20 oz. Troy	5.50
10 kilograms	9.75	10 oz. Troy	4.00

501 **Forceps**, adapted for handling weights:
- a **Steel**, Nickel Plated, 6 in. curved tip 2.50
- b **Brass**, Straight, 3 in ..... .75
- c Polished Steel, 4 in ..... .50
- d Ivory Tipped, Curved 1.50

565 **Barometer Tube, Graduated in mm, Bunsen's Siphon Form:**
- a Unfilled 4.00
- b Filled with mercury, after cleaning and drying 15.00

575 **Barometer Tube, Plain, Siphon Form**, bent with bulb for well:
- a Unfilled 1.00
- b Filled with mercury, after cleaning and drying 9.00

580 **Barometer Tube, Demonstration Form, with Stopcock at Top and Bottom**, for filling or emptying tube. Length about 104 cm. Graduated from 100 to 780 mm 10.00

585 **Barometer Tube, Plain, Straight Form**, unfilled:
- a Tube only, 80 cm long ..... .70
- b Tube with extra mercury well of iron 1.20

586 **Barometer Tube, Straight Form, Graduated in mm**, length 80 cm:
- a Unfilled 3.50
- b Filled with mercury, after cleaning and drying 12.00

720 **Beakers, Tall Form**, glass:
- a **Without Lip.**
- b **With Lip or Pour-out.**
- c **Resistance Glass:**

Capacity cc	30	60	90	120	150	180	250	300
Each	.14	.15	.16	.17	.18	.19	.20	.23
Capacity cc	350	500	550	600	750	1,000	1,500	2,000
Each	.25	.30	.32	.33	.38	.58	.70	.90

- d **Perfection Glass:**

Capacity cc	30	60	90	120	150	180	250	300
Each	.18	.20	.21	.22	.23	.24	.25	.30
Capacity cc	350	500	550	600	750	1,000	1,500	2,000
Each	.35	.40	.42	.45	.48	.75	.90	1.35

- e **Nonsol Glass:**

Capacity cc	30	60	90	120	180	250
Each	.20	.22	.25	.28	.30	.33
Capacity cc	300	350	500	700	1,000	1,200
Each	.36	.40	.50	.60	.90	1.00

- f **Pyrex Glass:**

Capacity cc	100	150	200	300	400	500	600	800	1,000
Each	.19	.21	.23	.26	.30	.32	.35	.38	.54

721 **Beakers, Low Form, Griffin**, glass:
- a **Without Lip.**
- b. **With Lip or Pour-out.**
- c **Resistance Glass:**

Capacity cc	30	60	90	120	150	180	250	300
Each	.14	.15	.16	.17	.18	.19	.20	.23
Capacity cc	350	500	550	600	750	1,000	1,500	2,000
Each	.25	.30	.32	.33	.38	.58	.70	.90

- d **Perfection Glass:**

Capacity cc	30	60	90	120	150	180	250	300
Each	.18	.20	.21	.22	.23	.24	.25	.30
Capacity cc	350	500	550	600	750	1,000	1,500	2,000
Each	.35	.40	.42	.45	.48	.75	.90	1.35

- e **Nonsol Glass** (Pour-out only):

Capacity cc	30	60	90	120	150	180	250	300
Each	.20	.22	.25	.27	.28	.30	.33	.36
Capacity cc	350	500	600	700	1,000	1,400	2,000	
Each	.40	.50	.55	.60	.90	1.25	1.50	

- f **Pyrex Glass:**

Capacity cc	30	50	100	150	250	400
Each	.18	.18	.19	.21	.25	.30
Capacity cc	600	800	1,000	1,300	1,500	2,000
Each	.35	.40	.54	.65	.73	.98

740 **Beakers, Porcelain**, usual form:
- a **Ohio** (without lip):

Capacity cc	150	350	500	750	1,000
Each	.40	.50	.75	1.00	1.50

- b **Coors** (without lip):

Capacity cc	165	250	340	580	700	970	1,500	1,775
Each	.90	1.08	1.20	1.44	1.80	2.16	3.00	4.80

- c **Coors** (with lip):

Capacity cc	165	250	340	580	700	970	1,500	1,775
Each	1.02	1.20	1.32	1.62	1.98	2.40	3.30	5.10

792

780

773

b

d

501

c

a

575 565

760

720b

740

721

745

772

765

775

770

Beakers, Metal, Griffin Form, low with pour-out:

Capacity cc	125	250	500	1,000	2,000	
a **Copper, polished**	.80	.95	1.40	1.90	4.25	
b **Copper, nickeled**	.95	1.20	1.75	2.30	5.00	
c **Aluminum**	.70	.85	1.30	1.75	4.00	

Bell Jars, Tall Form, Straight Sides, with knob at top:

Inside diam. inches	3	4	5	6	6½	7	8
Inside height inches	6	8	9	11	14	15	13
Each	1.25	1.50	1.75	2.00	2.25	2.50	2.75
Inside diam. inches		8	8½	8½	9	9½	10
Inside height inches		15	15	17	18	18	18
Each		3.00	3.50	4.00	5.00	6.00	9.00

Bell Jars, Tall Form, Straight Sides, With Open Top, Narrow Mouth:

Inside diam. inches	3	4	5	6½	7	8½	10
Inside height inches	6	8	9	11	15	15	18
Each	1.25	1.50	1.75	2.00	2.50	3.50	9.00

Bell Jars, Tall Form, Straight Sides, With Open Top, Wide Mouth:

Inside diam. inches	3	4	5	6½	7	8½	10
Inside height inches	6	8	9	11	15	15	18
Each	1.25	1.50	1.75	2.00	2.50	3.50	9.00

Bell Jars, Open Top, with Ground Glass Stopper, Swelled Sides, with ground flange:

Inside diam. in.:	3	4	5	6	7	8½	10
Inside height in.:	5	6½	8	10	12	13	16
Capacity gal.:	⅛	¼	½	1	2	3	4
Each:	1.50	2.00	2.50	3.00	3.50	4.50	9.00

Bell Jars, Open Top, with Ground Glass Stopper, Straight Sides, with ground flange:

Inside diam. in.:	3	4	5	6	7	8½	10
Inside height in.:	6	8	9	11	15	15	18
Capacity gal.:	⅛	¼	½	1	2	3	5
Each:	1.50	1.75	2.00	2.50	3.00	4.75	9.00

Bell Jars, Low Form, Swelled Sides, Open Top, Wide Mouth:

Inside diam. inches	3	4	5	6	7	8½	10
Inside height inches	5	6½	8	10	12	15	16
Each	1.25	1.50	1.75	2.00	2.75	3.50	9.00

Bell Jar, swell form, ground flange, with knob:

Inside diam. in.:	3	4	5	6	7	8½	10
Inside height in.:	5	6½	8	10	12	13	16
Capacity gal.:	1 (pt)	1 (qt)	½	1	2	3	5
Each:	1.25	1.50	2.00	2.50	3.00	3.75	9.00

Bell Jars, Tall Form, Straight Sides, Open Top, Wide Mouth, Ground Flange:

Inside diam. inches	3	4	5	6½	7	8½	10
Inside height inches	6	8	9	11	15	15	18
Each	1.25	1.50	1.75	2.00	2.50	3.50	9.00

Bell Jars, low form, with knob and ground flange:

Inside diam. in.:	3	4	5	6	7	8
Inside height in.:	1½	2¼	3½	4	4½	5
Each:	.80	.90	1.25	1.75	2.00	2.50
Inside diam. in.:			9	10	12	16
Inside height. in.:			6	8	10	11
Each:			3.00	3.50	4.75	7.00

Bell Jars, high form, with knob, unground flange, useful for covers:

Inside diam. in.:	8	9	10	11
Inside height. in.:	13	15	17	20
Each:	3.00	4.00	9.00	10.00

Bell Jars, low form, with knob, unground flange, useful for covers:

Inside diam in.:	7	8	9	10	11	12	13	14	15	16	17	18
Inside height in.:	5	5½	6	6¼	7½	8	8	9	9	10	10½	11
Each:	1.75	2.00	2.25	2.50	3.00	3.50	4.00	4.75	5.00	7.50	10.00	12.00

Blowers, Foot, Fletcher's, portable, producing a steady and powerful blast (without legs):

Size:	9	9A	9B
Diam. of air reservoir in.:	7¼	9	11
Pressure obtainable per in., lbs.:	1	1½	1¾
Cap. per hour, cubic feet:	190	330	625
Each:	7.50	9.50	14.50

Blowers, Foot, Fletcher's, with legs, rubber reservoir on lower side:

Size:	10	10A	10B
Diam. of air reservoir in.:	7¼	9	11
Pressure obtainable per in., lbs.:	1	1½	1¾
Cap. per hour, cubic feet:	190	330	625
Each:	8.00	11.00	17.00

Rubber Discs, for Foot Bellows Nos. 795 and 800:

Size:	9 & 10	9A & 10A	9B & 10B
Diam. in.:	9⅛	11½	14¼
Each:	1.00	1.25	1.75

810

795

800

815

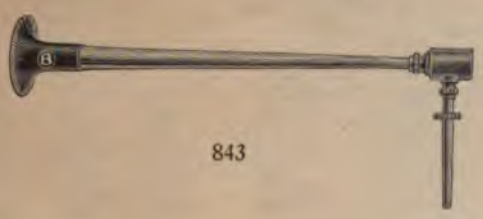
820b

825b

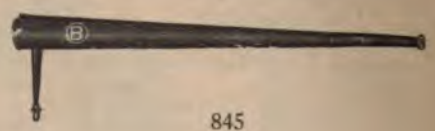
825a

855

860



843



845

850

875

803 **Nets,** for use with Foot Bellows Nos. 795 and 800, each ..... .50

805 **Bellows, Hand, Fletcher's,** small size, same type as 795. Gives steady continuous blast, being provided with net and rubber disc for air reservoir 6.00
a Extra Rubber Discs ..... .50

810 **Bellows, Hand,** ordinary form ..... A-size .90; B-size 1.50; C-size 3.00

815 **Blower, Hand,** consisting of two rubber bulbs, one for producing the pressure, the other with net for air reservoir 1.00

818 **Blowers, Hot Air, Electrically Operated,** producing a continuous blast of hot air, useful for evaporations, drying glassware, etc. Complete with double switch, one for blast at room temperature, the other for hot air; cord and plug for attaching to lamp socket included:

Size Number:	A	B	C	D
	A.C.		D.C.	
For voltage:	110	220	110	220
Each:	17.50	18.25	17.50	18.25

820 **Blower or Blast Apparatus, Richard's,** operated by water pressure for producing vacuum or blast. Supplied with the powerful Richard's Aspirator Pump. A very desirable form for quick filtration, operating blast lamps, blowpipes, etc.:
a **With One Pump** 20.00
b **With Two Pumps** 22.00
c **With Three Pumps** 28.00

825 **Blast Apparatus, Water, Muencke's,** complete with aspirator pump, for exhausting and compressing air in operating blast lamps. Chamber 4x8 inches:
a **Plain** 18.00
b **Including Vacuum Gauge** 26.00

843 **Blowpipe, Berzelius,** brass, with hard rubber mouth-piece and platinum plate at end of jet 3.00

845 **Blowpipe, Black's,** conical, japanned tin with detachable brass tip ..... .20

850 **Blowpipe, Black's,** brass, with tip that unscrews, and wooden mouth-piece ..... .75

855 **Blowpipes, Brass,** plain, usual form:

Length inches	7	8	9	10	11	12
Each	.20	.22	.25	.28	.30	.40

857 **Blowpipe, Brass,** plain, 9 inches long, with bone mouth-piece ..... .50

860 **Blowpipes, Brass, with Bulb or Air Chamber:**

Length inches	8	9	10	11	12
Each	.45	.50	.55	.60	.75

865 **Blowpipe, Plattner's,** nickel plated, with hard rubber mouth-piece, but without platinum tip 2.50

875 **Blowpipe, Plattner's,** nickel plated, with hard rubber mouth-piece and blast attachment for gas 3.75

885 **Blowpipe, for Illuminating Gas, Fletcher's,** adjustable for different angles:
a **With Double-joint Adjustment** 5.00
b **With Single-joint Adjustment** 4.50

888 **Blowpipe and Bunsen Burner, Combined,** adjustable for different angles. The blowpipe attachment can be operated with a blast from the mouth, a foot bellows, or other means of producing requisite air pressure. Gives needle, large or brush flames. When blowpipe attachment is removed it can be used as an efficient Bunsen Burner 6.00

1000 **Blowpipe Lamp, Fletcher's (125),** for sperm oil. The angle of wick holder can be adjusted by revolving it in the fixed collar. (The illustration is half size) 2.50

Bottles, Round, Narrow Mouth, flint glass:

1155 **Plain:**

Capacity ounces ...	1	2	4	6	8	16	32
Doz.	.72	.84	.96	1.20	1.50	2.00	3.60

1156 **With Glass Stoppers (Tinctures):**

Capacity ounces ...	1	2	4	6	8	16	32
Doz.	1.80	2.00	2.40	..	3.00	4.00	6.00

Bottles, Round, Wide Mouth, flint glass:

1160 **Plain:**

Capacity ounces ...	1	2	4	6	8	16	32
Doz.	.72	.84	.96	1.20	1.50	2.00	3.60

1161 **With Glass Stoppers (Saltmouths):**

Capacity ounces ...	1	2	4	6	8	16	32
Doz.	1.80	2.00	2.40	..	3.00	4.00	6.00

Bottles, Chemical, With Flat Hood Stoppers, flint glass:

Capacity ounces	1	2	4	8	16
1165 **Narrow Mouth, with Glass Stoppers (Tinctures),** doz.	5.00	5.30	6.50	8.00	9.00
1166 **Wide Mouth, with Glass Stoppers (Saltmouths),** doz.	5.25	5.50	6.75	8.50	9.50

888—As a Bunsen Burner

888—As a Blowpipe

885b

1000

885a

1210

1156

1160

1155

1166

1165

1161

Bottles, Round, Flint Glass, With Squat Stoppers:

Capacity ounces			4	8	16	32
58 **Narrow Mouth,** doz.			2.40	3.60	5.20	6.20
59 **Wide Mouth,** doz.			2.75	4.80	5.75	7.20

72 **Bottles, Extra Wide Mouth,** flint glass:

Capacity oz.	1	2	3	4	6	8
Doz.	1.00	1.20	1.50	1.80	2.00	2.40

Bottles, Square Body, Tall Form, Narrow Mouth:

Capacity oz.	1	2	4	8	16	32
00 **Plain** doz.	.75	.80	1.00	1.25	2.00	3.00
01 **With Glass Stoppers** doz...	1.75	2.00	2.25	3.00	4.00	6.00

05 **Bottles, Square Body, Tall Form, Wide Mouth:**

Capacity oz.	1	2	4	8	16	32
Plain doz.	.75	.80	1.00	1.25	2.00	3.00

10 **Bottles, Inverted (or Specimen Jars),** useful for exhibiting chemicals, specimens, grains, etc.:

Capacity oz.	2	4	8	16	32	64	128
Height inches	3¾	4⅜	6	7¾	9	11	14
Dozen	3.00	3.20	4.00	5.20	7.20	12.00	24.00

20 **Bottles, Acid, With Glass Stoppers,** as used for acids:

Capacity	8 oz.	16 oz.	32 oz.	64 oz.	1 gal.	2 gals.
Doz.	3.60	4.80	6.00	9.00	12.00	30.00

1280

1286

1280 **Bottles, Reagent, With Indestructible Vitrified Labels,** presenting a smooth white background against which the transparent letters and symbols are distinctly defined. These bottles are made from glass which is free from lead, zinc or other metallic flux:

a 125 cc, height 133 mm, doz 7
b 250 cc, height 165 mm, doz 8
c 500 cc, height 197 mm, doz 9
d 1000 cc, height 240 mm, doz 12

(Any of the 125 cc bottles can be furnished with **Wide Mouth** when so specified in the order.)

Acetic Acid, $HC_2H_3O_2$
Alcohol, C_2H_5OH
Ammonia, NH_3
Ammon. Carbonate
Ammon. Carbonate, $(NH_4)_2CO_3$
Ammon. Chloride
Ammon. Chloride, NH_4Cl
Ammon. Hydroxide
Ammon. Hydroxide, NH_4OH
Ammon. Hydrox. Conc.
Ammon. Hydrox. Dil.
Ammon. Molybdate, $(NH_4)_6Mo_7O_{24}$
Ammon. Oxalate
Ammon. Oxalate, $(NH_4)_2C_2O_4$
Ammon. Phospate, $(NH_4)_2HPO_4$
Ammon. Sulphide (Amber)
Ammon. Sulphide, $(NH_4)_2S$ (Amber)
Ammon. Sulphocyanide, NH_4CNS
Antimonious Chloride, $SbCl_3$
Argent. Nitr. Sol., $AgNO_3$ (Amber)
Barium Chloride, $BaCl_2$
Barium Hydroxide, $Ba(OH)_2$
Barium Nitrate, $Ba(NO_3)_2$
Benzol, C_6H_6
Bromine Water, Br.
Calcium Chloride, $CaCl_2$
Calcium Chlor. Anhydr., $CaCl_2$
Calcium Hydroxide, $Ca(OH)_2$
Carbon Bisulphide
Carbon Disulphide, CS_2
Carbon Tetrachloride
Chlorine Water, Cl
Chloroform, $CHCl_3$
Chloroform, Pure
Citric Acid, $H_3C_6H_5O_7$
Cobalt Nitrate, $Co(NO_3)_2$
Cochineal Solution
Copper, Cu (Wide Mouth)
Cupric Sulphate, $CuSO_4$
Esbach's Solution
Ether
Ethyl Alcohol
Fehling's Alkaline Sol.
Fehling's Copper Sol.
Fehling's Solution
Ferric Chloride, $FeCl_3$
Ferrous Sulphate, $FeSO_4$
Ferrous Sulphide, FeS
Formalin
Glycerin
Haines' Solution
Hydrobrom. Acid Dil., HBr
Hydrochloric Acid, HCl
Hydrochlor. Acid Dil.
Hydrochloric Acid Dil., HCl
Hydrocyan Acid. Dil., HCN
Hydrogen Peroxide, H_2O_2
Hydrogen Sulphide (Amber)
Hydrogen Sulphide (Amber), H_2S
Hypophos. Acid Dil.
Indigo Solution
Iodine, I
Iodine Solution, I+KI
Lactic Acid
Lactic Acid, $HC_3H_5O_3$
Lead Acetate, $Pb(C_2H_3O_2)_2$
Lead Nitrate, $Pb(NO_3)_2$
Litmus Paper (Wide Mouth)
Litmus Solution
Magnesia Mixture
Magnesium Sulphate, $MgSO_4$
Manganese Dioxide, MnO_2
Mercuric Chloride, $HgCl_2$
Mercurous Nitrate, $Hg(NO_3)_2$
Methyl Alcohol, CH_3OH
Methyl Orange
Millon's Reagent
Nessler's Reagent
Nickel Chloride, $NiCl_2$
Nitric Acid, HNO_3
Nitric Acid Conc.
Nitric Acid Dil.
Nitric Acid Dil., HNO_3
Nitro Hydrochloric Acid
Nitro Hydrochloric Acid Dilute
Nitrosulphuric Acid
Oil Turpentine
Oxalic Acid, $H_2C_2O_4$
Phenol, C_6H_5OH
Phenol Sulphonic Acid, $C_6H_4(HSO_3)OH$
Phenolphthalein
Phosphoric Acid Dil.
Platinic Chloride, $PtCl_4$
Potassium Bichromate, $K_2Cr_2O_7$
Potassium Bisulphate, $KHSO_4$
Potassium Bromide, KBr
Potassium Carbonate, K_2CO_3
Potassium Chlorate, $KClO_3$
Potassium Chromate, K_2CrO_4
Potassium Cyanide, KCN
Potass. Dichromate
Potassium Ferricyanide, $K_3Fe(CN)_6$
Potassium Ferrocyanide, $K_4Fe(CN)_6$
Potassium Hydroxide, KOH
Potassium Iodide, KI
Potassium Nitrate, KNO_3
Potassium Sodium Tart., $KNaC_4H_4O_6 + 4H_2O$
Potassium Sulphate, K_2SO_4
Potassium Sulphocyanide, KSCN
Silver Nitrate (Amber)
Silver Nitrate, $AgNO_3$ (Amber)
Sodium Acetate, $NaC_2H_3O_2$
Sodium Borate, $Na_2B_4O_7$
Sodium Carbonate
Sodium Carbonate, Na_2CO_3
Sodium Chlorate, $NaClO_3$
Sodium Hydrobromate, $NaBrO_3$
Sodium Hydroxide
Sodium Hydroxide, NaOH
Sodium Hypophosphite, $NaPH_2O_2$
Sodium Nitrate, $NaNO_3$
Sodium Phosphate, Na_2HPO_4
Stannous Chloride, $SnCl_2$
Starch (Wide Mouth)
Sulphuric Acid, H_2SO_4
Sulphuric Acid Dil.
Sulphuric Acid Dil., H_2SO_4
Test Paper (Wide Mouth)
Turmeric
Zinc, Zn (Wide Mouth)
Zinc Sulphate, $ZnSO_4$

Reagent Bottles, With Labels, Moulded in the Glass, and surface ground to render them easy to read. The glass from which these bottles are made is free from lead, zinc or other metallic flux:

285 **Reagent Bottles, Wide Mouth,** 4 oz., or 125 cc, height 4⅞ inches, doz..... 3.75

No.		No.	
314.	Ammonium Sulphate, $(NH_4)_2SO_4$	313.	Sodium Ammonium Hydrogen Phosphate, $Na(NH_4)HPO_4 + 4H_2O$
304.	Borax, $Na_2B_4O_7$	301.	Sodium Carbonate, Na_2CO_3
305.	Ferrous Sulphate, $FeSO_4$	312.	Test Paper
303.	Potassium Cyanide, KCN	307.	Blank
302.	Potassium Nitrate, KNO_3		

286 **Reagent Bottles, Narrow Mouth,** 4 oz., or 125 cc, height 5¼ inches, doz..... 3.25

No.		No.	
1.	Hydrogen Sulphide (Amber), H_2S	35.	Ether $(C_2H_5)_2O$
2.	Hydrochloric Acid, HCl	36.	Cupric Sulphate, $CuSo_4$
3.	Acetic Acid, $HC_2H_3O_2$	37.	Platinic Chloride, $PtCl_4$
4.	Sulphuric Acid, H_2SO_4	38, 39, 40.	Blank
5.	Nitric Acid, HNO_3	58.	Fehling's Solution
6.	Potassium Ferrocyanide, $K_4Fe(CN)_6$	59.	Sodium Carbonate, Na_2CO_3
7.	Potassium Sulphocyanide, KCNS	60.	Sodium Acetate, $NaC_2H_3O_2$
8.	Potassium Carbonate, K_2CO_3	61.	Sodium Hydroxide, NaOH
9.	Potassium Sulphate, K_2SO_4	77.	Ammonia, NH_3
10.	Potassium Iodide, KI	81.	Stannous Chloride, $SnCl_2$
11.	Potassium Ferricyanide, $K_3Fe(CN)_6$	82.	Ammonium Molybdate, $(NH_4)_2MoO_4$
12.	Potassium Hydroxide, KOH	83.	Carbon Disulphide, CS_2
13.	Potassium Dichromate, $K_2Cr_2O_7$	86.	Mercurous Nitrate, $Hg_2(CO_3)_2$
14.	Sodium Phosphate, Na_2HPO_4	87.	Indigo Solution
15.	Ammonium Hydroxide, NH_4OH	88.	Nessler's Solution
16.	Ammonium Sulphide (Amber), $(NH_4)_2S$	90.	Magnesia Mixture
17.	Ammonium Chloride, NH_4Cl	93.	Oxalic Acid, $H_2C_2O_4$
18.	Ammonium Carbonate, $(NH_4)_2CO_3$	94.	Picric Acid, $C_6H_2OH(NO_2)_3$
19.	Ammonium Oxalate, $(NH_4)_2C_2O_4$	96.	Potassium Chromate, K_2CrO_4
20.	Barium Chloride, $BaCl_2$	97.	Ammonium Sulphydrate, NH_4HS
21.	Calcium Chloride, $CaCl_2$	100.	Mercuric Potassium Iodide
22.	Calcium Sulphate, $CaSO_4$	401.	Barium Nitrate, $Ba(NO_3)_2$
23.	Calcium Hydroxide, $Ca(OH)_2$	404.	Silver Sulphate, Ag_2SO_4
24.	Magnesium Sulphate, $MgSO_4$	406.	Bromine Water
25.	Mercuric Chloride, $HgCl_2$	407.	Chloroform, $CHCl_3$
26.	Silver Nitrate (Amber), $AgNO_3$	408.	Cochineal
27.	Lead Acetate, $Pb(C_2H_3O_2)_2$	409.	Coralline
28.	Ferrous Sulphate, $FeSO_4$	410.	Litmus
29.	Ferric Chloride, Fe_2Cl_6	411.	Methyl-Orange
30.	Alcohol, C_2H_5OH	412.	Phenolphthalein
31.	Ammonium Sulphocyanide, NH_4CNS	413.	Turmeric
32.	Barium Hydroxide, $Ba(OH)_2$	414.	Iodine Solution, $I + KI$
33.	Barium Carbonate, $BaCO_3$	415.	Methyl Alcohol, CH_3OH
		416.	Sodium Cobaltic Nitrite
		417.	Sodium Hyposulphite, $Na_2S_2O_3$

287 **Reagent Bottles, Narrow Mouth,** 8 oz., or 250 cc, height 6½ inches, doz..... 4.25

No.		No.	
101.	Sulphuric Acid Con., H_2SO_4	114.	Barium Chloride, $BaCl_2$
102.	Sulphuric Acid Dil., H_2SO_4	116.	Blank
103.	Nitric Acid Con., NHO_3	122.	Ammonium Sulphide (Amber), $(NH_4)_2S$
104.	Nitric Acid Dil., HNO_3	126.	Alcohol, C_2H_5OH
105.	Hydrochloric Acid Con., HCl	129.	Sodium Phosphate, Na_2HPO_4
106.	Hydrochloric Acid Dil., HCl	130.	Ammonium Oxalate, $(NH_4)_2C_2O_4$
107.	Hydrogen Sulphide (Amber), H_2S	131.	Acetic Acid, $HC_2H_3O_2$
108.	Ammonium Hydroxide, NH_4OH	145.	Silver Nitrate (Amber), $AgNO_3$
109.	Ammonium Chloride, NH_4Cl	150.	Potassium Hydroxide, KOH
110.	Ammonium Carbonate, $(NH_4)_2CO_3$	151.	Calcium Hydroxide, $Ca(OH)_2$
111.	Sodium Hydroxide, NaOH	152.	Lead Acetate, $Pb(C_2H_3O_2)_2$
112.	Sodium Carbonate, Na_2CO_3		

288 **Reagent Bottles, Narrow Mouth,** 16 oz., or 500 cc, height 7¾ inches, doz..... 6.25

No.		No.	
204.	Ammonium Hydroxide, NH_4OH	216.	Nitric Acid, HNO_3
211.	Blank	217.	Hydrochloric Acid, HCl
215.	Sulphuric Acid, H_2SO_4		

289 **Reagent Bottles, Narrow Mouth,** 32 oz., or 1,000 cc, height 9½ inches, doz..... 8.00

No.		No.	
501.	Sulphuric Acid Con., H_2SO_4	505.	Hydrochloric Acid Con., HCl
502.	Sulphuric Acid Dil., H_2SO_4	506.	Hydrochloric Acid Dil., HCl
503.	Nitric Acid Con., HNO_3	511.	Blank
504.	Nitric Acid Dil., HNO_3		

1385a

1385b


1295


1415


1420


1345


1340


1355

1425


1350


1292


1560a


1570


1440


1445b


1445a


1580


1600


1602


1601


1603

1292 **Bottle Caps, Glass,** for reagent bottles, covering the neck and stopper:

To fit bottles of (capacity cc)	125	250	500	1000
Inside diam. mm	32	41	47	54
Inside height mm	50	60	63	66
Each	.12	.15	.16	.18

1295 **Bottles, Aspirator,** heavy clear glass, with tubulature at bottom:

Capacity cc	250	500	1,000	2,000	4,000
Each	1.00	1.50	2.00	3.00	4.00

1298 **Bottles, Aspirator,** clear glass, with connecting tube at base for attaching rubber tubing:

Capacity cc	125	250	500	1,000	2,000	4,000
Each	1.00	1.25	1.50	2.00	3.00	4.00

1300 **Bottles, Aspirator,** heavy glass, with glass stopper and glass stopcock ground into tubulature near bottom:

Capacity cc	250	500	1,000	2,000	4,000
Each	3.50	4.50	5.00	5.50	7.00

1340 **Bottles, Dropping,** with ground-in glass pipette, and with or without rubber bulb:

Capacity cc	15	30	50
a Without Rubber Dropping Bulb	.30	.33	.36
b With Rubber Dropping Bulb	.33	.36	.40

1342 **Bottles, Dropping, Barnes,** with combination rubber stopper and bulb, and glass pipette:

a Capacity 30 cc ..... .10
b Capacity 60 cc ..... .15

1343 **Combined Rubber Stopper and Bulb, With Glass Dropper or Pipette,** to fit narrow mouth bottles, as used with Dropping Bottles No. 1342:

a To fit 30 cc bottles, each ..... .05
b To fit 60 cc bottles, each ..... .06

1344 **Bottles, Eye Dropping,** with combination rubber stopper and pipette:

Capacity cc	15	30
Each	.10	.15

1345 **Bottles, Acid, Bulb Top and Dropper,** ground to fit:

Capacity ounces	1	1½	2½
Dozen	3.00	3.60	4.20

1348 **Bottle, Balsam,** with ground glass cap and pointed glass dropper, 1½ oz. ..... .40

1350 **Bottle, Balsam,** with glass rod and ground glass cap, for microscopic work:

Capacity ounces	1½	2
Each	.40	.50

1355 **Bottles, Dropping, TK,** with grooved stopper for regulating flow of drops:

Capacity cc	15	30	60
Each	.30	.35	.40

1360 **Bottles, Dropping, Schuster,** with curved tapering neck:

Capacity cc	30	60
a Without glass stopper, each	.40	.60
b With glass stopper, each	.60	.80

1370 **Bottle, Cedar Oil,** with metal cap and spiral wire dropper, as used with oil immersion microscopic objectives 1.25

1372 **Bottle, Cedar Oil,** with rubber stopper and glass rod. Capacity 30 cc ..... .15

1380 **Bottles, Graduated, For Mixing,** with ground glass stoppers:

Capacity cc	100	250	500	1,000	2,000
Each	1.25	1.50	2.00	4.00	6.00

1385 **Bottles, Graduated,** wide mouth, without stoppers:

a **Apothecaries Measure:**

Capacity ounces	16	32	64	128
Each	1.50	1.75	2.50	4.00

b **Metric Measure:**

Capacity cc	500	1,000	2,000	4,000
Each	1.75	2.00	3.00	4.50

1395 **Bottles, Oil Sample,** round, tall and slender:

Capacity ounces	1	2	4	8
Each	.07	.08	.12	.15

1396 **Bottle, Oil Sample, Extra Long,** with cork lined metal screw cap, capacity 4 oz., length 6⅜ in., diam. 1 7/16 in. Sold only in cartons of 24 ..... 3.50

1400 **Carboys, Glass:**

Capacity gallons	5	10
a Glass Carboy only	3.50	6.00
b Complete with crate	7.50	10.00

1410 **Bottles, Round, With Metal Screw Caps, Low Form,** for specimens, etc. Sold only in dozen lots:

Capacity ounces	1	2	4	6	8	16	32
Dozen	.60	.75	.90	1.10	1.25	1.75	2.20

1412 **Bottles, Round, With Metal Screw Caps, Tall Form,** for specimens, etc. Sold only in dozen lots, packed in carton:

Capacity ounces	1	2	4	8	16
Dozen	.75	1.00	1.25	1.50	2.00

1415 **Bottles, Square Body, With Metal Screw Caps,** cork lined, for specimens, etc. Sold only in dozen lots:

Capacity ounces	1	2	4	8
Dozen	.60	.75	.90	1.20

Bottles, Specific Gravity, usual form with perforated glass stoppers:

	Capacity cc	5	10	25	50	100
1420	Unadjusted	.60	.75	1.00	1.25	1.75
1425	Adjusted at 20°C	1.25	1.50	1.75	2.00	2.75

1428 **Bottles, Specific Gravity, Geissler's,** with thermometer ground to fit bottle, provided with side neck capillary tube and cap:

Capacity cc	10	25	50	100
Each	4.50	5.00	5.50	7.50

1430 **Bottle, Specific Gravity, Le Chatelier,** for cement, made according to specifications of the Bureau of Standards. (Without certificate) .....
(A certificate by the Bureau of Standards will be obtained, when ordered, at actual cost.)

1432 **Bottles, Specific Gravity, Double Wall With Vacuum (Boot's),** for maintaining constant temperature. Supplied with perforated stopper and ground cap:
Capacity 25 cc .....
Capacity 50 cc .....

1435—**Bottles, Specific Gravity, For Liquids, Regnault's,** with ground glass stopper:
Capacity 25 cc .....
Capacity 50 cc .....

1436 **Bottles, Specific Gravity, For Solids, Regnault's,** with ground-in neck and glass stopper:
Capacity 25 cc .....
Capacity 50 cc .....

1440 **Bottles, Washing,** with ground-in glass stopper, for volatile liquids:

Capacity cc	250	500	1,000
Each	1.50	2.00	2.50

1445 **Bottles, Washing,** regular form, fitted with rubber stopper, glass blowing and delivery tubes:

	Capacity cc	125	250	500	750	1,000
a	Plain	.35	.45	.55	.65	.75
b	With Rubber Joint	.40	.50	.60	.70	.80

1448 **Bottles, Washing, Heavy Glass, Ring Neck Covered With Wicker,** adapted for hot water:

Capacity cc	150	250	500	700	1,000
Each	1.00	1.20	1.30	1.40	1.50

1500 **Bottles, Wax or Ceresine,** for hydrofluoric acid:

Capacity cc	30	125	250	500
Each	.40	.75	.90	1.20

1505 **Bottles, Hard Rubber,** square body, with screw top, as used for hydrofluoric acid:

Capacity ounces	1	2	4	6	16	32
Each	.60	.75	1.00	1.50	1.75	4.75

1560 **Bottles, Weighing, Tall Form,** with ground glass stopper:
a Flat Bottom:
b Round Bottom:

Height mm	50	50	65	75	75	80	100	125	150
Diam. mm	15	20	15	15	25	15	25	25	25
Each	.35	.45	.40	.40	.50	.40	.70	.90	1.00

1570 **Bottles, Weighing, Wide Form, Medium Height,** flat bottom, with ground glass stopper:

Height mm	40	50	50	60	70	80
Diam. mm	25	30	40	30	35	40
Each	.40	.50	.70	.60	.70	.90

1575 **Bottles, Weighing, Contracted Neck,** with ground-in glass stopper:

Height mm	50	50	50	65	75
Diam. mm	25	30	40	50	40
Each	.50	.60	.70	1.00	.90

1580 **Bottles, Weighing, Low Form,** flat bottom, with ground glass stopper:

Height mm	30	30	30	50
Diam. mm	50	60	70	60
Each	1.35	1.85	2.35	1.50

1600 **Bottles, Woulff, With Two (2) Necks:**

Capacity cc	125	250	500	1,000	2,000
Each	1.25	1.40	1.75	2.50	4.00

1601 **Bottles, Woulff, With Two Necks, and Tubulature at Bottom:**

Capacity cc	250	500	1,000	2,000
Each	1.75	2.25	3.25	4.50

1602 **Bottles, Woulff, With Three (3) Necks:**

Capacity cc	125	250	500	1,000	2,000
Each	1.25	1.50	2.25	3.50	4.75

1603 **Bottles, Woulff, With Three (3) Necks, and Tubulature at Bottom:**

Capacity cc	250	500	1,000	2,000
Each	2.00	2.[illegible]		

1605 **Bottles with Narrow Mouth and Tubulature at b[illegible]**

Capacity, gallons	½
Each	2.25

Boxes, Pasteboard, Round, With Covers, for specimens or samples:

Diam. inches	1¼	1½	1¾	2 1/16	2 7/16	2¾
Dozen	.20	.24	.30	.60	.75	.90

Boxes, Pasteboard, Rectangular, With Covers, for specimens or samples:

Size inches	2 5/16x1⅜	2 9/16x1⅝	2¾x1 15/16
Dozen	.20	.24	.30

Boxes, Wood, Round, with covers:

Capacity ounces	½	1	2	4
Dozen	.36	.48	.60	1.20

Boxes, Seamless Tin, Round, with covers:

Capacity ounces	1	2	4	8	16	24
Dozen	.40	.60	.80	1.20	1.80	2.00

Brushes, Test Tube, white bristles on wire handle about 9 inches long:

Length of Brush Part (Inches) ...	2	2	2¼	2¼	2½	2½	2½	2½	3	3	3
Diam. of Brush (Inches)	¾	1¾	⅝	1½	½	¾	1½	1¾	¾	1½	1¾
Tinned Wire Handle with Sponge End, Doz.	.60	.50	.60	.60	.90	.75	.80	1.00	.90	1.00	1.00
Tinned Wire Handle with Tufted End, Doz.	.60	.50	..	.60	..	.75	.80	..	.90	..	1.00
Brass Wire Handle with Sponge End, Doz.	..	.60	..	..	1.00	.90	..	1.10	1.00	..	1.10
Brass Wire Handle with Tufted End, Doz.	..	.60	..	..	..	.90	..	1.10	1.00	..	1.10

Brush, Test Tube, with rattan handle ..... .10

Brush, Test Tube, Stiff Bristles, 1 inch diam. by about 2 inches long, on heavy tinned wire handle 13½ inches long ..... .10

Brush, Narrow Tube, total length about 13 inches, bristle part 2½ inches long by ½ inch diam., doz. ..... .25

Brush, for Narrow Tubes, handle 20 inches long with brush in middle ..... .15

Brush, Tube, total length 36½ inches, bristle part 5 inches long by ⅞ in. diam., suitable for cleaning burettes, long tubes, etc ..... .40

Brush, for cleaning pipettes ..... .15

Brush, Burette, with wire handle, length 3 feet ..... .12

Brush, Beaker, Cylindrical Shape, with long wooden handle ..... .30

Brush, Cylindrical Shape, for Cylinders or Jars, with combination wooden and wire handle. Length about 12 inches ..... .30

Brush, Cylindrical Shape, for wide mouth jars and bottles ..... .35

Brush, Beaker, with wooden handle ..... .25

Brushes, For Cylinders, Large Tubes and Bottles, same shape as regular Test Tube Brush but larger. Brass wire handle:

a Length 11 inches, doz 3.50
b Length 14 inches, doz 3.75
c Length 16 inches, doz 4.00

Brush, Cylindrical Shape, black and white bristles, four rows, with wooden handle, for cleaning large jars, cylinders, etc ..... .40

Brushes, "Tufto," for any shape bottle:

Length inches	12	14
Each	.20	.25

Brush, Conical Form, wooden handle, black hair, 9 inches long, adapted for cleaning cylinders or jars ..... .25

Brush, Conical Form, black with tuft of bristles on end, combination wire and wooden handle, for cylinders, jars, etc. Length 12 inches ..... .30

Brush, Conical Shape, with tuft at end, black and white bristles, wooden handle, adapted for cleaning large cylinders ..... .45

Brush, for cleaning porous cylinders, etc ..... .50

Brush, Flask, for Babcock Milk Test Bottles. Length 9½ inches; diam. long bristles 2 inches; diam. short bristles ½ inch ..... .06

Brushes, For Volumetric Flasks, with curved steel spring handle:

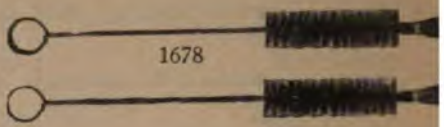
For flasks capacity cc	250	500	1,000
Each	.30	.35	.40

Brush, Flask, steel spring and wooden handle ..... .30

Brush, Cylindrical Shape, four rows of bristles with 2 projecting tufts at end for reaching into corners of large jars, cylinders, etc ..... .40

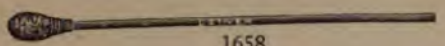
Brush, Double, for cleaning both inside and outside of glass tumblers, jars, cylinders, etc., at same time ..... .50

1640-1650



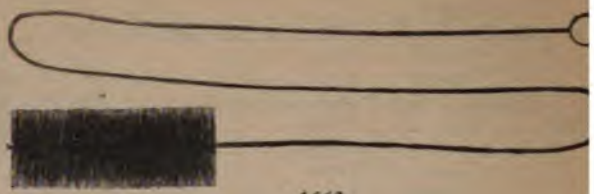
1678

1645



1658

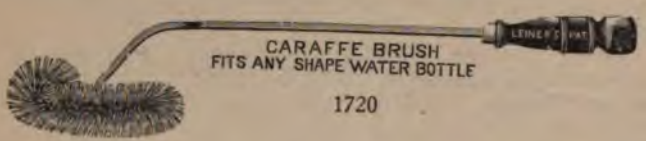
1660



1663

1665

1692



1720

1695

1685

1670 1688 1672 1675 1710 1705 1680

1720 **Brush, Carafe,** suitable for cleaning bottles, flasks, etc., with spring steel and wooden handle ..... .30

1722 **Brush,** adapted for cleaning shelves, table tops, etc.:
a Coarse bristles ..... .75
b Medium bristles 1.00
c Fine bristles 1.50

1725 **Brushes, Camel's Hair, Round,** in quills:

Length of Hair mm	14	18	22
Each	.10	.12	.15

1730 **Brushes, Camel's Hair,** flat, for cleaning scale pans, etc.:

Width inches	½	1	1½	2
Each	.30	.50	.75	1.00

1732 **Brush, Glass, For Acids,** diam. 6 mm, with glass handle ..... .50

1768 **Burettes, Dispensing,** holding a large volume of liquid:

Capacity cc	250	500	1,000
a Without Stopcock or attachment	2.00	3.00	4.50
b With Stopcock	3.50	4.50	6.00

(The attachment for 1768a, consisting of glass tube, rubber connection and pinchcock, will cost, extra ..... .50)

1770 **Burettes, Mohr's,** subdivided into 1/10 cc, for use with pinchcock, not including attachment:

Capacity cc	10	25	50	75	100
Each	.40	.50	.75	1.00	1.40

1770a **Burette Attachment,** including glass tip, rubber tube and spring pinchcock ..... .30

1771 **Burettes, Mohr's,** with side filling tube, without attachment. Graduated into 1/10 cc:

Capacity cc	10	25	50	75	100
Each	.50	.60	.90	1.10	1.50

1773 **Burettes, "Standard," Guaranteed Accurate,** sub-divided into 1/10 cc (certificates of accuracy by the Bureau of Standards will be furnished at actual cost):

Capacity cc	10	25	50	75	100
a Without Stopcock or attachment	.60	.75	1.00	1.50	2.00
b With Stopcock	1.75	2.25	2.75	3.25	3.75

(The attachment for 1773a, consisting of glass tube, rubber connection and pinchcock, will cost .50 extra.)

1775 **Burettes, Schellbach, With Blue Line and White Background,** graduated into 1/10 cc:

Capacity cc	25	50	100
a Without Stopcock or attachment	2.25	2.50	3.75
b With Glass Stopcock	3.25	3.75	5.00

(The attachment for 1775a, consisting of glass tube, rubber connection and pinchcock, will cost .50 extra.)

1777 **Burettes, Schellbach, With Side Filling Tube,** graduated into 1/10 cc, without attachment or stopcock:

Capacity cc	25	50	100
Each	2.75	3.00	4.50

1778 **Burettes, Schellbach, With Three-Way Glass Stopcock,** graduated into 1/10 cc:

Capacity cc	25	50	100
Each	5.50	6.00	7.50

1780 **Burettes, Mohr's, With Fresenius Stopcock,** graduated into 1/10 cc:

Capacity cc	10	25	50	75	100
Each	1.75	2.00	2.50	2.75	3.50

1782 **Burettes, With Fresenius Stopcock, Also Side Filling Tube With Glass Stopcock,** graduated into 1/10 cc:

Capacity cc	25	50	100
Each	4.50	5.00	6.00

1800 **Burettes, With Geissler Stopcock,** graduated into 1/10 cc:

Capacity cc	10	25	50	75	100
Each	1.40	1.70	1.90	2.20	2.75

1810 **Burettes, With Three-Way Stopcock,** graduated into 1/10 cc:

Capacity cc	25	50	100
Each	3.25	4.00	5.25

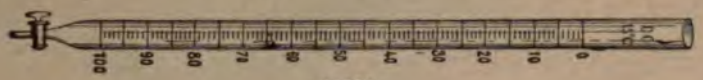
1820 **Burette, Squibb's, Automatic,** including 50x1/10 cc burette, reservoir, clamp and suction tube (without pressure bulb) 10.00

1875 **Burette Attachment,** consisting of glass tube, rubber connection and pinchcock:
a Straight, one-way ..... .25
b Three-way, for side filling ..... .50
c Glass tips only, doz ..... .36

1880 **Burette Reading Lens Attachment,** with adjustable eye-piece to fasten on the side of burettes 2.50

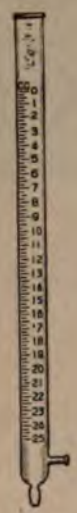
1890 **Burette Floats,** of glass:
a Beutel's, with bulb top ..... .50
b Erdmann's, plain ..... .50
c Schulz's, with thermometer 1.75
d Vollhard's, with side projections to prevent adhering to walls of burette 1.00

1770 and 1770a

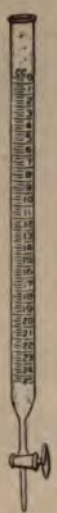


1800

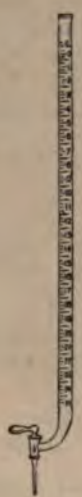
1770



1771



1800



1780

1810

1820

1910

1890b

1940

1930

1945

1970

1960b

1960a

1898 **Burette Float,** with thermometer 2.50

1910 **Burette Caps, Glass** (outside diameter of burette must be given when ordering):

To fit burette whose capacity in cc is	25	50	100
Each	.10	.16	.20

1911 **Burette Funnel, Glass, Small Size,** for use in filling burettes ..... .20

1920 **Gas Lighters, Metallic,** for lighting Bunsen and other burners where gas is used. Eliminates the match and insures safety:

a With Wire Handle and Spark Tip. Good for about 1,500 lights, each ..... .30
b Extra Spark Tips for above, doz ..... .75
c Pocket Lighter, for holding gasoline, benzine or alcohol, with wick ..... .50
d Extra Flint Spark Tips for above, doz ..... .75
e Pistol Lighter, designed to "shoot" sparks into the gas without endangering the hand. Length 7 inches. Good for about 10,000 lights 1.00
f Extra Renewal Spark Tips for above, doz. 1.20

1925 **Burner, Acetylene Gas, Bunsen Form,** 6 in. high, tube 9/16 in. diam 2.25

1930 **Burners, Alcohol Lamps, Glass,** usual form with wick, holder and ground glass cap:

Capacity ounces	2	3	4	8
Each	.30	.35	.40	.50

1940 **Burners, Alcohol Lamps,** polished brass, with screw top:

Capacity ounces	2	4	8
Each	.70	.80	1.00

1942 **Burners, Alcohol Lamps,** polished brass, with screw top and ratchet feed for wick:

Capacity ounces	3	5
Each	.60	.75

1943 **Burner, Alcohol Lamp, Large Flame,** nickel plated brass, with detachable wick holder, capacity 2 oz. ..... .80

1945 **Burner, Alcohol Lamp, Spun Copper, Large Flame,** with reducer and cap. Capacity 4 oz. A serviceable burner for laboratory work 1.20
a Extra wicks for above lamp, doz ..... .36

1950 **Wicks, for Alcohol Lamps:**
a Small size, doz. ..... .15
b Medium size, doz. ..... .50
c Large size, doz. ..... .75

1960 **Burner, Barthel, Alcohol Stove,** enameled iron, with brass reservoir. Safe, smokeless, no wick required. Adjustment for regulating size of flame:
a Single burner, capacity 1 pint 5.00
b Two burners, capacity 2¼ pints 9.00

1970 **Burner, Alcohol, Barthel,** vertical form, with side attachment for regulating flame. An excellent substitute for the ordinary Bunsen burner. Generates its own gas 10.00

1980 **Burners, Barthel, Alcohol, Bunsen Form,** including 5 feet flexible metallic tubing and reservoir; capacity 1 quart; for alcohol. The flame is practically equivalent to two Bunsen burners 12.00

1992 **Burner, Alcohol Stove, Nickel Plated Brass,** with indestructible invisible wick. Generates own gas; very powerful; capacity 7 oz. 1.50

1994 **Burner, Alcohol Stove, Broad Flame, Adjustable for Height;** noiseless, economical and safe, giving intense smokeless flame for three hours on one filling 6.00

1998 **Burner, Alcohol Blast,** vertical needle flame, copper case 3.50

2030 **Burner, Kerosene Vapor Stove;** automatically generates own gas, producing a high temperature blue flame without wick, smoke or odor. Air pressure pump attached. Height 9 in.:
a Burner only, without tripod 6.50
b Burner complete with tripod attachment 8.00

2035 **Burner, Optimus Wickless Kerosene Stove,** polished brass. Gives perfect combustion and a high temperature blue flame free from smoke or odor. Includes side pressure pump and tripod attachment:
a With Roaring Burner 6.00
c With Silent Burner 6.50

2040 **Burner, Hot Blast Laboratory Torch,** for gasoline; pint size. The flame is adjustable both as to size and direction. Provided with detachable tripod for supporting articles while heating 9.50

2045 **Blast Lamp, Turner's Jewel Torch,** gasoline, vertical flame 7.50

2050 **Burners, Laboratory Torch,** gasoline, pint size, with rigid vertical burner and wheel valve for regulating flame. May be used as Bunsen burner under ordinary tripod 8.00

2055 **Burner, Adjustable Laboratory Torch,** for gasoline, pint size. An adjustable stand permits the flame to be used at any desired angle. Fitted with automatic pump-in tank and adjustable tripod adapting it for use as a Bunsen burner:
a Torch with stand and tripod 8.50
b Torch only 7.50
c Stand and tripod only 4.50

2060 **Blast Lamp, Fletcher's, Compound Blowpipe,** for illuminating gas, adapted for experimental work where a wide range of flame adjustment is possible. Air and gas regulated automatically by single lever arm. Provided with pilot light 12.00

2045

2040

1980

2050

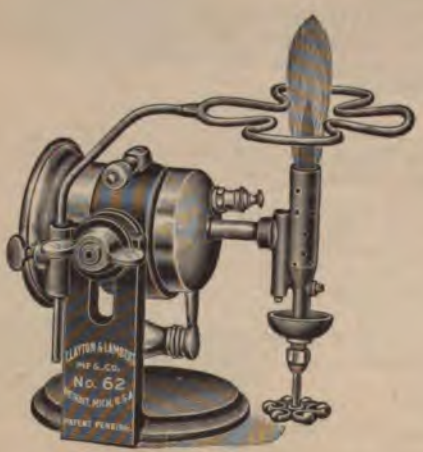
2035

2060

2082

2080

2096



2055

2090

Burners, or Blast Lamps, for coal gas:

Simple Laboratory Form, with three tips, on base 5.00

Compact Form, New Design, with gas and blast supply connections parallel, including three tips 4.75

Bunsen, Extra Large and Powerful, with two tips, much used by glass blowers on large work 9.00

French Form, With Ball Joint and three tips, easily adjusted to different angles.... 5.00

Compound, Blast Lamp and Blowpipe, with lever control for both air and gas, pilot light, adjustable angles, heavy base..... 10.00

Burner, Bunsen, for coal gas, regular form with air regulator, 5½ in. high, tube 7/16 in. diam. ..... .40

Stansico Stabilized Burner (New), Bunsen Form. The special feature is the heavy cast base which is designed to be **Self-Erecting** in case the burner is accidentally hit or tipped over. Not only a means of fire-prevention, but lessens the risk to one's person, of spoiling an experiment, or of injuring apparatus.

The weight of the base also prevents it from being moved out of its proper position, when used for heating a vessel.

The shape of the base fits into a ring of the Ring Stand, where the burner may be supported at different heights, or adjusted to various angles:

a Bunsen Burner, regular form..... .85
b Bunsen Burner, the base being provided with check valve for regulating gas..... 1.15
c Universal Burner, for low or high blast flame, controlled by single adjusting screw 1.85
d Meker Burner, the base provided with check valve for gas..... 3.00

Burner, Bunsen, With Central Draft to prevent clogging, for coal gas, height 5½ in., tube 7/16 in. diam. ..... .35

Burner, Bunsen (Pilot), Self-Lighting, with bi-pass tube for keeping gas lighted when turned low. For illuminating or natural gas, to be specified when ordered..... 1.50

Burner, Bunsen, With Pilot Light and Stopcock, for coal gas, height 6 in., tube ½ in. diam. 2.25

Burner, Bunsen, Low Form, curved neck, 3 in. high ..... .60

Burner, Illuminating, for table illumination, height 30 cm 1.50

Burner, Bunsen, Ring Form, with air regulator for attaching to supports or ring stands by means of clamps:

Diam. in.	3	4	5	6	8
a Without stopcock	1.60	1.75	2.00	2.25	3.00
b With stopcock	2.50	2.75	3.00	3.25	4.00

Burner, Tirrill, for either gasoline or coal gas. Independent gas and air regulators. Its substantial construction and wide range of flame make it a very efficient burner for general laboratory work 1.25

Burners, Tirrill, New Form, with only one control valve for both gas and air. Instantly adjusted to any desired size of flame. A powerful burner of proven merit..... 1.25

a With Set-Screw attachment for firmly securing adjustment when proper flame is produced 1.50

Burner, Argand, with flame regulator, useful for work where uniform temperature is desired:

a With glass chimney 1.20
b With iron chimney 1.20
c With mica chimney 1.30

Burner, Chaddock's, of Porcelain and White Fire Clay, non-corrosive and durable, adapted for use in fume closets or hoods. Complete with air regulator, support for dishes, chimney for triangles, asbestos disc and rings. Height 9 inches..... 4.50

Burner, Micro, height 5 cm, diam. of tube 6 mm, heavily nickel plated..... .40

Burner, Bunsen, with star for chimney and fork for attaching to stand, height 6 inches, tube 7/16 in. diam. 2.00

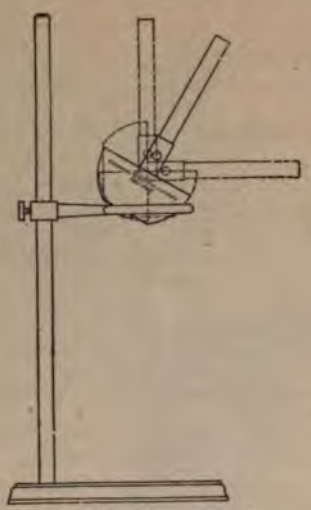
Burners, Bunsen, adapted for either coal, natural or gasoline gas:

5a Simple form, height 6 in., tube 7/16 in. diam. 1.00
5b Ditto, with flame check and gas regulator 1.25
6a Detroit form, height 6 in., tube ½ in. diam. 1.15
6b Ditto, adjustable 1.50
5a Boyce form, adjustable, height 6 in., tube 7/16 in. diam. ..... .90
5b Ditto, with set screw 1.35

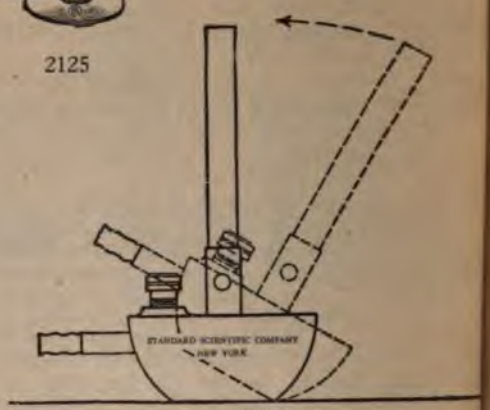
7 **Burners, High Temperature Laboratory,** air and gas regulated separately so that burner may be used for gasoline, coal or natural gas. Specially constructed to eliminate the low temperature cone found in the ordinary form of Bunsen burner:

Size	1	2	3
Height inches	6	6½	7
Diam. of grid inches	¾	1	1⅛
Each	1.75	2.25	2.75


2195


2091—On Ring Stand


2125



2091


2105

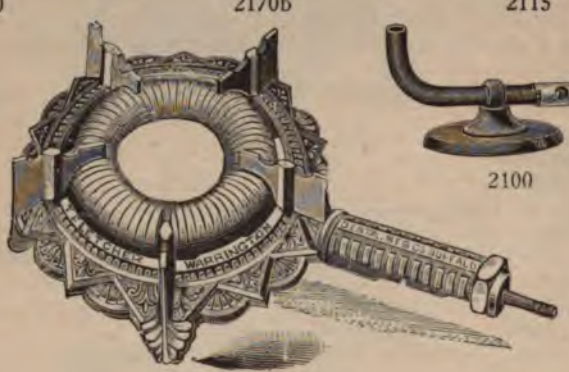

2110


2170b


2115


2350


2122


2265


2100


2120


2220

2225


2185


2160

2158 **Burners, Compound, High Temperature Laboratory,** same as 2157 but arranged in a row on single base:
- a Row of four, small size No. 1 ..... 10.00
- b Row of four, medium size No. 2 ..... 15.00
- c Row of four, large size No. 3 ..... 20.00

2160 **Burners, Clustered or Compound, Bunsen,** on stand:

No. of Burners	2	3	4	6
Each	2.25	2.50	2.75	3.50

2165 **Burners, Clustered or Compound, Bensen,** arranged in straight row, on base, height 6¾ in., tubes 7/16 in. diam:
- a Three tubes in row 2.25
- b Four tubes in row 3.00

2170 **Burners, Compound, Bunsen,** in straight row, on single base, with stopcock for gas supply for each burner tube. Height 8 in., tube 7/16 in. diam.:
- a Three tubes in row 6.00
- b Four tubes in row 7.00

2172 **Burners, Bunsen, Set of Four In Row, on Stand, With Two Adjustable Forked Supports for Combustion Tube.** Each burner has a stopcock, and is adapted for use on either coal, natural or gasoline gas 12.00

2173 **Burners, Bunsen, Four in Row With Stopcock and Wing Top for Each Burner Tube;** mounted on tripod base with clamps and Y-pieces and trough for supporting tubes 12.00

2180 **Burner, Roger's Ring,** for heating platinum crucibles, the flame surrounding the crucible at the upper portion. Platinum triangle included 9.00

2185 **Burner, Koch's Safety,** with automatic stopcock to shut off gas after the flame has gone out:
- a Small size, 5 in. high 6.50
- b Ditto, large size, 6 in. high 7.00

2195 **Burner, Koch's Safety, but on Tripod:**
- a Small size, 9 in. adjustable to 13 inches 8.00
- b Large size, 10 in. adjustable to 14 inches 9.00

2198 **Burner, Large Flame,** gauze top about 2¼ in. diam., height 5 in., length 14 inches, on cast base, for coal gas 3.00

2215 **Burners, Evaporating, Fletcher's,** made of copper, adapted for heating glass or porcelain vessels, as well as for general heating work in the laboratory. Top contains large number of small holes, giving smokeless blue flame. Not easily extinguished by splashes or air currents. Height 1½ inches:

Diam. in.	4	5	6½	7¾	9¼	10¼	12
Each	3.00	3.25	4.00	5.00	5.75	8.50	10.50

2220 **Burners, Evaporating, Fletcher's,** with numerous holes; gives small smokeless blue flames. Similar to 2215, but made of cast iron:

Diam. in.	4	5	6½
Each	2.25	2.50	3.75

2225 **Burners, Solid Flame, Fletcher's,** with gauze top and three rests for supporting plates or vessels for quick boiling and evaporation:
- a Diam. 3¾ inches, for coal gas 3.00
- b Ditto but with wheel valve for gasoline gas 8.00
- c Diam. 4¼ inches, for coal gas 4.00
- d Ditto but with wheel valve for gasoline gas 9.00

2242 **Burners, Solid Flame,** with three projections for supporting dishes:
For Coal Gas:
- a Diam. 3 inches 2.00
- b Diam. 4 inches 2.50

For Gasoline Gas, with wheel valve:
- c Diam. 3 inches 4.00
- d Diam. 4 inches 5.00

2265 **Burner, Radial, Fletcher's,** efficient and durable. Made of annealed cast iron. Provided with 5 projections for supporting plates or dishes. Adapted for coal or water gas. The flame is practically solid without tendency to form a point at the center:
- a Diam. burner ring 3¾ in. 2.50
- b Diam. burner ring 5 in. 3.00

(Fitted for use with gasoline gas. Information on request.)

2272 **Burners, Radial,** with three projections for supporting dishes:
For Coal Gas:
- a Diam. 3½ inches 3.00
- b Diam. 5 inches 4.00

Gor Gasoline Gas, with wheel valve:
- c Diam. 3½ inches 5.00
- d Diam. 5 inches 6.00

2300 **Heater for Flasks, Electric,** adapted for distillation of inflammable liquids. Will accommodate 1,000 cc flasks. Includes tripod support, incandescent lamp for 110 volts, cord and plug 12.00

2345 **Burner, Blast Flame, Tirrill,** flared at top, adjustable with one movement producing temperature of 2,000° F 3.50


2380


2360


2375


2355


2365


2390


2370


2395

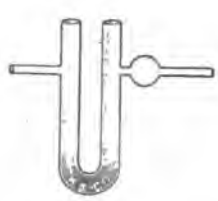

2420


2422


2400


2438

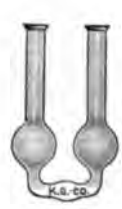

2435


2440


2430


2442


2450


2445


2600

Burners, Meker, High Temperature, with adjustment for air and gas, flared top provided with grid:

Size No.	1	2	3	4	5
Diam. Burner mm	16	20	24	30	43
Height Burner mm	115	130	155	190	250
a For Coal Gas	2.50	2.75	3.50	4.00	8.00
b For Gasoline Gas	2.75	3.00	4.00	4.50	9.00
c For Natural Gas	2.75	3.00	4.00	4.50	9.00

Burners, Meker, Four in Row, With Base; size of burner No. 3:
a For Coal Gas 18.00
b For Natural Gas 22.00

Burner, High Temperature, Improved Meker Form, adapted for use on coal, natural or gasoline gas. Diam. of top 20 mm 3.00

Burner, Meker, With Bent Neck, designed for use in either vertical or horizontal position. For coal gas. Diam. flame 30 mm:
a For Coal Gas 6.00
b For Gasoline Gas 6.50
c For Natural Gas 6.50

Burner, Meker, with a flat narrow flame. Top of burner 15x50mm, height 225 mm:
a For Coal Gas 7.00
b For Gasoline Gas 7.50
c For Natural Gas 7.50

Blowpipe Tube, fitting inside the tube of Bunsen burners, for blowpiping ..... .20

Blowpipe Tip, for Bunsen Burners:
a For 7/16 inch Burner ..... .12
b For ½ inch Burner ..... .15

Wing Top, Fitting Bunsen Burners, for spreading flame, bending glass tubes, etc.:
a For 7/16 inch Burner ..... .12
b For ½ inch Burner ..... .15

Chimney, Sheet Iron, With Support, for attaching to Bunsen burner:
a For 7/16 inch Burner ..... .75
b For ½ inch Burner ..... .85

Chimney, Sheet Iron, for protecting flame of Bunsen burner; without support:
a Small size, 2 inch diam. at bottom ..... .10
b Large size, 2½ inch diam. at bottom ..... .12

Burner Crown, for attaching to Bunsen burners. Gives round flame. Useful for heating small dishes:
a For 7/16 inch Burner ..... .50
b For ½ inch Burner ..... .60

Burner Star, for supporting chimney, fitted with set screw for attaching to Bunsen burners:
a For 7/16 inch Burner ..... .25
b For ½ inch Burner ..... .28

Burner Tripod, for Attaching to Bunsen Burners, to support small dishes:
a For 7/16 inch Burner ..... .16
b For ½ inch Burner ..... .20

Gauze Top for Bunsen Burners, giving large, round flame:
a For 7/16 inch Burner ..... .26
b For ½ inch Burner ..... .30

Burner Guard, vitrified earthenware, for protecting the flame of Bunsen burners from drafts. May be also used as a support. Height 9 in.; base 8 in. diam.; top 5 in. diam ..... .50

Burner, Gas Stove, Single, for coal gas 1.50

Burner Fork, for supporting Bunsen burners to ring stand, or supports ..... .25

Calcium Chloride Jars, or Drying Towers, glass, with tubulature at base:

Height inches	8	10	12
Each	2.25	3.00	4.00

Calcium Chloride Jars, or Drying Towers, glass, similar to 2402, but having ground glass stopper and side tube at top, with a tubular connection at base:

Height inches	8	10	12
Each	4.00	5.50	6.00

Calcium Chloride Drying Tubes, Straight Form:

Length, inches	3	4	5	6	8	10
With One Bulb, each	.09	.10	.12	.13	.15	.20
With Two Bulbs, each	.10	.11	.13	.15	.18	.24
With Two Bulbs and small inner tube to collect moisture at first bulb	.18	.20	.24	.26	.33	.40

Calcium Chloride Drying Tubes, U-Shape:

Length, inches	3	4	5	6	7	8	10
Plain U, each	.15	.18	.20	.25	.30	.40	.50
With Side Tubes, each	..	.20	.25	.30	..	.45	.50
With Side Tubes and ground glass stoppers (Schwartz), each	..	1.25	1.40	1.50	1.75	2.00	..

(Continued)

2776

2879—In Use

2879

2778

alcium Chloride Drying Tubes—(Continued).

Length inches	3	4	5	6	7	8	10
With Side Tubes and Bulb, each	..	..	.40	.50	..	.60	..
Marchand's, with cork and connecting tube, each	..	.30	.40	.50	..	..	..
Peligot's, with three bulbs, each	..	.35	.40	.50	.60	.80	..
With Ground Outlets, bent, each	..	.90	1.00	1.20	..	..	..

alcium Chloride Cylinders, with perforated glass stopper and side tubulation at top:

Height mm	210	260	315
Each	3.25	3.75	4.00

alcium Chloride Cylinders, glass, tall form, with tubulature near bottom:

Height mm	210	260	315
a **Narrow Mouth**	1.25	1.50	2.00
b **Wide Mouth:**	1.25	1.50	2.00

aliper, Vernier, Metric, reading to 0.1 mm, length 10 cm., Wide jaws 4.75

arr Adiabatic Oxygen Bomb Calorimeter. A Calorimeter developed and perfected by Professor S. W. Parr, which has been in successful operation for the past three years. A new system is employed which insures a degree of accuracy not possible with pneumatic or vacuum methods. Water is kept circulating constantly throughout the cover and on all sides of the jacket, the temperature of which is under the positive control of the operator. By turning the proper valve, either cooler or warmer water is instantly admitted and immediately distributed throughout the jacket, permitting the operator to keep the temperature controlled in either direction to correspond absolutely with that in the calorimeter proper. This is a feature not found in any other commercial calorimeter. By this means errors due to radiation or to conductivity lag are eliminated and the use of calculations made unnecessary. The cover is pivoted so that it swings out of the way in a horizontal plane, carrying the thermometer with it, thus reducing the danger of breakage to a minimum.

This instrument complete with water container, Illium Bomb, adiabatic water jacket, rotary stirrers, pressure gauge and needle valve with oxygen connection and couplings, special ignition wire and gaskets, but without thermometers or motor, heater or heater burner 400.00

a **Heater for water supply system** 25.00

b **Heater Burner** 1.00

c **Electric Motor, Variable Speed,** 110 V., A C or DC 28.00

d **Electric Motor, Variable Speed,** 220 V., A C or DC 28.00

arr Oxygen Bomb Calorimeter. The principles and methods of operation of this calorimeter are those underlying the older type of Bomb Calorimeter such as Berthelot, Mahler, Kroecker and Atwater. The advantages of this Calorimeter as compared with the older types are found in the material of the Bomb and the ingenious device which forms the oxygen inlet.

The Bomb is made of an acid resisting alloy, superior in strength to the best tool steel. It is unlined and has been brought to such a high degree of perfection that the apparatus is the equivalent of the platinum lined instrument even to the most exacting degree of refinement. This eliminates the problem of expense connected with the use of platinum and gold lined bombs. It also avoids the serious corrosive deterioration of bombs wherein the shell supporting the platinum is made of steel, as well as the breakage in connection with enamel lined bombs. By using solid metal it has been possible to introduce features which result in greatly increased facility of operation. Perhaps the most notable is the substitution of rubber gaskets for lead. The needle valve is replaced by an automatic device which avoids the difficulties common to the usual methods of sealing at the inlet.

This calorimeter complete with bomb, water container, insulating vessel with cover, stirrer and pulley, oxygen connection with gauge, needle valve and couplings, one-half dozen capsules of special alloy, reading lens and ring support for holding calorimeter covers with thermometer, special ignition wire and gaskets—but without motor or thermometer 300.00

arboy Stand or Rocker, for tilting acid carboys 6.00

arboy Holder and Inclinator, for pouring dangerous acids. Easily manipulated with safety. The carboy is securely clamped to the frame, and by means of handle can be tilted on its bearings to any desired angle. The carboy returns to upright position if accidentally released. Holds any size of carboy, as well as cased cans and steel drums not exceeding 22½ in. wide and 29 in. high 17.50

asseroles, Agateware, with handle:

Capacity cc	500	750	1,000	2,000
Diam. mm	110	125	150	175
Each	.50	.60	.75	1.00

asseroles, Porcelain, Glazed With Exception of Rim, With Lip, Flat Porcelain Handle: Coors:

Size No.	1	2	3	3a	4	4a	5	6	7
Outside diam. mm	50	70	85	95	110	135	135	165	175
Inside diam. mm	47	66	80	90	105	130	130	160	170
Height mm	25	35	45	50	62	90	80	95	130
Capacity cc	30	75	150	210	375	500	750	1250	2000
Each	.35	.40	.50	.70	.90	1.15	1.40	2.00	3.50

(Continued)

2900

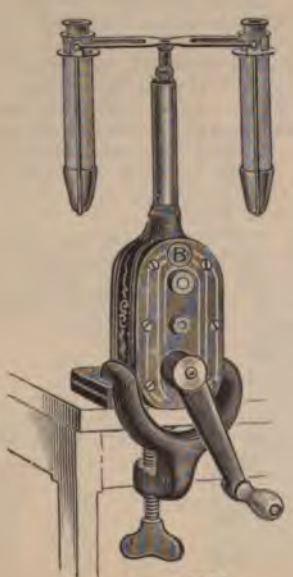
2910

2961

3040

2955

3105



3050

3110

Casseroles—(Continued).

Ohio:

Size No.	1	2	3	3a	4	5	6	7
Capacity cc	30	75	150	210	375	750	1250	2000
Diam. over body mm	5	7	85	95	11	135	165	175
Each	.35	.45	.50	.70	.90	1.60	2.00	3.50

Casserole, Porcelain (Coors), glazed, with exception of rim, with lip and extra long handle. Size No. 4; diam. 117 mm; height 56 mm; capacity 360 cc 1.10

Casseroles, Porcelain, Glazed Inside and Out, with cover and wood handle:

Size No.	00	0	1	2	3	4
Capacity cc	125	250	375	500	720	1000
Diam. mm	90	105	110	120	152	172
Each	.60	.70	.90	1.10	1.75	2.25

Cement, Alundum Refractory, for covering and imbedding wire resistors, repairing muffles, cores, furnaces, etc. Mix cement with water to form plastic mass, apply when in this state, then dry by heating:

In lots of (pounds)	1	5	10
a Cement RA 162	.40	1.50	2.50
b Cement RA 355	.50	2.00	3.00
c Cement RA 305 and RA 518	.60	2.50	3.50

Cement, De Khotinsky's, useful for cementing glass, etc. Is not attacked by sulphuric, nitric or hydrochloric acid, carbon disulphide, benzine, water, etc. Is very little effected by caustic alkalis, chloroform, or ether. Comes in three grades:

a Hard, for glass, metal or porcelain, stick ..... .75
b Medium, for cementing or insulation, stick ..... .75
c Soft, for cementing or insulation, such as wires, wood, etc., stick ..... .75

Centrifuges, Electric, Purdy, substantially mounted on rigid base, for 110 or 220 volts D. C., or 105 volts A. C. of 60 cycles, with controlling lever for medium and high speeds. Can be attached to incandescent lamp service. When ordering specify kind of current as well as voltage:

	For 110 to 115 volts	For 220 volts
3P For Two Tubes	48.00	58.00
3PA For Four Tubes	54.75	68.25

Tubes and Accessories for Purdy Centrifuges No. 2955:

a Plain Glass Tube ..... .20
b Graduated Glass Tube 15 cc ..... .55
c Percentage Tube for Blood Analysis, for use with Haematokrit ..... .75
d Plain Sputum Tube, for use with Haematokrit ..... .30
e Aluminum Shield for carrying Glass Tubes a and b ..... .30

Centrifuge, Electric, Purdy (3PE), for general laboratory use. Adapted for 100 to 115 or 220 volts D. C., or for alternating current. The rotating arm carries two metal tube shields and two graduated tubes 50 cc. Similar to No. 2955, but for larger tubes. Speed regulator in base. When ordering please specify kind and voltage of current 56.25
a If equipped for alternating current 66.25

Centrifuge, Purdy, Hand Driven (10PE), otherwise similar to No. 2960 ..... 18.50

Tubes and Accessories for Purdy Centrifuge Nos. 2960 and 2961:

a Plain Glass Tube ..... .50
b Graduated Glass Tube 50 cc ..... .75
c Metal Shield for above tubes ..... .75

Speed Controller, Adjustable, for use with Purdy Centrifuges No. 2955. Permits wide and gradual adjustment of speed, also for keeping speed constant 16.00

Dome Protector, for Purdy Centrifuges Nos. 2955 and 2965 ..... 15.00

Centrifuges, Electric, for Blood, Sputum and Milk Analysis, for A. C. or D. C. (110 volts), with rheostat for controlling speed. When ordering please specify kind of current used:

a **Single Arm, Two Tubes,** with one plain and one graduated glass tube 15 cc 36.00
b **Double Arm, Four Tubes,** with two plain and two graduated glass tubes 15 cc 38.00
c **Single Arm, Two Tubes,** with one plain and one graduated glass tube 50 cc 40.00

Centrifuge, Electric, B. & L., with ball bearings, 1,800 R. P. M., including rheostat and two 15 cc tubes. Can be attached to ordinary lamp socket. Current consumption ¾ ampere:

a For 110 volts A. C. or D. C. 32.50
b For 220 volts A. C. or D. C. 37.50

Centrifuge, Hand Driven, with clamp for attaching to table top. Phosphor bronze gears, ball bearings, running smoothly and quietly. Speed 2,000 to 2,500 R. P. M. Holders are included:

	Protecting Tube With 15 cc Tubes	Protecting Tube With 50 cc Tubes
a **Single Arm, Two Tubes,** including one each plain and one graduated tube	13.00	16.00
b **Double Arm, Four Tubes,** including two plain and two graduated tubes	16.00	20.00

3100 **Hand Centrifuge, B. & L., Single-Speed,** 1,200 R. P. M.; complete with two-arm sedimentation attachment, one tube graduated, 1-15 cc, and one tube ungraduated but with 15 cc mark

3105 **Hand Centrifuge, B. & L., Double-Speed,** 1,200 to 4,000 R. P. M.; complete with Daland's Haematokrit, automatic blood pipette and two sputum tubes, in addition to two-arm sedimentation attachment with one tube graduated, 1-15 cc, and one tube ungraduated but with 15 cc mark

3110 **Centrifuge, Water Power, B. & L.,** complete with two-arm sedimentation attachment, one tube graduated, 1-15 cc, and one tube ungraduated, but with 15 cc mark, and with rubber hose and coupling

3115 **Centrifuges, Electric, B. &. L., for Two Tubes,** with cord and plug ready for attaching to incandescent lamp socket. Equipped with a 5-step rheostat for regulating speed from 750 to 2,100 R. P. M. Includes one plain and one graduated glass tube 15 cc:
- a For 110 volts D. C.
- b For 220 Volts D. C.
- c For A. C. 110 volts, 60 cycles

3122 **High Speed Centrifuge, Electric, With Guard and Cover, B. & L.** Can be attached to ordinary lamp socket. Complete with rheostat. Speed 600 to 3,600 R. P. M. Includes set of plain and graduated tubes 15 cc:
- a For 110 volts D. C.
- b For 220 volts D. C.
- c For 110 volts A. C., 60 cycles
- d Two-arm Sedimentation Attachment, with aluminum shields and set of tubes (2), extra
- e Four-arm Sedimentation Attachment, with aluminum shields and set of tubes (2), extra

3126 **Blood Lancet,** automatic

3134 **Haematokrit,** with tubes for examination of blood and sputum

3138 **Centrifuge Milk Tube** for determining percentage of fats, graduated

3142 **Centrifuge Pipette,** 1 cc for filling milk tubes

3145 **Centrifuge Tubes, Glass,** standard form, plain and graduated:
- a 10 cc plain, doz.
- b 10 cc graduated, doz.
- c 15 cc plain, doz.
- d 15 cc graduated, doz.
- e 50 cc plain, doz.
- f 50 cc graduated, doz.

3155 **Aluminum Shields** for holding glass centrifuge tubes:
- a Size 15 cc, each
- b Size 50 cc, each

3355 **Chamois Skins:**

Size (approx.) inches	6x8	9x11	10x13	14x18
Each	.15	.25	.40	1.00

3360 **Charcoal Blocks,** for blowpipe analysis, of hard wood, doz.

3370 **Charts, Spectrum:**
- a **Showing 6 Spectra and 12 Intermediate Colors, Complementary Colors, etc.**
- b **Containing: K, Rb, Cs, Tl, Na, Li, Ca, Sr, Ba.** Each spectrum measures about 5.5 cm wide by 52 cm long. Mounted on linen back with wooden rollers.
- c **Containing Those Mentioned Above Under "b" With the Addition of: In, C, Bo, Mn, Pb, Cu, Co, Ni, Fe**

3380 **Charts, Chemical,** size 42x62 inches, on linen back with wooden rollers:
- a **Chemical Elements With Atomic Weights**
- b **Periodic Classification of the Elements, Mendelejeff**

3386 **Chimneys, Lamp:**
- a **Student's,** 10½ inches long.
- b **Argand,** plain 2x7 inches.

3387 **Chlorine Absorption Apparatus,** with flask ground-on, Bunsen-Fresenius form

3388 **Chlorine Tube,** for decomposition of water by chlorine

3400 **Clamp, Wood, for Flasks and Tubes,** large size, with wire spring

3405 **Clamp, Test Tube, Wooden,** with wire spring.

3410 **Clamps, Test Tube, Wire Form, Nickel Plated, Stoddard's,** very serviceable, **will not** break or burn:
- a Small, 4½ in. long
- b Medium, 5 in. long
- c Large, 6½ in. long.

3425 **Clamps, Chaddock's,** japanned wire with rubber covered jaws:

	Small	Medium	Large
a **For Beakers**	.40	..	.50
b **For Evap. Dishes**	.40	.50	.60
c **For Flasks**	.40	..	..

30 **Clamps, Burette, Universal,** adjustable to different angles, with V-opening and set screw for attaching to ring stands and supports. One of the most convenient and widely used clamps for laboratory work in chemistry. Length about 6 inches; jaws opening about 1⅜ inches:
- a **With Stamped Steel Jaws** ..... .35
- b **With Cast Iron Jaws, Rubber Covered** ..... .55
- c **Made of Polished Brass** ..... .75
- d **Nickel Plated Brass** 1.00

45 **Clamps, Burette, With Strong Spring Grip and Lever Release,** with V-clamp and set screw for attaching to support or ring stand. Made for fixed position. Length 6 inches:
- a Jaws opening ¾ in. ..... .55
- b Jaws opening 1⅛ in. ..... .65

200 **Clamp or Chart-Hanger, "Kling-Klamp,"** (Patented), nickel plated. The iron cam makes a tight grip on the object which can be easily released when desired. Furnished with two screws for attaching to wall. Will hold either thin or thick objects up to ⅜ in. It is especially useful for charts, maps and pictures, and should be in every class and lecture room.
- Pair ..... .50
- Dozen 2.75

(Special prices will be made on quantity orders.)

55 **Clamp, Double, Allihn's,** for two Burettes, with two V's and spring for clamping each tube at 3 points 3.00

56 **Clamps, Double, for Two Burettes,** with V-opening and set screw for attaching to support or ring stand:
- a **With Spring Grip and Lever,** opening ¾ in., length 7 inches ..... .70
- b **Hoffmann's, With Screw Clamps,** opening 1¼ in., length 7 inches 1.00

57 **Clamp, Burette, Double, With Wood Back** and spring grip having set screw. Gives quick adjustment and minimizes breakage. Designed by Prof. Lincoln, of University of Illinois 1.00

50 **M-B Safety Burette Clamp** (Patented), made of wood with concealed spring. Easily attached and adjusted. The burette is held in position at three points of contact. The friction of clamping pin is so regulated that the burette can be readily shifted, turned, elevated or lowered. Withstands hard laboratory usage. Will fit rods from ¼ to ½ inch diam 1.00

75 **Clamps, Burette, Bunsen, with stem.** When attached to clamp holder they are capable of being extended, or turned in different angles or positions. A standardized clamp for chemical laboratory work:
- a Round Jaws, opening 1¼ in., length 8 in ..... .45
- b Round Jaws, opening 2 in., length 9 in ..... .55
- c V-Jaw, opening 1¼ in., length 8 in ..... .45
- d V-Jaw, opening 2 in., length 9 in ..... .55

30 **Clamp, Burette or Tube, on Stem, Skidmore.** Improvement of Hoffmann Form, with guide pin for clamping uniformly by means of adjusting screw:
- a Round Jaw, opening 1 in., length 7 in ..... .50
- b V-Shaped Jaw, opening 1 in., length 9 in ..... .50

95 **Clamps, Universal,** with Clamping Screw and Check Nut. Suitable for clamping condensers and large tubes:
- a Jaws opening 1¼ in., length 8 in ..... .65
- b Jaws opening 2 in., length 10 in ..... .85

10 **Clamp Holders, Right Angle, Iron, Double V-Form,** with set screws, for attaching clamps, etc., to supports or ring stands:
- a Opening ½ inch ..... .35
- b Opening ¾ inch ..... .45

15 **Clamp Holder, Universal,** adjustable to different angles, V-shaped, with set screws, opening ½ inch ..... .70

20 **Clamp, for Burettes, Thermometers, or Tubes,** with wood screw for attaching to wall or table ..... .50

30 **Clamp, With Extension Arm and Hook at End, for Supporting Chemical Thermometers.** Made to be attached to iron supports or ring stands ..... .75

40 **Clamps, Spring Pinchcocks, Mohr's Standard Form,** wire, nickel plated, for rubber tubing:
- a Small, 2¼ in. ..... .11
- b Medium, 2¾ in. ..... .13
- c Large, 3¼ in. ..... .15
- d Extra large, 3½ in. ..... .28

65 **Clamp, Screw Pinchcock, Hoffmann's Standard Form,** nickel plated:
- a Small, ½x¾ inch, doz 2.40
- b Large, ½x1 inch, doz 3.00

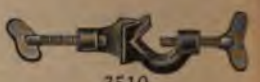
60 **Clamp, Screw Pinchcock, With Side Opening;** easily attached to or detached from rubber tubing without disconnecting apparatus. Heavily made, cast brass frame, nickel plated:
- a Small, ½x¾ inch, doz. 2.75
- b Large, ¾x1¼ inch, doz. 3.25


3410


3405


3430

A1200


3510


3515


3570


3475a


3456b


3400


3520


3582


3456a


3555


3495

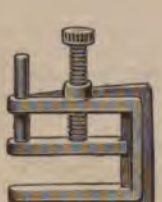

3457


3475c


3425a


3572


3540


3560


3566


3565

3565 **Clamp, Screw Pinchcock, With Detachable Link,** for attaching or removing from rubber tubing from the side. Nickel plated brass:
a Small, ½x¾ inch, doz. 2.50
b Large, ½x1 inch, doz. 3.00

3566 **Clamp, Screw Pinchcock,** improved form for attaching or detaching without disconnecting rubber tubing:
a Small, 5/16 inch, doz. 2.50
b Large, ½ inch, doz. 3.00

3570 **Clamp, Screw Pinchcock, Bunsen Form,** with compression bar and two screws. Large and substantial. Can be removed without disconnecting rubber tubing. Size ¾x1½ in. ..... .40

3572 **Clamp, Wire Form, Stoddard's,** for holding Evaporating Dishes up to 4½ in. diam..... .25

3582 **Clamp, or Cut-Off, Spring Form, for Rubber Tubing,** positive grip with lever compression. Made of nickel plated brass:
a With 3/16 in. opening, doz..... .50
b With 5/16 in. opening, doz..... .90

3583 **Clamps, Watch Glass:**
a Spring Brass Form, small ..... .30
b Spring Brass Form, large ..... .40
c Bunsen's, Wire Form, 50 mm..... .35
d Bunsen's, Wire Form, 65 mm..... .40

3585 **Cobalt Plates,** blue, rectangular and square, for flame tests:

Size in.	2x2	2x3	3x3	3x4	4x4
Each	.12	.16	.20	.25	.30

3700 **Color Comparison Cylinders, Graduated, With Glass Stopcocks, Hehner's,** for estimation of iron in water, on metal base, in pairs..... 7.50

3705 **Color Comparison Tubes, Camp, Graduated,** for determination of manganese in steel. The larger tube has ground glass stopcock, set 7.50

3744 **Color Comparison Tubes, Nessler Jars, With Lip, Ungraduated,** made of colorless glass with polished bottoms:

Capacity cc	50	50	50	100	100	100
Size inches	1x7½	1⅛x7	1¼x5	1¼x8	1⅜x7	1⅜x9
Each	.40	.40	.40	.50	.50	.60

3745 **Color Comparison Tubes, Nessler Jars,** usual form, special colorless glass:
50 cc ..... .75
100 cc ..... .80
50 and 100 cc ..... .90

3746 **Color Comparison Tubes, Nessler's,** clear glass with polished bottoms, tall form. (See American Public Health Assoc., "Standard Methods of Water and Sewage Analysis," 1917):
50 cc, each ..... .75
Set of six (6)..... 4.75
Set of Twelve (12)..... 10.00
100 cc, each 1.00
Set of six (6)..... 7.00
Set of Twelve (12)..... 15.00
50 and 100 cc, each 1.00
Set of six (6)..... 7.00
Set of Twelve (12)..... 15.00

3747 **Stand, Wood, Black Finish,** base covered with white glass plate, for holding 12 Color Comparison Tubes (Nessler's) 50 cc..... 7.00

3755 **Color Comparator Camera,** mounted on adjustable stand for two color comparison tubes, with blue and ground glass..... 15.00

3770 **Colorimeter, Campbell-Hurley,** for determining carbon in steel, water and urine analysis and general work. The telescope attachment gives a circular field for rapid and accurate comparisons. Complete with one graduated cylinder 100 cc by 1 cc divisions, and one cylinder 100 cc in 10 cc divisions (Journal American Chemical Society, Vol. XXXIV, No. 7, July, 1912)..... 25.00

3785 **Colorimeter, Schreiner's,** as used in U. S. Dept. of Agriculture, Bureau of Soils. All parts coming in contact with liquids are of glass 25.00

3790 Graduated tubes, per pair..... 7.50

3795 Plain tubes, per pair..... 1.50

3800 **Colorimeter, Dubosq, Standard Form,** for determination of nitrogen, urea, ammonia, creatin, creatinine in blood and urine, as well as for general use in physiological and analytical chemistry 140.00
a **Glass Cylinder** 10 cm high, with glass plate fused to cylinder..... 2.00
b **Glass Plunger** 10 cm high 9.00

3810 **Colorimeter, Dubosq, B. & L.,** standard form for measuring color intensity of liquids, complete in wooden case with tubes and scales 50 mm long..... 110.00
a Ditto with tubes and scales 100 mm long..... 135.00

3825 **Micro-Colorimeter, Universal,** pocket size, according to Theodore Kuttner, M.D., New York. For the examination of blood, urine, or other physiological fluids, as clinical aid to a correct diagnosis of disease, it has become a necessity in the daily routine of practitioners of medicine and surgery. Simple, rapid and accurate (Journal A. M. A. April 29, 1916)..... 18.00

3785

3746

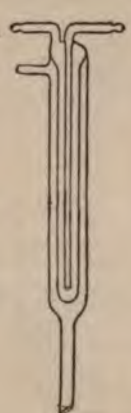
3745

3958

3583a

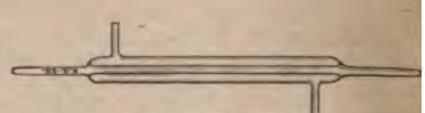
3905

4085

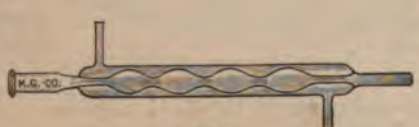


4090

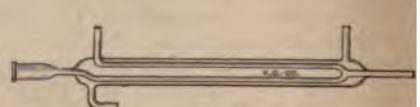
4070a



4070c



4088



4089

160 **Color, Turbidity Scale,** standard form as adopted by the U. S. Geological Survey. Made of aluminum 8 in. long, graduated, complete in case 10.00

170 **Color Tubes,** of brass, 2½ in. in diameter, 24 in. long, with screw caps at ends holding in place a heavy glass disk 15.00

175 **Color Comparison Tubes, Eggertz,** for estimating carbon and manganese in steel by colorimetric method:

	Set of 2	Set of 4
Graduated, without glass stoppers:		
a 30 cc by 1/10 cc	4.00	7.50
b 50 cc by 1/10 cc	4.50	8.50
c 100 cc by 1/5 cc	6.00	12.00
Graduated, but with glass stoppers:		
d 30 cc by 1/10 cc	4.50	9.00
e 50 cc by 1/10 cc	5.50	10.00
f 100 cc by 1/5 cc	7.00	14.00

180 **Color Comparison Tubes, Julian's,** with bent ends, graduated except lower part:

	Set of 2	Set of 4
Usual Form:		
a 5 to 30 cc by 1/10 cc	4.00	8.00
b 10 to 50 cc by 1/10 cc	5.50	10.00
c 10 to 70 cc by 1/2 cc	6.00	12.00
With Funnel Top to Facilitate Filling:		
d 5 to 30 cc by 1/10 cc	4.50	8.50
e 10 to 50 cc by 1/10 cc	6.00	10.50
f 10 to 70 cc by 1/2 cc	6.50	12.50

190 **Combustion Apparatus, Johnson,** for determination of carbon in iron, steel and ferro-alloys, etc., complete with Hoskins' Electric Combustion Furnace and Rheostat:
a For 110 volts 60.00
b For 220 volts 65.00

195 **Combustion Apparatus, Vanier,** for determining carbon in iron and steel by combustion method. Complete with Hoskins' Electric Combustion Furnace and Rheostat:
a For 110 volts 75.00
b For 220 volts 80.00

196 **Vanier Absorption Bulb,** for carbon dioxide, a combined potash and drying tube..... 10.50

Combustion Boats, Porcelain, Unglazed, Vitreous:

200a **Coors:**

Size No.	0	1	2	3	4	5	6	7	8
Length mm	58	60	60	62	76	76	88	97	100
Width mm	10	7	10	8	10	11	12	18	20
Height mm	8	8	8	8	9	9	8	13	13
Each	.18	.18	.18	.19	.20	.20	.21	.22	.23

Combustion Boats, Porcelain, Glazed Throughout Except Outside Bottom Surface:

205a **Coors:**

Size No.	0	1	2	3	4	5	6	7	8
Length mm	58	60	60	62	76	76	88	97	100
Width mm	10	7	10	8	10	11	12	18	20
Height mm	8	8	8	8	9	9	8	13	13
Each	.22	.22	.22	.23	.24	.24	.25	.27	.28

205c **Ohio:**

Length mm	60	75	75	100	115	145
Width mm	10	11	15	18	13	14
Each	.22	.22	.22	.27	.30	.35

Combustion Capsules, Porcelain, Without Lip, Rounded Bottom, Glazed Throughout With Exception of Outside Bottom Surface:

230a **Coors:**
Size No. 3; diam. top 42 mm; bottom 25 mm; capacity 25 cc ..... .25

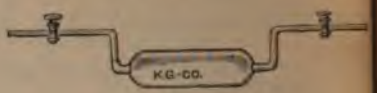
235 **Capsules, Porcelain (Coors),** without lip, glazed throughout, straight sides and flat bottom. Used in milk analysis, etc.:
Size No. 1; diam. 45 mm; height 12 mm; capacity 13 cc ..... .25
Size No. 3; diam. 69 mm; height 13 mm; capacity 25 cc ..... .35
Size No. 4; diam. 72 mm; height 16 mm; capacity 45 cc ..... .40

255 **Combustion Furnace, Bunsen, for Gas,** movable burners each fitted with separate stop-cock, complete with clay tiles and gutters:
a Length 14 inches, 10 burners 30.00
b Length 19 inches, 15 burners 38.00
c Length 25 inches, 20 burners 45.00
d Length 31 inches, 25 burners 50.00

258 **Combustion Furnace, Fletcher, for Organic Analyses,** for illuminating gas. Designed so that burners are outside and in front of the furnace to prevent clogging by falling dirt. No iron work to rust; metal parts made of brass. Each burner has separate stopcock:
a Length 12 inches 35.00
b Length 24 inches 70.00

4096

4097



4094

4145

4155b

4230

4155c

4185

4198

4170

4190

4231

4165

4200

4220

4210

3960 **Combustion Furnace, Glaser,** fitted with mica plates for viewing burners. The burners are movable and each is provided with stopcock. Complete with clay parts:

a Length 15 inches, 10 burners 45.00
b Length 23 inches, 15 burners 50.00
c Length 30 inches, 21 burners 65.00
d Length 36 inches, 26 burners 80.00

3990 **Combustion Furnace, Fletcher,** for use with or without foot bellows or blower. For natural, gasoline or coal gas:

a 12 inches long 24.00
b 18 inches long 30.00
c 24 inches long 40.00

4068 **Condensers, Liebig,** usual form, similar to **4070a,** but fitted with cork ends through which the condenser tube passes. This simplified form is less expensive and quite efficient for students' use:

Length inches	12	18	20	24
Each	1.00	1.25	1.50	2.00

4070 **Condensers, Glass, Liebig's,** standard form:

Length of Jacket inches	10	12	16	18	20	24
a **Condensing Tube separate with rubber connections,** regular quality	2.10	2.50	2.75	3.00	3.50	4.00
b Ditto, Pyrex glass	2.40	2.60	..	..	3.60	4.00
c **Condensing Tube sealed-in,** regular quality	2.25	2.75	3.00	3.25	3.75	4.25
d Ditto, Pyrex glass	2.80	3.20	..	..	4.40	4.80

4072 **Condensers, Liebig, Brass,** polished, 1⅞ in. diam.:

Length inches	12	15	20	24	27	30	40
Each	3.00	3.50	4.00	4.50	5.00	5.25	6.00

4075 **Condenser Tubes, Glass, Liebig's,** for use with 4070:

To fit Jackets (length in inches)	10	12	16	18	20	24
a Regular quality	.50	.60	.65	.70	.75	.90
b Pyrex glass	.50	.60	..	..	.80	1.00

4085 **Condensers, Glass, With Coiled Worm,** sealed to jacket (Liebig-Graham):

Length of Jacket inches	10	12	16	18	20	24
Each	4.00	5.50	7.00	9.00	10.00	12.00

4088 **Condensers, Glass, Allihn's,** with bulb form of condensing tube, sealed-in:

Length of Jacket inches	10	12	16	18	20	24
Each	3.00	3.50	3.75	4.50	5.00	6.00

4089 **Condensers, Glass, Goeckel's,** for determination of inflammable substances:

Length of Jacket inches	18	24
Each	7.00	8.00

4090 **Condenser, Glass, Hopkins',** for use with extraction apparatus. Length of Jacket 14 inches 4.00

4092 **Condenser, Glass, Hopkins, (Picard-Law Modification),** with side tube bent upright at right angle having funnel shaped opening for pouring in the extraction fluid..... 4.75

4093 **Condensers, Glass, Davies' Improved Form,** double surface, the outflowing warm water does not heat the inflowing water:

Length of Jacket inches	6	8	12
Each	6.75	7.50	9.00

4094 **Condenser, Glass, Liebig's, With Two Stopcocks,** for sulphurous acid 3.40

4095 **Condenser, Hallock's,** of copper, 14½x4 inches, with block-tin worm. Has two rods for support 9.00

4096 **Condenser, Glass, Schumann's,** with three stopcocks for sulphurous acid 5.20

4097 **Condenser, Glass, Fischer's,** with two stopcocks on vertical tubes for sulphurous acid... 3.40

4145 **Condenser, Zinc,** with block-tin worm (see 5360):

Capacity gallons	½	1	2	3	5
Each	7.00	9.00	12.00	15.00	18.00

4155 **Connections, For Rubber Hose or Tubing,** tapering and corrugated, nickel plated brass, threaded to fit standard faucets:

a **Female Thread, Hydrant,** ⅝ in. nipple ..... .45
b **Male Thread**..... ¼ ⅜ ½ ¾ in. I. P.
Each ..... .35 .40 .45 .60
c **Female Thread,** ¾ in. I. P..... .75

4165 **Cork Borers, Polished Hard Brass,** with steel punch:

No. in set	3	6	9	12	15
Diam. mm	4–7	4–9	4–13	4–16	4–18
Per set	.75	1.25	2.00	3.25	5.00

4170 **Cork Borers, Hard Brass, With Individual Handles,** including steel punch:

No. in set	3	6	8	9	12	15
Sizes	1–3	1–6	1–8	1–9	1–12	1–15
Per set	.90	1.75	2.75	3.25	5.00	6.50

4175 **Cork Borers, Steel,** nickel plated, with individual handles and steel punch:

No. in set	3	6	12
Per set	1.75	3.00	5.00

4185 **Cork Borer Sharpener,** brass cone with steel blade 1

4190 **Cork Boring Machine,** for boring holes in either corks or rubber stoppers 1

4197 **Cork Mats, Suberite,** compressed cork, 12 cm diam.:

Thickness, cm.	1	2	4
Each	.40	.50	.75

4198 **Cork Rings, Suberite,** compressed cork, for supporting flasks, etc.:

Diam. inside, mm	30	60	90	120	150
Each	.40	.60	1.00	1.20	1.75

4200 **Cork Knife,** wood handle.....

4210 **Cork Press, Lever Form:**

a Small size 1

b Large size 1

4220 **Cork Press, Rotary Form,** for rolling cork into desired tapering size:

a Small size 1

b Large size 2

4230 **Cork Screws:**

a Plain, with wooden handle.....

b Plain, better quality .....

c Improved model, self-pulling.....

4231 **Cork Puller,** especially useful where corks have been broken, or pressed too far into bottle to use regular cork screw .....

4235 **Corks, Regular Length,** selected for laboratory work:

Size	Small end in in.	Large end in in.	Large end in mm	XX Price per 100	XXX Price per 100	XXXX Price per 100
0	1/4	3/8	9.5	.25	.40	.43
1	5/16	7/16	11.1	.25	.40	.43
2	3/8	1/2	12.7	.28	.45	.53
3	7/16	9/16	14.2	.33	.55	.60
4	1/2	5/8	15.8	.38	.62	.73
5	11/32	11/16	17.4	.42	.69	.85
6	9/16	3/4	19.0	.46	.75	.95
7	5/8	13/16	20.6	.52	.85	1.13
8	11/16	7/8	22.2	.62	1.18	1.45
9	23/32	15/16	23.8	.76	1.45	1.78
10	13/16	1	25.4	.84	1.63	2.03
11	13/16	1 1/16	26.9	.90	1.78	2.20
12	7/8	1 1/8	28.5	.98	1.95	2.43
13	15/16	1 3/16	30.1	1.08	2.15	2.68
14	1	1 1/4	31.7	1.24	2.48	3.10
15	1 1/32	1 5/16	33.3	1.42	2.85	3.55
16	1 1/16	1 3/8	34.9	1.74	3.53	4.40
17	1 1/8	1 7/16	36.5	1.88	3.80	4.75
18	1 1/4	1 1/2	38.1	2.04	4.08	5.10
19	1 3/32	1 9/16	39.6	2.26	4.50	5.50
20	1 1/8	1 5/8	41.2	2.48	4.90	5.90
22	1 1/2	1 3/4	44.4	3.00	..	..
24	1 13/32	1 7/8	47.6	3.60	..	..
26	1 3/4	2	50.8	4.40	..	..

4245 **Corks, Flat Specie,** XX, for wide mouth bottles:

Diam. top inches..	1	1 1/8	1 1/4	1 3/8	1 1/2	1 5/8	1 3/4	1 7/8	2	2 1/8
Per 100	.85	1.00	1.20	1.50	1.75	2.00	2.40	2.75	3.00	3.50
Diam. top inches..	2 1/4	2 1/2	2 5/8	2 3/4	3	3 1/2	4	4 1/2	5	6
Per 100	4.00	4.50	5.75	6.50	7.50	8.00	13.00	25.00	30.00	48.00

4250 **Cork Sheets,** XX, 4 x 12 inches:

Thickness, inches	1/8	3/16	1/4
Each	.25	.40	.50

4255 **Cotton, Absorbent,** best quality:

Package, ounces	4	8	16
Each	.25	.40	.75

4256 **Cotton,** for plugging test tubes, etc., pkg.....

Crucibles, Porcelain, low form, glazed throughout, with exception of outside bottom surface:

4260a **Coors:**

Size No.	0000	000	00	0	1	2	3	4	5
Diam. rim mm	18	32	37	41	46	56	67	81	96
Diam. bottom mm	8	13	15	15	18	18	23	29	35
Height mm	12	19	21	25	29	36	44	52	65
Capacity cc	2.5	8	12	17	30	50	90	145	265
Each	.09	.12	.15	.18	.25	.34	.43	.50	.62
Covers for above	.05	.05	.05	.07	.07	.08	.12	.15	.18

(Continued)

Crucibles—(Continued).

Ohio:

Size No.	000	00	0	1	2	3	4	5
Capacity cc	8	12	17	25	45	80	140	250
Diam. mm	32	37	41	46	56	67	81	96
Height mm	19	21	25	29	36	44	52	65
Each	.10	.12	.15	.22	.30	.40	.45	.54
Covers for above	.05	.05	.06	.08	.08	.12	.17	.18

Crucibles, Porcelain, high form, glazed throughout, with exception of outside bottom surface:

Coors:

Size No.	000	00	0	1	1a	2	3	4	5
Diam. rim mm	26	30	35	41	45	52	62	72	87
Diam. bottom mm	12	14	17	20	21	25	30	34	40
Height mm	19	25	27	35	40	43	50	59	72
Capacity cc	5	10	15	30	40	57	95	155	280
Each	.09	.12	.15	.24	.28	.30	.35	.45	.55
Covers for above	.05	.05	.05	.07	.09	.09	.12	.12	.15

Ohio:

Size No.	000	00	0	1	2	3	4	5
Capacity cc	5	10	15	25	57	95	155	280
Diam. mm	26	30	35	41	52	62	72	87
Height mm	19	25	27	35	43	50	59	72
Each	.09	.13	.17	.23	.32	.40	.45	.60
Covers for above	.05	.05	.05	.05	.08	.13	.14	.18

Crucible, Porcelain [Coors] cylindrical form:
Diam. rim 30 mm; height 32 mm; capacity 15 cc ..... .25

Crucibles, Assay, Sand, Dixon's:

a With Lip.

b Triangular.

Size No.	A	B	C	D	E
Height inches	2⅝	3	3½	4	4½
Diam. inches	1⅝	1⅞	2¼	2⅜	2⅞
c Crucible, each	.15	.18	.20	.24	.27
d Cover, each	.12	.12	.15	.20	.24

Size No.	F	G	H	J	K	L
Height inches	5	5⅝	5⅞	6⅝	7¼	8
Diam. inches	3	3⅜	3¾	4⅜	4¾	5¼
c Crucible, each	.30	.37	.45	.40	.45	.50
d Cover, each	.25	.30	.35	.35	.37	.40

Crucibles, Sand, with Covers:

a Round:

Height inches	2¾	3⅜	3½	4½	4¾	5¼
Diam. inches	2	2¾	2⅞	3⅛	3⅝	4⅜
b Crucible, each	.10	.12	.15	.16	.20	.30
c Cover, each	.06	.07	.08	.09	.10	.12
Height inches	5¾	7	7½	8¾	11¼	12¾
Diam. inches	4⅞	5¾	6	6¾	8⅜	9½
b Crucible, each	.40	.50	.70	1.10	2.00	3.50
c Cover, each	.15	.16	.18	.25	.40	.50

d Triangular:

Height inches	2¼	3½	3½	4	4¾	5¼	6	7
Diam inches	2	2½	2½	2⅞	3¼	3⅞	4⅞	6⅛
e Crucible, each	.10	.12	.15	.16	.25	.25	.48	.70
f Cover, each	.05	.06	.08	.09	.10	.12	.18	.20

g Round Assay, Battersea Shape:			
Height inches	5	5⅛	5⅞
Diam. inches	3⅛	3⅜	3¾
h Crucibles, each	.12	.18	.20
i Covers, each	.09	.10	.12

Crucibles, Clay, without lip:

Capacity grams	3	5	10	12	15	20	25	30	35
Height inches	2¼	2⅝	3	3¼	3½	3¾	4¼	3⅞	4¾
Diam. inches	2¼	2⅜	2⅝	2¾	2⅞	3	3¼	3½	3¼
Each	.07	.08	.10	.11	.12	.13	.15	.16	.18

Crucibles, Assay, Gram Shape, Dixon's:

a With Lip.

b Without Lip.

Size No. grams	10	20	30	35
Height inches	2¾	3¾	3⅞	4¾
Diam. top inches	2⅜	3⅛	3½	3¼
Crucibles, each	.15	.20	.25	.30

4260

4262

4355

4320

4340

4288d

5035a

4770

4380

4755

4700

4750

4742

4705

4740

4720

312 **Crucibles, Assay, Clay, Without Lip (Denver):**

Height inches	2⅝	3	3¼	3½	3¾	4	3⅞	4¾
Diam. top inches	2⅜	2⅝	2¾	2⅞	3⅛	3¼	3½	3¼
a **Crucibles,** each	.10	.12	.13	.14	.16	.18	.20	.22
b **Covers,** each	.05	.05	.06	.07	.08	.09	.12	.13
Height inches	5⅝	3½	4	4½	5	5⅛	5	5¾
Diam. top inches	3⅝	2¼	2⅜	3	3⅛	3⅜	2¼	3
a **Crucibles,** each	.25	.10	.12	.15	.18	.20	.18	.25
b **Covers,** each	.14	.06	.07	.08	.10	.12	.15	.18

316 **Crucibles, Melting, With Lip (Denver),** of purest clay, making them suitable for melting enamel, dyes, chemicals, glass, gold, silver, etc.:

Height inches	5⅛	5⅞	6	6⅝	7¼	8	8½
Diam. top inches	3⅜	3¾	4	4⅜	4¾	5¼	5¾
Crucible, each	.20	.24	.26	.38	.48	.96	1.25

319 **Crucible, Gooch,** pure sheet nickel, perforated bottom and extra cup.
Size 1½ in. diam. by 1⅝ in. high; capacity, 30 cc. 2.00

Crucibles, Gooch, Porcelain, with perforated bottoms, glazed throughout except outside bottom surface:

320a **Coors:**

Size No.	2	2a	3	4
Diam. rim mm	27	33	35	40
Diam. bottom mm	18	20	22	25
Height mm.	30	33	40	43
Capacity cc.	10	20	25	35
Each	.30	.35	.40	.45
Covers for above	.05	.05	.05	.07

320c **Ohio:**

Size No.	2	3	4
Capacity cc	10	25	35
Diam. mm	27	35	40
Height mm	30	40	43
Each	.27	.35	.45

321 **Crucibles, Gooch, Porcelain [Coors]** with two holes for suspending in Extraction Apparatus.
Size No. 3; diam. rim 35 mm; capacity 25 cc ..... .40

322 **Crucibles, Gooch, Porcelain [Coors],** glazed inside and out, with straight sides and solid perforated bottoms.

Size No.	1	3
Diam. top mm	33	39
Diam bottom mm	20	26
Height mm	33	40
Capacity cc	15	25
Each	.35	.40
Covers	.05	.07

Crucibles, Porcelain, of special shape, with large filtering surface for bitumen determination:

323a **Coors:**
Diam. rim 45 mm; bottom 35 mm; height 24 mm ..... .50

323b **Ohio:**
Diam. top 44 mm; diam. bottom 36 mm; height 25 mm ..... .48

Crucibles, Caldwell, Porcelain, glazed inside and out with open flange bottom to hold perforated discs:

324a **Coors:**

Size No.	1	3
Diam. top mm	33	39
Diam. bottom mm	20	26
Height mm	33	40
Capacity cc	15	25
Each	.30	.35
Covers	.05	.07

340 **Crucibles, Graphite, Dixon's:**
a **Round Form.**
b **Triangular Form.**
(Outside dimensions.)

Size No.	0	00	000	0000	1	1½	2	3
Height inches	2	2¼	2½	2⅞	3⅝	4	4½	5¼
Diam. inches	1½	1⅜	1⅜	2⅜	3¼	3½	3¾	4¼
Each	.60	.68	.72	.75	.80	.90	1.00	1.40

Size No.	4	5	6	7	8	9	10
Height inches	5⅝	6	6½	6¾	7⅛	7⅝	8
Diam. inches	4⅝	4⅞	5¼	5½	5¾	5⅞	6⅛
Each	1.60	2.00	2.20	2.40	2.60	2.80	3.00

4355 Crucibles, Sheet Copper, with cover:

Capacity cc	20		30		50		75		100
Diam. in.	1½		1⅝		1¾		2		2⅛
Height in.	1⅜		1¾		2		2¼		2½
Each	.50		.70		.90		1.00		1.25
Capacity cc	150		200		250		500		
Diam. in.	2¾		3		3¼		4		
Height in.	2¾		3⅛		3¼		3⅝		
Each	1.50		1.75		2.10		2.50		

4360 Crucibles, Sheet Nickel, with cover:

Capacity cc	20		30		50		75		100
Diam. in.	1½		1⅝		1¾		2		2⅛
Height in.	1⅜		1¾		2		2¼		2½
Each	90		1.00		1.25		1.75		2.00
Capacity cc	150		200		250		500		
Diam. in.	2¾		3		3¼		4		
Height in.	2¾		3⅛		3¼		3⅝		
Each	2.50		3.50		4.25		5.00		

4365 Crucibles, Sheet Iron, with cover:

Capacity cc.	20	30	50	100	200	400	
Diam. in.	1½	1¾	2⅛	2½	3⅛	3¾	
Height in.	1¼	1⅜	1½	2	2⅜	3	
Each	.20	.25	.30	.40	.45	.60	

4368 Crucibles, Pure Sheet Silver, with lids:

Capacity cc	20	30	50	75	100	150	
Diam. in.	1½	1⅝	1¾	2	2⅛	2¼	
Height in.	1⅜	1¾	2	2¼	2½	2¾	
Weight approx. in grams	35	45	60	80	100	150	

Price from 12 to 15 cents per gram.

Crucibles, Rose, Porcelain:

4370a Coors, Unglazed:

Size No.	1	2	3
Diam. rim mm	30	35	50
Diam. bottom mm	19	23	23
Height mm	38	40	50
Capacity cc	15	30	60
Each	.18	.27	.30
Covers for above	.06	.07	.09

Delivery tube, size No. 1, diam. 5.5 mm, length 140 x 30 mm.....

4370c Ohio, glazed inside only:

Size No.	1	2	3
Capacity cc.	15	30	60
Complete, each	.45	.70	.80
Covers only	.09	.12	.18
Tubes only	.22	.35	.45

4375 Crucible, Pennock and Martin, pure sheet nickel, with lid; for determination of sulphur in coke and coal. Size 1½ x 1¾ in. high. Capacity 40 cc. .....

4378 Crucible, Kawin's, heavy pure nickel, used in a muffle furnace for burning off filter paper in silicon determinations in iron. Diam. 28 mm by 15 mm high, doz.....

4380 Crucibles, Skidmore's Normal, made of spun iron, with cover, clamp, and outlets, adapted for experiments where the materials used do not act destructively on iron, such as: Making oxygen from manganese dioxide; calcination of chalk with recovery of carbon dioxide; manufacture of soda from cryolite; preparation of ammonia; destructive distillation of coal, wood, or other organic substances.

a 1½ oz. capacity, doz. 15.00
b 6 oz. capacity, doz..... 20.00

4642 Cupels, Dixon's:

Diam. inches	1	1¼	1½	1¾	2
Each	.06	.08	.10	.12	.15

4680 Cups, Annealing, Porcelain [Coors], Conical Form, glazed throughout with exception of outside bottom surface. Diam. top 37 mm; bottom 26 mm; height 25 mm.....

4685 Cups, Swimming, Porcelain [Coors], with perforations for washing specimens.

Size No. 1; diam. 27 mm; height 35 mm .....
Size No. 2; diam. 35 mm; height 50 mm .....

Cells, Porous, Round, for Batteries:

4690a Coors:

Size No.	1	2	2a	3	4	5	6	7	8	8a	9	10	11	12
Diam. mm.	25	30	38	25	40	52	55	76	76	80	88	90	100	150
Height mm	76	76	75	102	90	100	150	127	177	200	265	210	280	250
Each	.18	.23	.24	.25	.32	.37	.45	.54	.75	1.50	1.70	1.15	2.20	2.35

(Continued)

Cells—(Continued).

0c **Ohio:**

Height mm.	175	125	100	88
Diameter mm.	73	50	50	36
Each	.54	.42	.37	.32

Cells, Porous, Oblong:

5a **Coors:**

Size No.	A	B	C
Length mm.	200	305	305
Width mm.	50	89	178
Height mm.	172	305	305
Each	4.00	6.00	9.00

Cylinders, Glass, with Metric Graduations, on foot, with lip or pour-out:

0 **Double Graduation,** reading up and down:

Capacity cc.	5	10	15	25	50	100	125	150	200
Each	.55	.60	.65	.70	.80	.85	.90	.95	1.00
Capacity cc	250	300	500	1000	1500	2000	3000	4000	
Each	1.10	1.30	1.50	2.00	5.00	6.00	7.50	9.00	

5 **Single Graduation:**

Capacity cc.	5	10	15	25	50	100	125	150	200
Each	45	.50	.55	.60	.70	.75	.80	.85	.90
Capacity cc.	250	300	500	1000	1500	2000	3000	4000	
Each	.95	1.00	1.25	1.60	3.50	4.00	5.50	7.00	

0 **Cylinders, Glass, with Ground Glass Stopper,** on foot [Mixing Cylinder]:

Capacity cc.	10	15	25	50	100	150	200
a Single Graduation	1.00	1.20	1.30	1.50	1.60	1.65	1.70
b Double Graduation, reading up and down, each	1.10	1.30	1.40	1.60	1.70	1.75	1.80
Capacity cc.	250	300	400	500	1000	1500	2000
a Single Graduation	1.75	1.85	2.30	2.60	3.60	5.50	6.00
b Double Graduation, reading up and down, each	2.00	2.30	2.75	3.00	4.00	7.00	8.00

5 **Cylinders, Glass, Apothecaries Scale, Graduated in Ounces,** on foot, with lip or pour-out:

Capacity ounces ..	1	2	4	8	16	32	64
Each	.40	.50	.60	1.00	1.50	1.80	4.00

0 **Cylinders, Glass Combination with Metric and Apothecaries Graduations,** on foot, with lip or pour-out:

Capacity cc	30	60	125	250	500	1000	2000
Capacity ounces	1	2	4	8	16	32	64
Each	.60	.75	.85	1.50	1.80	2.50	6.00

Cylinders, or Hydrometer Jars, Glass, on Foot:

0 **With Lip:**

Size inches ..	4x1	5x1	6x1	6x1¼	6x1½	8x1	8x1½	8x2	10x1½	10x2
Each	.34	..	.36	..	.42	.44	.46	.48	.50	.52
Size inches ..		12x1½	12x2	12x2½	12x3	15x2½	15x3	18x2½	18x3	20x3
Each		.54	.56	.72	.74	1.00	1.25	1.04	1.25	1.90

2 **Plain, Without Rim or Lip:**

Size inches .	4x1	5x1	6x1	6x1¼	6x1½	8x1	8x1½	8x2	10x1½	10x2
Each	.34	..	.36	..	.42	.44	.46	.48	.50	.52
Size inches ..		12x1½	12x2	12x2½	12x3	15x2½	15x3	18x2½	18x3	20x3
Each		.54	.56	.72	.74	1.00	1.25	1.04	1.25	1.90

0 **With Rim, Unground:**

Size inches ..	4x1	5x1	6x1	6x1¼	6x1½	8x1	8x1½	8x2	10x1½	10x2
Each	.38	..	.40	..	.46	.48	.51	.53	.55	.57
Size inches .		12x1½	12x2	12x2½	12x3	15x2½	15x3	18x2½	18x3	20x3
Each		.60	.62	.79	.81	1.10	1.35	1.15	1.38	2.00

5 **With Rim, Ground:**

Size inches .	4x1	5x1	6x1	6x1¼	6x1½	8x1	8x1½	8x2	10x1½	10x2
Each	..	.48	.50	.56	..	..	.60	.75	.80	.90
Size inches .		12x1½	12x2	12x2½	12x3	15x2½	15x3	18x2½	18x3	20x3
Each		.95	1.00	1.10	..	1.25	..	1.50	2.00	..

0 **Cylinders, Glass, Wide Form,** on Foot, With Ground Rim:

Size inches.	8x3	8x4	12x3	12x4	15x3	16x3	20x3	24x3
Each	1.00	1.10	1.20	1.75	1.80	1.85	2.00	3.00

5 **Cylinders, Glass, With Enlarged Top,** to prevent overflow when used with hydrometers:

Size inches	14x1½	12x2	16x2½
Each	.75	1.05	1.35

0 **Cylinders, Glass, with Tubulature near Bottom,** thin wall for heating. Diam. 4 in. by 15 in. high. As used in laboratory of Soil Bacteriology, U. S. Dept. of Agriculture.. 1.70

0 **Cylinders or Drip Cups, Glass,** with side funnel tube:

Height in.	5	6	7	10
Each	.75	90	1.05	1.25

5 **Cylinder, Conical Base, Capacity 1000 cc, Graduated 0 to 50 cc,** as used in testing sewage. 3.75


4780


5033


5032


4765


5348


5325


5040

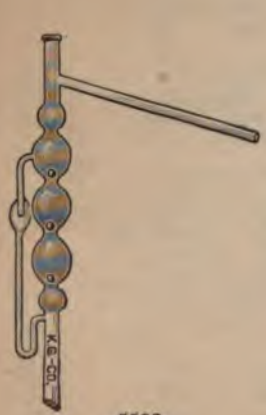

5035


5345


5265


5320


5321


5508


5360


5500

0 **Cylinders, Conical from Top to Bottom, Capacity 1000 cc, Graduated 0 to 100 cc, as used** in testing sewage 3.40

5 **Demijohns, Glass, Wicker Covered:**

Capacity gal.	½	1	2	3	5
Each	.75	.90	2.50	2.80	3.25

0 **Desiccators, Scheibler's, Vacuum Form,** with side outlet and glass stopcock ground-in:

Diam. mm.				100	120
Each				3.00	3.50

1 **Desiccators, Scheibler's, Vacuum Form,** with glass stopcock ground into cover, with hook:

Diam. mm.			150	200	250
Each			9.00	11.50	15.00

2 **Desiccating Jar, Fruehling and Schultz,** with ground cover:

Diam. (inside), in.				8	10
Height (inside), in.				11	12
a Plain Cover, each				6.50	11.00
b With Hole in Cover, each				7.00	12.00

3 **Desiccators, Fruehling and Schultz,** with glass stopcock ground into cover:

Diam. mm.				200	250
Each				14.50	19.00

5 **Desiccating Jars, Scheibler's,** with ground cover:

Diam. (inside), in.	4	5	6	8	10
Height (inside), in.	4½	6	6	8	9¼
a Plain Cover, each	1.75	1.90	2.00	6.50	11.00
b With Hole in Cover, each	..	..	3.00	7.50	12.00

5 **Desiccating Jar, Low Wide Form,** with ground cover. Diam. 10 in.; height 9¾ in.; (inside dimensions) 12.00

7 **Desiccating Jar, Atwater,** with ground cover. Diam. 4 in.; height 8½ in. (inside dimensions) 3.50

8 **Desiccator, Vacuum Form,** heavy walled jars, rubber stopper at top with glass stopcock and hook, including porcelain plate:

Diam. mm.			100	140	160
Each			4.00	5.00	6.00

9 **Desiccators, Triangular Form, Heavy Glass,** for use in balance cases for drying. Size 2 in. wide by 1½ in. high 1.00

Desiccator Plates, Porcelain, glazed on one side, for Scheibler's Desiccators:

0a **Coors:**

Size No.	0	1	2	2a	2b	3	4	5
Diam. mm	85	95	115	120	125	140	190	240
No. holes	3	3	4	5	8	5	7	8
Diam. of holes	23	30	30	23	23	30	30	30
Each	.65	.75	.85	.95	1.10	1.25	2.00	2.50
Each, without feet	..	..	..	..	..	..	1.75	2.10

0c **Ohio:**

Diam. mm	90	110	140	190	230
No. of holes	3	4	5	6	8
Diam. of holes mm	26	26	26	26	26
Thickness mm	5	5	5	6	7
Each, with three small feet	.80	1.00	1.25	2.00	2.50
Each, without feet	.75	.90	1.12	1.80	2.10

Desiccator Plates, Porcelain, glazed on one side, without feet, with numerous small holes:

4a **Coors:**

Size No.			4	5
Diam. mm			190	230
No. holes			700	900
Diam. of holes mm			2	2
Price, each			1.75	2.10

4b **Ohio:**

Diam. mm	140	190	230
Diam. of holes mm	5½	5½	5½
Thickness mm	5	6	7
Price, each	1.25	2.00	2.50

0 **Desiccator Tripods, Glass,** with feet, for holding dishes and crucibles in desiccators:

For Desiccator, diam., in.	4	5	6
Each	.60	.75	.90

5 **Desiccator Plates, Aluminum,** 26 mm diam., with 7 holes:

Diam. in.	4¾	5½	7½
Each	1.50	1.75	2.00

0 **Dialyzer Papers, Parchment:**

a Vegetable, sheets 18x24 in., each ..... .10
b Animal, sheets 17x22 in., each 2.00

0 **Dialyzers,** including open top bell jar covered with parchment, suspended in glass jar with wooden support:

Capacity, liters	2	4	6	8	12
Each	2.00	3.00	4.50	6.00	8.00

5185 Diamonds for Writing on Glass, with handle:

a Small	4.00
b Medium	6.00
c Large	10.00

5190 Diamond Ink, for etching or writing on glass, per oz. bottle .....

5225 Disc, Perforated, Porcelain (Coors), for Caldwell Crucibles and Funnels. Sizes 6 to 9 with beveled edges.

Size No.	1	2	3	4	5	6	7	8	9
Diam. rim, mm.	15	20	22	25	30	38	50	60	75
Thickness mm.	1.5	1.5	1.5	1.5	1.5	4	4	4	4
Each	.17	.19	.20	.20	.23	.30	.38	.45	.60

5260 Dishes, Aluminum, straight sides, for milk analysis:

Diam. in.	2	2½	3	3½	4
Height in.	½	5/8	¾	7/8	1
Each	.25	.30	.40	.50	.60

5262 Dish, Aluminum, with Cover, straight sides, 2 in. diam. by 1 in. deep.....

5265 Dishes, Crystallizing, Glass, straight sides and flat bottom:

Diam. mm.	45	50	55	60	70	75	80	85	90
Height mm.	30	35	25	25	35	35	25	30	30
Dozen	1.45	1.50	1.55	1.60	1.70	1.75	1.80	1.80	1.80
Diam. mm.	95	100	115	120	140	150	190	190	200
Height mm.	40	40	45	45	45	45	65	75	65
Dozen	1.90	2.20	3.10	3.35	4.10	5.40	8.40	9.00	9.00

Diam. mm.	200	210	220	230	240
Height mm.	75	70	70	85	85
Dozen	9.60	11.00	12.00	16.00	20.00

5268 Dishes, Culture (Moist Chamber), heavy glass, with loosely fitting cover:

Diam. cover, mm.	150	200	220	240
Height inside, mm.	50	70	70	80
a With Knob, doz.	20.00	36.00	40.00	42.00
b Without Knob, doz.	15.00	27.60	30.00	32.20

Dishes, Porcelain, Flat Bottom and Straight Sides, without Lip, glazed inside and out, for milk evaporation, etc.:

5280b Ohio:

Diam. mm.	40	43	72
Height mm.	7	11	16
Each	.10	.20	.45

5280c Coors:

Diam. 180 mm; height 75 mm; capacity 1300 cc. Each .....

5300 Dishes, Stender Form (Preparation Jar), with cover grooved and carefully ground:

Diam. in.	1 3/8	2	2 3/8	2 3/8
Height in.	¾	1	1 1/8	3 ¾
Dozen	1.60	2.10	2.90	2.90

5310 Dishes, Enameled Iron, flat bottom, shallow form:

Diam. cm.	15	18	22
Capacity cc.	500	1000	2000
Each	.50	.75	1.00

Dishes, Evaporating, Porcelain, With Lip, Medium Deep or Regular Form. Sizes up to five are glazed inside and out with exception of rim. Larger sizes are partly glazed outside:

5320a Coors:

Size No.	000	00	0	1	2	3	4	5	6	6a	7
Capacity cc	35	60	80	100	90	100	110	120	145	162	185
Diam. mm	60	70	80	85	37	42	43	50	48	51	54
Height mm	24	27	30	33	140	175	210	300	385	535	765
Each	.12	.18	.20	.30	.35	.40	.45	.55	.70	.80	.90

Size No.	8	8a	9	10
Diam. mm	215	230	265	305
Height mm	63	70	80	95
Capacity cc	1285	1430	2200	3250
Each	1.20	1.50	1.80	3.00

Dishes, Evaporating, Porcelain, shallow form, with lip, glazed:

5321a Coors:

Size No.	1	2	3	4	5	5a	6	7
Diam. mm.	70	80	95	105	120	128	140	160
Height mm.	15	20	23	30	34	34	40	48
Capacity cc.	45	60	95	160	200	210	350	550
Each	.20	.25	.40	.50	.60	.65	.75	.90

(Continued)

Dishes, Evaporating—(Continued).

Ohio:

No.	000	00	0	1	2	3	4	5
Diam. outside, cm.	6	7	8	8½	9	10	11	12
Capacity cc.	35	50	80	100	140	175	210	300
Each	.12	.16	.19	.22	.30	.35	.40	.50

No.	5a	6	6a	6b	7	8	8a
Diam. outside, cm.	12½	14½	13½	17	18½	21½	23
Capacity cc.	330	385	535	690	765	1285	1430
Each	.55	.60	.75	.80	.85	1.00	1.50

Dishes, Evaporating, with Lip, made of spun metal, polished:

Diam. in.	2	2¾	3½	4
Capacity cc.	40	100	200	300

Copper, each ..... .80 .90 1.20 1.50

Aluminum, each ..... .90 1.00 1.20 1.50

Nickel, each 1.20 1.50 2.50 3.00

Silver, each 5.40 9.00 15.00 21.00

Dishes, Lead, round, for hydrofluoric acid:

Diam., in.	2	2½	3	3½	4	5	6
Each	.10	.15	.20	.25	.30	.50	.60

Dishes, Petri (Culture), With Covers, annealed, clear white glass:

Diam. cover, mm	50	60	60	75	80	80	90	100
Height lower dish, mm...	10	10	15	10	10	15	10	10
Gross	36.00	36.00	36.00	36.00	40.00	40.00	40.00	44.00
Diam. cover, mm	100	100	110	115	120	120	150	
Height, lower dish, mm.	15	20	15	15	15	20	15	
Gross	44.00	44.00	62.00	72.00	80.00	80.00	100.00	

Covers, Porous Clay, for Petri Dishes (No. 5345) glazed or unglazed:

Guernsey, unglazed:

Size No.	1	2
Diam. inside, mm.	96	105
Per hundred	9.00	9.00

Ohio, glazed top:

Size No.	1	2
Diam. inside, mm.	98	102
Inside depth, mm.	10	10
Per hundred	22.50	22.50

Ohio, unglazed top:

Size No.	1	2
Diam. inside, mm.	98	102
Inside depth, mm.	10	10
Per hundred	18.00	18.00

Dish Holder, Petri, round, with inside tray to lift out, 9 in. high by 4½ in. diam.:

a Copper 4.00

b Sheet iron 3.00

Dish Holder, Petri, Pfuhl's, with five shelves and carrying handle:

a **Round Form,** Copper, 8x5 in. 11.00

b **Square Form,** Copper, 7x5x5 in. 10.00

Dish Holder, Petri, Spring Wire Form, nickel, for holding Petri Dishes about 10 cm diam.:

a For 3 Dishes ..... .90

b For 6 Dishes 1.00

Distilling Apparatus, Laboratory, for water, etc., consisting of heavy copper retort, tin-lined, with movable head; and zinc condenser with block-tin worm:

Capacity, gallons	½	1	2	3	5
Each	15.00	20.00	25.00	35.00	45.00

Distilling Apparatus, Glass, for Determination of Ammonia in Water 10.50

Distillation Tube, Hempel's, filled with glass beads 4.50

Distillation Tube, Glinsky's, glass, with glass valves, 8 in. 2.25

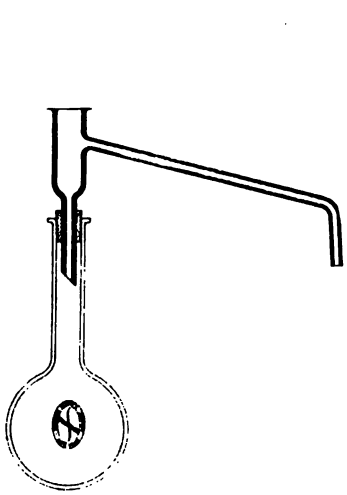
Distillation Tube, Knight's, for separation of xylenols and higher homologues from phenol and the creosols 3.00

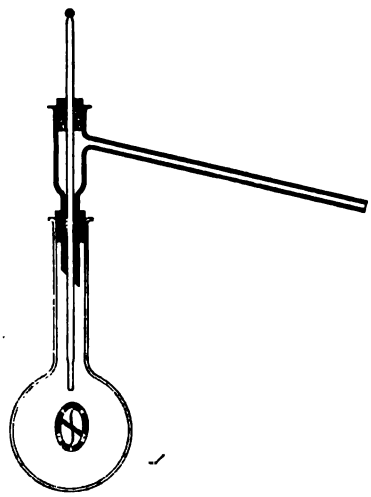
Distillation Tube, Wurtz', with two bulbs 1.25

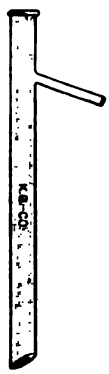
Distillation Tube, Young's, with rod and discs, for small distillations 4.00

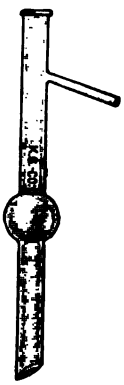
Distillation Adapter, H-J., to fit the ordinary flask for making distillations. Replaces the regular distillation flask with side delivery tube, which is easily broken in the laboratory as well as during shipment.

It is connected to the flask through a rubber or cork stopper, forming a tight but non-rigid joint, thus greatly lessening the liability to injury when used in the laboratory. The dissectibility of the Adapter and flask has many advantages; for example: Shipping breakage reduced to a minimum; flask may be easily removed for refilling without disturbing other connections; Adapter may be transferred to other flasks if desired; in case either the Adapter or flask is broken, the cost of replacing that part is less than the cost of a complete new distillation flask; when not in use the


5525a

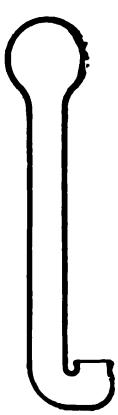

5525b

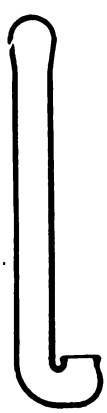

5527a


5527c

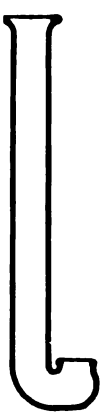

5527d

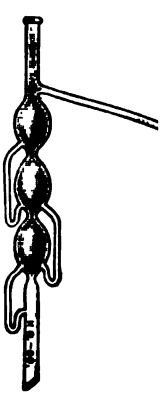

5690

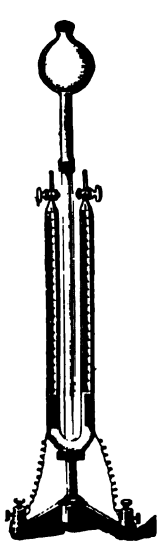

5536

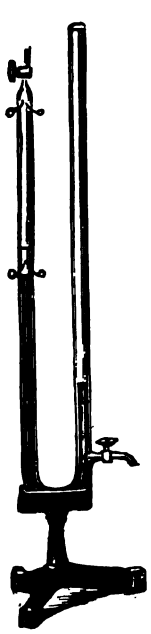

5537

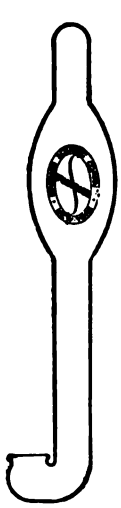

5539

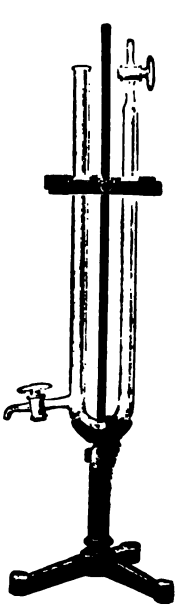

5538

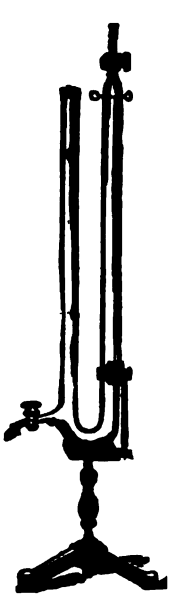

5530


5716b


5720


5535


5717


5718

Adapter may be removed and put in a suitable place without much fear of injury, but the safety of a distillation flask is always a source of great care. If desired we can supply rubber or cork stoppers for the top of the Adapter, as well as for the stem which fits into the flask. In ordering, please give inside neck dimensions of the flask, the diameter of the small end of the stopper desired, or simply give the standard number of the stopper itself. An extra charge is made for stoppers.
Made of heavy walled glass in two styles:

a With bent delivery tube and narrow stem, each ..... .50
b With straight delivery tube, and larger stem for inserting thermometer, each..... .50

Special Quantity Prices:

Doz. lots, per dozen	5.40
Lots of 50, per dozen	5.00
Lots of 100, per dozen	4.75

Distillation Tubes, Straight, with side delivery tube, for fractional distillation:

a Plain, regular quality ..... .25
b Plain, Pyrex glass, 12 inches 1.00
c With one bulb, regular quality..... .40
d With two bulbs, regular quality..... .50
e With two bulbs, Pyrex glass..... 1.75

Distillation Tubes, Glass, Le Bel and Henninger's:

Number of bulbs	2	3	4	5
Each	1.50	1.65	2.80	3.80

Drinking Tubes or Cups, Glass, McCollum's Design, for Rats and Mice, as used in animal experimentation. A convenient and successful form, siphon feed, developed after many different types had been tried and discarded. Can be easily cleaned and kept in a sanitary condition. Length overall about 9 inches. The elliptical bulb near the end of tube gives extra capacity:

a **Heavy Wall Gauge Glass,** doz..... 6.00
b **Medium Wall Glass,** doz..... 4.80
(Special prices will be made on large quantities. Quotation will be made on different sizes if desired.)

Drinking Tubes or Cups, Glass, McCollum's, similar to **No. 5535,** but with round bulb at top. Length about 9 inches:

a **Heavy Wall Gauge Glass,** doz..... 5.00
b **Medium Wall Glass,** doz..... 4.00
(Special prices will be made on large quantities. Quotation will be made on different sizes if desired.)

Drinking Tubes or Cups, Glass, for Rats and Mice, similar to McCollum's **Nos. 5535** and **5536,** but without bulb:

a **Heavy Wall Gauge Glass,** doz..... 4.00
b **Medium Wall Glass,** doz..... 3.25
(Special prices will be made on large quantities. Quotation will be made on different sizes if desired.)

Drinking Tubes or Cups, Glass, Siphon Form, Open Top, for Rats and Mice. A rubber stopper must be used for tightly closing the top end:

Length inches	4	5	6	9
Dozen	2.50	2.75	3.00	3.50

(Special prices will be made on large quantities. Quotation on other sizes will be made if desired.)

Drinking Tubes or Cups, Glass, Straight Tip, Open Top, for Mice and Rats. A rubber stopper must be used for tightly closing the top end:

Length inches	4	5	6	9
Dozen	2.00	2.25	2.50	2.75

(Special prices will be made on large quantities. Quotation on other sizes will be made if desired.)

Drying Tube, Vanier's, for zinc, as used in Vanier's Combustion Apparatus..... 1.50

Drying Tube, Vanier's, for sulphuric acid, as used in Vanier's Combustion Apparatus... 2.25

Electrolysis Apparatus, Simple Form, Detachable Graduated Tubes:

a With Platinum Electrodes 5.00
b With Carbon Electrodes 4.00

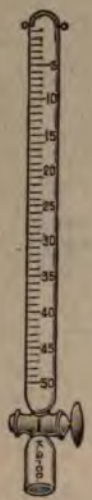
Electrolysis Apparatus, Hoffmann's, Ungraduated, with detachable electrodes:

a With Platinum Electrodes 7.50
b With Carbon Electrodes 6.00
c With Copper Electrodes 6.00
d Supporting Stand with clamp and binding posts 2.50

Electrolysis Apparatus, Hoffmann's, Graduated, large size, with detachable electrodes, and glass stopcocks:

a With Platinum Electrodes 15.00
b With Carbon Electrodes 12.50
c With Copper Electrodes 12.50
d Iron Support with binding posts..... 3.00


5725


5738


5745a


5745b


5747


5778


5780


5735


5740


6310


5900


5895


5758


5785


5764a

5890


6318c

6320


6319c


6319b


6323


6319a

6190

5958

5960

5716 **Electrolysis Apparatus, Hoffmann's,** for water, hydrochloric acid and ammonia, with glass stopcocks, mounted on iron support with binding posts:
a Ungraduated 12.50
b Graduated, volumetric 15.00

5717 **Electrolysis Apparatus, Hoffmann's,** for showing volumetric composition of hydrochloric acid, with glass stopcocks, one at top and one at side, mounted on support..... 15.00

5718 **Electrolysis Apparatus, Hoffmann's** with platinum electrodes, and stopcocks at top and bottom, for volumetric synthesis of ammonia and water, with support..... 10.00

5720 **Electrolysis Apparatus, Hoffmann's,** with stopcock at top and one at bottom, and two sets of platinum electrodes, one at top and one at middle of closed tube, for decomposition and synthesis of water..... 16.00

5722 **Lecture Apparatus, Hoffmann's,** glass tube with stopcocks, for demonstrating the fixed proportions of combining hydrogen and chlorine in forming hydrochloric acid:
a With support 7.50
b Without support 6.00

5725 **Eudiometer, Bunsen's,** with platinum electrodes:

Capacity cc	50	50	100	200
Subdivided by	1/5	1/10	1/5	1/5
Each	3.00	3.50	4.25	5.25

5730 **Eudiometers, Bunsen's,** similar to 5725, but graduated in millimeters:

Length of graduations	300	500	800
Each	4.00	4.75	5.50

5732 **Eudiometer, Hoffmann's,** with graduated arm, stopcock at top and one at bottom, platinum electrodes at top 16.00

5735 **Eudiometter, Ure's,** with platinum electrodes:

Capacity cc	50	100
Subdivided by	1/5	1/5
Each	3.50	4.00

5738 **Eudiometers, Mitcherlich,** with glass stopcock and platinum electrodes:

Capacity cc	50	100
Subdivided by	1/5	1/5
Each	5.25	6.50

5740 **Extraction Apparatus, Soxhlet's, Tubes Only:**

Diam. mm	30	38	50
a Regular quality	1.80	2.40	3.50
b Pyrex glass	..	5.00	..

5745 **Extraction Apparatus, Soxhlet's,** complete with bulb condenser, extraction tube and wide mouth flask:

Diam. mm	30	38	50
a With Cork Stoppers	4.90	5.25	6.75
b With Ground Glass Joints	6.75	7.50	9.00

5747 **Extraction Apparatus, Soxhlet's,** similar to 5745b, but with Hopkin's Condenser in place of bulb condenser:

Diam., mm	30	38	50
Each	7.50	8.25	9.75

5758 **Extraction Thimble, Glass,** round bottom with perforations:

Height mm	80	80	123
Diam. mm	25	33	43
Each	.50	.75	1.10

5762 **Extraction Thimbles, Filter Paper, Whatman's,** seamless, free from fat, in boxes of 25:

Size mm	10x50	19x90	22x80	26x60	25x80	33x80	25x100
Single thickness	3.15	3.15	3.15	3.15	3.55	3.55	4.40
Double thickness	5.28	5.28	5.28	5.28	5.92	5.92	7.36

5764 **Extraction Condensers, Spherical, Copper,** tinned inside and nickel plated outside, about 4 in. diam.:
a One Bulb 3.50
b Two Bulbs 10.00

5765 **Extraction Tube, Plain, Pyrex Glass,** 9 inches long, diam. of body 1¼ inches..... .50

5770 **Extraction Apparatus, Soxhlet's,** copper bath, tinned inside, 23x4x4½ inches, with 6 holes each 2½ in. diam., adjustable racks..... 28.00

5772 **Extraction Apparatus, Soxhlet's,** improved form, for hot water as used in Beet Sugar Laboratories. Copper, tinned inside, 23 inches long, adjustable from 27 to 34 inches in height 33.00

5776 **Extraction Apparatus, Soxhlet's Round Bath,** 12 inches diam., copper, with 6 openings each 2½ inches diam., provided with concentric rings and water level attachment. Upright support stands 21 inches above bath, and is provided with two adjustable clamp brackets each holding 6 extractors. Adjustable ring burner for gas, with tripod support, are included 33.00

5778 **Extraction Apparatus, Knorr's,** complete with condenser, extraction tube and Knorr's flask 9.80

5780 **Extraction Apparatus, Ringer's,** with Hopkin's condenser and extraction apparatus for continuous extraction from liquid media, all joints ground air-tight. Diam. of extraction tube 38 mm 12.00

5782 **Extraction Apparatus,** as used in Food Laboratories, Bureau of Chemistry, U. S. Dept. of Agriculture:
Complete
a Cylinder only
b Condenser only
c Thimble only

5785 **Extraction Flasks, Sy's,** large neck, with trough for mercury:

Capacity cc	100	150	200	250
Each	.75	1.00	1.10	1.25

5787 **Extraction Condenser,** Underwriters' Laboratories model, for testing rubber insulation on wires

5788 **Extraction Apparatus, Electric Heated,** including 6 heating lamps with individual switches. Base 30½x5½x7 inches. Two uprights and two adjustable horizontal supports with six spring clamps for extractors and condensers

5790 **Extraction Apparatus, Digestion, Sy's Fumeless,** with four rings and burners for gas, on ring-stand

5792 **Extraction Apparatus, Reed's,** copper, for bark and wood extracts as used in tanning laboratories, complete with Soxhlet's spherical condenser

5795 **Extraction Apparatus, Electric Heated,** with 6 hot plates each 4½ inches diam., complete with 6 clamps, cord and plug (state voltage when ordering)

5865 **Files, Round,** rat-tail, as used for laboratory work:

Length inches	3	4	5	6	7	8
Each	.13	.17	.19	.22	.24	.26

5870 **Files, Triangular,** sharp edges, for cutting glass tubing:

Length inches	3	4	5	6	7	8
Each	.12	.13	.14	.16	.20	.27

5872 **Files, Flat:**

Length inches	3	4	5	6	7	8
Each	.25	.25	.30	.40	.65	.90

5875 **File Handles,** wood, doz.

5890 **Filter Rack and Compressor,** made of galvanized iron wire. Keeps filter away from glass funnel, and serves to squeeze the dregs:

Diam. inches	5	7	9	12
Each	60	.75	.90	1.25

5895 **Filter Tube, Glass, for Gooch Crucibles,** stem ground to a point:

Diam. mm	20	25	28	32	35	38
Each	.25	.30	.35	.45	.50	.60

5900 **Filter Tube, Glass, Fresenius',** with bulb, diam. 20 mm at top, inside

5905 **Filter Tubes, Glass,** for filtering through asbestos, glass wool or powder:

Length inches	6	8
Each	.20	.30

5912 **Filter Boat,** made of sheet nickel, for iron and steel analysis. Size ½x3 inches, doz.

5916 **Filter, Berkefeld Medical or Laboratory,** for use where liquids are to be sterilized, etc:

Size of cylinder inches	2½x5⅛	8x1	10x2
Each	4.75	7.50	9.00

5918 **Filtering Cone, Seamless Nickel,** perforated. Size 1½ in. diam.

5955 **Filter Paper, Alpha, White,** close texture, adapted for general laboratory use, in packages of 100 circular sheets. Samples sent on request:

Diam. inches	3	4	5	6	7	8	10	13	15	18	20
Package, each	.10	.13	.18	.23	.30	.38	.55	.90	1.25	1.65	2.00

In sheets 20x20 inches, per ream

5958 **Filter Paper, Climax, White, Rapid,** high grade, creped surface, in packages of 100 circular sheets. Samples sent on request:

Diam. inches	3	4	5	6	7	8	10	13	15	18	20
Package, each	.10	.13	.18	.23	.30	.38	.55	.90	1.25	1.25	2.00

In sheets 20x20 inches, per ream

5960 **Filter Paper, Lion, White,** creped surface, heavy and strong, medium texture, for rapid filtering, in packages of 100 circular sheets. Samples sent on request:

Diam. inches	3½	4	5	6	7	8	10	13	15	18	20
Package, each	.15	.17	.22	.30	.38	.46	.75	1.20	1.55	2.20	2.65

In sheets 20x20 inches, per ream

5965 **Filter Paper, White,** for clear rapid filtering. Uniform in texture and strength. Excellent quality for general laboratory work. In packages of 100 circular sheets. Samples sent on request:

Diam. inches	3	3½	4	4½	5	6	7
Package, each	.20	.22	.24	.28	.30	.40	.52
Diam. inches	8	10	13	15	18	20	24
Package, each	.66	.92	1.40	1.72	2.40	3.00	5.20

5966 In sheets 19x19 inches
Per quire
Per ream

00 **Filter Paper, Ashless (Double Washed) Baker's.** Washed in Hydrochloric and Hydrofluoric Acids. 100 circles in box:

a **No. 1 Quality:**
Thin, very rapid filtering, for general analytical work, very low in ash:

Diam. mm	55	70	90	110	125	150
Per box	.60	.75	.90	1.20	1.50	1.75

(The amount of Ash after incineration is shown on each box.)

b **No. 2 Quality:**
Dense, for filtering Barium Sulphate, Calcium Oxalate and other troublesome precipitates, also rapid filtering:

Diam. mm	55	70	90	110	125	150
Per box	.90	1.10	1.40	1.80	2.20	2.50

05 **Filter Paper, Single Washed, Baker's,** washed in Hydrochloric Acid only:

Diam. mm	55	70	90	110	125	150
Per box	.50	.60	.70	.90	1.10	1.20

10 **Filter Paper,** for Gooch Crucibles, Baker's Corrugated, for qualitative work:

Diam. mm	70	90	110	125	150
Per box	30	.35	.45	.55	.70
Diam. mm	200	250	330	400	450
Per box	.75	.90	1.50	2.00	2.50

80 **Filter Paper, B. & A.** Washed in hydrochloric and hydrofluoric acids, "A" quality, in boxes holding 100 circles:

Diam. cm	5½	7	9	11	12½	15
Ash in one piece, grams	.00001	.00002	.00003	.00005	.000065	.000093
Per box	1.20	1.40	1.70	2.15	3.40	4.20

90 **Filter Paper, Whatman, No. 1,** a high-grade chemical filter paper for general quantitative and qualitative work. This paper is made from high-class materials, is tasteless, free from chlorine, and has been so specially prepared as to render it **free from starch.** It, moreover, retains Barium Sulphate when properly precipitated. In packages of 100 circles:

Diam. cm	4.25	5.5	7	9	11	12.5
Ash in grams per circle	.00017	.00028	.00046	.00076	.0011	.0016
Per package	.16	.17	.20	.24	.28	.37
Diam. cm	15	18.5	24	27	32	
Ash in grams per circle	.0021	.0032	.0054	.0068	.0096	
Per package	.51	.71	1.25	1.48	2.30	

91 **Filter Paper, Whatman No. 2,** a paper similar in its general characteristics to No. 1 quality, but thicker, being about 50 per cent. heavier. It filters fine precipitates rapidly, the filtrate being clear and bright. A standard for analytical work. In packages of 100 circles:

Diam. cm	7	9	11	12.5	15	18.5	24
Ash in grams per circle	.0007	.0012	.0018	.0024	.0034	.0052	.0089
Per package	.27	.34	.42	.52	.74	1.04	1.78

Filter Paper, Whatman No. 5, this paper has been made of the purest material, and has been subjected to a special hardening process. It is very strong and close in texture, and will retain such fine precipitates as Barium Sulphate and Lead Sulphate, the latter even when freshly precipitated. In packages of 100 circles:

Diam. cm	5.5	7	9	11	12.5	15	18.5
Per package	.20	.27	.34	.41	.54	.75	1.11

Filter Paper, Whatman No. 30. This filter paper is of the same high quality as the foregoing grades, but has been so treated as to remove as far as possible by Hydrochloric Acid such chemical salts as are normally contained in the fiber. This paper, having low ash and close texture, is more suitable for quantitative work than No. 1. In packages of 100 circles:

Diam. cm	7	9	11	12.5	15	18.5
Ash in grams per circle	.00012	.0002	.0003	.0004	.00057	.00087
Per package	.68	.90	1.20	1.50	1.90	2.70

Filter Paper, No. 190, White, creped, heavier than "Climax," but more open and rapid, in packages of 100 circular sheets. Samples sent on request:

Diam. inches	3½	4	5	6	7	8	10	13	15	18	20
Package, each	.13	.15	.20	.25	.35	.44	.63	1.00	1.40	1.90	2.30

In sheets 20x20 inches, per ream 9.55

Prices and information concerning other grades of **Whatman's Filter Papers,** will be sent on request.

Filter Cones, Porcelain (Coors), glazed except rims, with holes about 1 mm diam:
Size No. 3, diam. 50 mm, height 43 mm ..... .90
Size No. 4, diam. 63 mm, height 62 mm 1.10

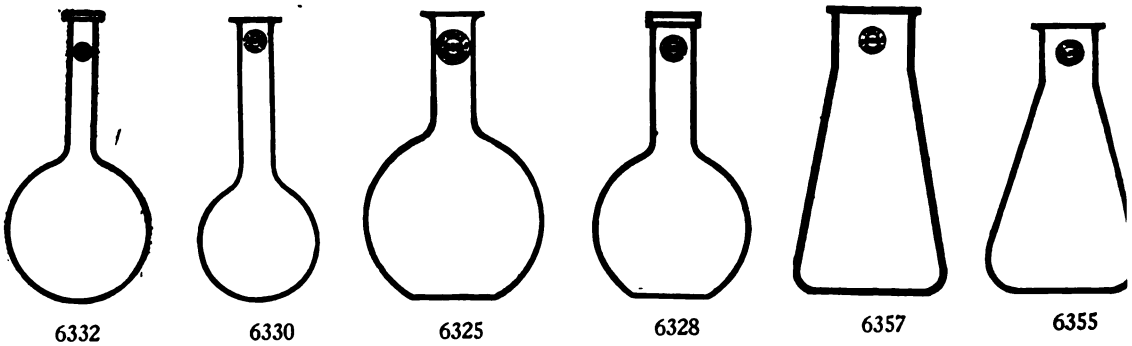
b **Filter Plates, Hirsch, Glazed Porcelain,** perforated, beveled edges, for use in funnels:

Ohio:

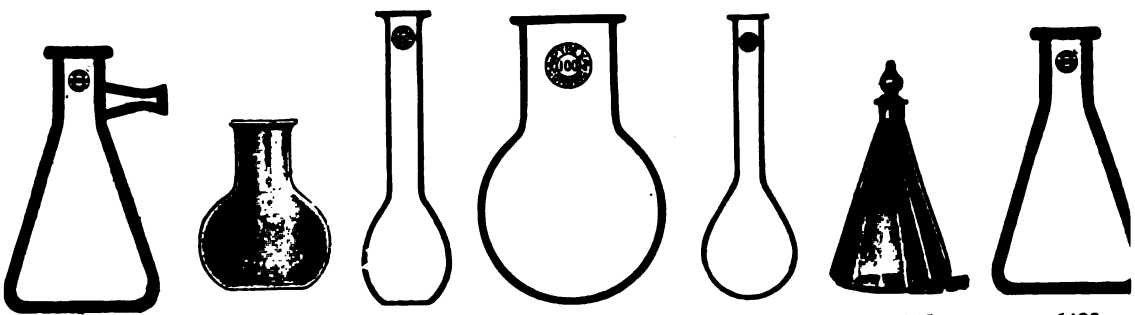
Size No.	1	2	3
Diam. mm	25	38	50
Each	.20	.25	.30

2 **Finger Cots, Gum Rubber,** doz ..... .75

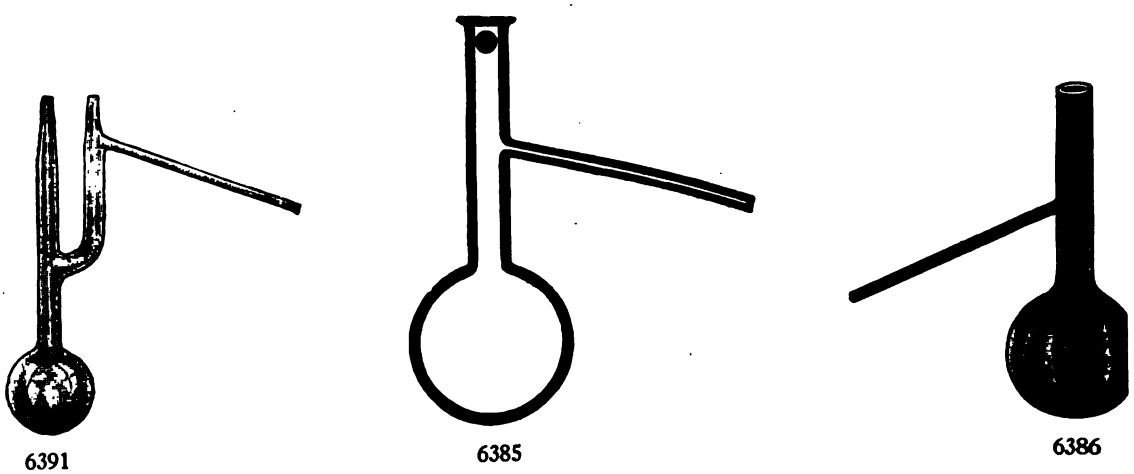
5 **Filter Tube, Porous Clay (Coors),** closed on one end with flange on other end. Diam. tube 20 mm; flange 50 mm; inside diam. 16 mm; length 115 mm ..... .80



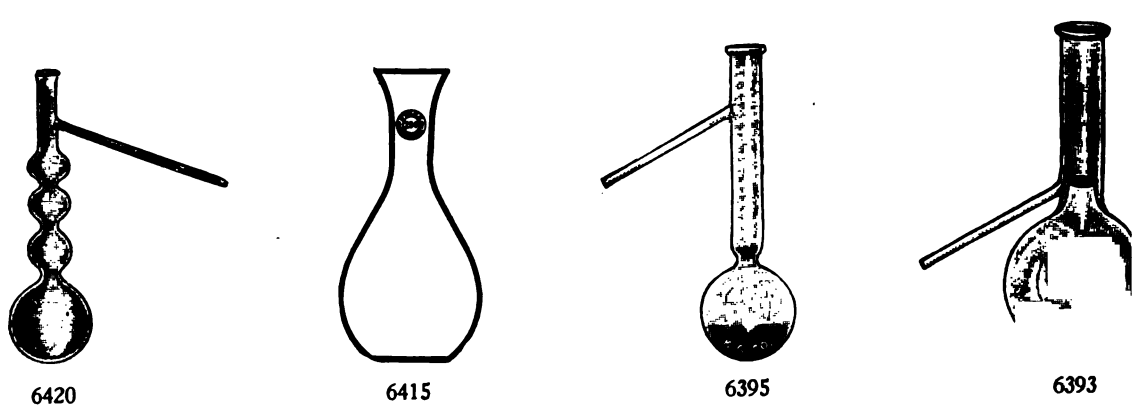
6332 6330 6325 6328 6357 6355



6425 6370 6377b 6372 6375 6365 6423



6391 6385 6386



6420 6415 6395 6393

Filter Tube, Pyrex Glass, plain, straight, 6 inches long:

Diam. body inches	1	1⅛	1¼	1½
Each	.40	.45	.50	.65

Filter Pumps (Aspirators), on Base:

a Plain 5.00
b With Vacuum Gauge 12.00
c With Vacuum Gauge and Stopcocks 15.00

Filter Pumps, Glass:

a **Geissler's** 1.75
b **Muencke's**, with one suction tube 2.50
c Ditto, with two suction tubes 3.00

Fire Extinguisher, Pyrene. Should be on wall of chemical laboratory ready for instant use 18.00

Flash-Point Tester, Foster's, for Illuminating Oils, complete with thermometer graduated to 190° F., and alcohol lamp 18.00

Flash-Point Tester, for Illuminating Oils, Elliot's, heavy copper, adopted by many states 10.00

Flasks, Balloon, Short Ring Neck, Pyrex Glass:

Capacity cc	200	500	1,000	1,500	2,000
Each	.28	.38	.55	.66	.78
No. in case	144	72	36	24	18
Stopper No.	3	6	8	9	10

Flasks, Flat Bottom, Florence or Boiling, vial mouth:

a **Resistance Glass:**

Capacity cc	30	60	120	150	180	250	300
Each	.11	.12	.15	.16	.17	.18	.20
Capacity cc	360	500	750	1,000	1,500	2,000	
Each	.22	.24	.28	.33	.38	.50	

b **Perfection Glass:**

Capacity cc	30	60	120	150	180	250	300
Each	.15	.16	.20	.21	.22	.23	.25
Capacity cc	360	500	750	1,000	1,500	2,000	
Each	.27	.30	.36	.40	.60	.80	

c **Nonsol Glass:**

Capacity cc	30	60	120	180	250
Each	.20	.22	.26	.28	.30
*No. in case	144	144	360	288	144
Capacity cc	350	500	700	1,000	2,000
Each	.38	.40	.50	.55	1.20
*No. in case	144	144	72	72	36

d **Pyrex Glass:**

Capacity cc	50	100	150	200	300	400
Each	.17	.18	.20	.22	.25	.27
*No. in case	192	168	108	144	96	84
Stopper No.	0	1	1	3	4	4
Capacity cc	500	700	1,000	1,500	2,000	
Each	.30	.36	.43	.51	.60	
*No. in case	72	36	36	24	18	
Stopper No.	6	6	7	7	8	

Flasks, Ring Neck, Flat Bottom:

a **Resistance Glass:**

Capacity cc	30	60	120	150	180	250	300
Each	.12	.14	.16	.17	.18	.20	.22
Capacity cc	360	500	750	1,000	1,500	2,000	
Each	.24	.27	.30	.35	.42	.60	

b **Perfection Glass:**

Capacity cc	30	60	120	150	180	250	300
Each	.16	.18	.22	.23	.24	.26	.28
Capacity cc	350	500	750	1,000	1,500	2,000	
Each	.30	.35	.40	.45	.65	.90	

c **Nonsol Glass:**

Capacity cc	250	500	1,000
Each	.35	.45	.60
*No. in case	144	144	72

d **Pyrex Glass:**

Capacity cc	500	700	1,000	1,500	2,000
Each	.38	.47	.55	.66	.78
*No. in case	72	36	36	24	18
Stopper No.	5	6	7	7	8

6330 Flasks, Round Bottom, vial mouth:

a Resistance Glass:

Capacity cc	30	60	120	150	180	250	300
Each	.11	.12	.15	.16	.17	.18	.20
Capacity cc		360	500	750	1,000	1,500	2,000
Each		.22	.24	.28	.32	.38	.50

b Perfection Glass:

Capacity cc	30	60	120	150	180	250	300
Each	.15	.16	.20	.21	.22	.24	.25
Capacity cc		360	500	750	1,000	1,500	2,000
Each		.27	.30	.36	.42	.60	.75

c Nonsol Glass:

Capacity cc	120	250	500	1,000	
Each	.26	.30	.40	.55	
*No. in case	360	144	144	72	

d Pyrex Glass:

Capacity cc	50	100	150	200	300	400
Each	.17	.18	.20	.22	.28	.32
*No. in case	156	84	180	144	84	72
Stopper No.	1	2	3	3	4	4
Capacity cc	500	700	1,000	1,500	2,000	
Each	.37	.45	.56	.71	.79	
*No. in case	48	42	30	24	18	
Stopper No.	4	6	6	7	9	

6332 Flasks, Ring Neck, Round Bottom:

a Resistance Glass:

Capacity cc	30	60	120	150	180	250	300
Each	.12	.13	.16	.17	.18	.20	.22
Capacity cc		360	500	750	1,000	1,500	2,000
Each		.24	.26	.30	.36	.45	.60

b Perfection Glass:

Capacity cc	30	60	120	150	180	250	300
Each	.16	.18	.22	.23	.24	.26	.28
Capacity cc		360	500	750	1,000	1,500	2,000
Each		.30	.36	.40	.45	.70	.90

6355 Flasks, Erlenmeyer, usual form, narrow mouth:

a Resistance Glass:

Capacity cc	30	60	120	180	250	
Each	.12	.13	.15	.16	.18	
Stopper No.	0	3	3	3	4	
Capacity cc	360	500	750	1,000	2,000	
Each	.20	.23	.28	.35	.56	
Stopper No.	6	6	7	7	9	

b Perfection Glass:

Capacity cc	30	60	120	180	250
Each	.15	.16	.20	.21	.23
Capacity cc	360	500	750	1,000	2,000
Each	.28	.30	.38	.45	.72

c Nonsol Glass:

Capacity cc	60	120	180	250	350
Each	.22	.26	.28	.30	.38
*No. in case	144	360	288	144	144
Capacity cc	500	700	1,000	2,000	
Each	.40	.50	.60	1.20	
*No. in case	144	72	72	36	

d Pyrex Glass:

Capacity cc	25	50	100	150	200	250	300
Each	.16	.16	.18	.18	.20	.22	.25
*No. in case	360	276	180	252	144	132	132
Stopper No.	00	1	3	4	5	5	6
Capacity cc		500	600	750	1,000	1,500	2,000
Each		.29	.31	.34	.42	.51	.60
*No. in case		72	60	48	36	24	24
Stopper No.		6	6	7	8	9	10

6357 Flasks, Erlenmeyer, Wide Mouth, Pyrex Glass:

Capacity cc	250	500	750	1,000	2,000
Each	.22	.29	.34	.42	.60
*No. in case	132	60	48	36	24
Stopper No.	7	10	10	11	13

6365 Flasks, Erlenmeyer, With Ground Glass Stopper:

Capacity cc	125	250	500	1,000
Each	.60	.80	1.00	1.50

6370 Flasks, Extraction, Flat Bottom, vial mouth:

a Resistance Glass:

Capacity cc	50	100	150	250
Each	.18	.20	.21	.30

(Continued)

Flasks, Extraction—(Continued).

b Nonsol Glass:

Capacity cc	120	195	250	
Each	.30	.36	.40	
No. in case	360	288	144	

c Pyrex Glass:

Capacity cc	50	100	150	250	500	750	1,000	2,000
Each	.16	.18	.19	.20	.29	.36	.54	.98
No. in case	168	120	108	120	60	48	36	18
Stopper No.	6	6	7	8	10	10	10	11

Flasks, Extraction, Round Bottom, Wide Neck, Vial Mouth:

a Resistance Glass:

Capacity cc	50	100	150	250
Each	.18	.20	.21	.30

b Pyrex Glass:

Capacity cc	100	2,000
Each	.18	.69
*No. in case	120	18
Stopper No.	6	13

Flask, Extraction, Conical, with mercury seal:

Capacity cc	100	150	250
a Pyrex glass, each	2.00	2.25	2.50
b Regular quality	.60	..	..

Flasks, Kjeldahl's, Round Bottom:

a Resistance Glass, Long Neck:

Capacity cc	200	500	800	1,000
Each	.30	.50	.60	.76

b Pyrex Glass, Long Neck:

Capacity cc	300	500	650	800
Each	.28	.37	.42	.45
No. in case	60	36	36	36
Stopper No.	5	6	6	7

c Pyrex Glass, Short Neck:

Capacity cc	300	500	800
Each	.28	.37	.45
No. in case	60	48	36
Stopper No.	5	6	7

Flasks, Kjeldhal's, Flat Bottom:

a Resistance Glass, Short Neck:

Capacity cc	100	200	300	500	800	1,000	1,500	2,000
Each	.22	.26	.34	.46	.52	.68	.84	.96

b Pyrex Glass, Long Neck:

Capacity cc	300	500
Each	.28	.37
No. in case	60	36
Stopper No.	5	6

Flasks, Distillation, With Side Delivery Tube at about middle of neck:

a Resistance Glass:

Capacity cc	30	60	125	250	500	1,000	2,000
Each	.30	.40	.50	.75	.92	1.35	2.00

b Nonsol Glass:

Capacity cc	120	250	500	1,000
Each	.85	.95	1.25	1.50
*No. in case	72	36	36	24

c Pyrex Glass:

Capacity cc	25	50	100	125	200	250
Each	.36	.40	.45	.50	.55	.60
*No. in case	108	108	56	84	72	36
Stopper No.	1	1	2	3	3	3
Capacity cc	300	500	1,000	1,500	2,000	
Each	.65	.70	1.18	1.45	1.60	
*No. in case	40	32	24	18	10	
Stopper No.	4	4	6	7	9	

Flasks, Distillation, Resistance Glass, with side delivery tube. In ordering specify whether high or low delivery tube is desired:

a High Delivery Tube.

b Low Delivery Tube.

Capacity cc	20	60	125	250	500	1,000
Each	.30	.40	.50	.75	.92	1.35

6455


6500

6428

6430

6450


6610a


6530


6525b


6535


6630


6575


6545


6550


6560


6620a


6555


6615a


6540


6615b

6391 **Flasks, Distillation, Claissen's,** with double neck and side delivery tube:

a Resistance Glass:					
Capacity cc	60	125	250	500	
Each	1.00	1.45	1.60	2.00	
b Pyrex Glass:					
Capacity cc	50	125	250	500	1,000
Each	1.20	1.60	1.80	2.20	3.00

6392 **Flasks, Distillation, Engler's,** with side delivery tube. Standard dimensions for oil distillation:

a Resistance Glass:			
Capacity cc	100	200	250
Each	.46	..	.60
b Pyrex Glass:			
Capacity cc	100	200	250
Each	.50	.60	.68
No. in case	56	72	60
Stopper No.	1	2	2

6393 **Flasks, Distillation, Lung's,** with trap and side delivery tube:

Capacity cc	125	250	500
Each	1.50	1.70	2.00

6394 **Flasks, Distillation, With Three Necks, Pyrex Glass:**

Capacity cc	500	1,000	2,000
Each	2.50	4.00	5.00

6395 **Flasks, Distillation, Hempel's,** with side delivery tube, 500 cc:

a Resistance Glass, with contraction	1.20
b Pyrex Glass, without contraction	1.50
c Pyrex Glass, with contraction	1.75

6415 **Flasks, Copper Determination,** with flaring neck:

Capacity cc	120	180	250
a Resistance Glass	.22	.27	.31
b Nonsol Glass	..	.32	.38
c Pyrex Glass	..	.25	.30

6420 **Flasks, Distillation, Ladenburg's,** with three bulbs in neck:

Capacity cc	125	250	500	1,000
a Resistance Glass	.90	.140	1.75	2.40
b Pyrex Glass	1.00	1.40	2.00	..

6423 **Flasks, Filtering, Erlenmeyer Form, Heavy Wall,** plain, without side tube:

a Resistance Glass:				
Capacity cc	250	500	1,000	2,000
Each	.23	.32	.45	.75
b Pyrex Glass:				
Capacity cc	250	500	1,000	2,000
Each	.40	.54	.84	1.20
No. in case	120	72	30	20
Stopper No.	6	6	7	9

6425 **Flasks, Filtering, Heavy Wall, Erlenmeyer Form, With Side Tube:**

a Resistance Glass:				
Capacity cc	250	500	1,000	2,000
Each	.47	.67	1.00	1.95
b Pyrex Glass:				
Capacity cc	250	500	1,000	2,000
Each	.70	.95	1.45	2.40
*No. in case	96	60	24	15
Stopper No.	6	6	7	9

6428 **Flasks, Filtering, With Side Tube and Glass Stopcock:**

Capacity cc	250	500	1,000	2,000
Each	1.90	2.25	3.75	5.25

6430 **Flask, Filtering, Erlenmeyer Shape,** 1,000 cc, heavy glass with side tube at top, and a side tube with stopcock near bottom on opposite side 3.00

6432 **Flasks, Filtering, Erlenmeyer Shape,** heavy glass with side tube and glass funnel ground into neck:

Capacity cc	200	1,000
Each	2.70	4.10

Flasks, Volumetric, Resistance Glass, accurately graduated with one mark on neck:

Capacity cc	10	25	50	100	200
6450 Without Glass Stopper	.40	.60	.60	.60	.65
6455 With Glass Stopper	.65	.75	.75	.95	1.00
Capacity cc	250	300	500	1,000	2,000
6450 Without Glass Stopper	.65	.70	.90	1.20	2.00
6455 With Glass Stopper	1.05	1.15	1.25	1.45	2.35

6460 **Flasks, Volumetric, Resistance Glass,** accurately graduated with two marks on neck and glass stopper:

Capacity cc	100	250	500	1,000	2,000
Each	1.45	1.50	2.00	2.25	3.00

6465 **Flasks, Volumetric, Pyrex Glass,** with mark on neck for graduation:

Capacity cc	100	250	500	1,000	2,000
Each	.34	.48	.64	.88	1.14
*No. in case	84	72	48	30	24

6470 **Flasks, Volumetric, Pyrex Glass,** graduated according to specifications of U. S. Bureau of Standards:

Capacity cc	100	250	500	1,000	2,000
Each	1.00	1.25	1.50	2.00	2.50

6475 **Flask, Porous Clay (Coors),** 125x200 mm 1.65

6480 **Flasks, Volumetric, Pyrex Glass,** wide neck for phosphoric acid determination, 200 cc.. .90

6485 **Flasks, Volumetric, Pyrex Glass,** short neck and flaring top for sugar analysis, 100 cc... .80

6490 **Flasks, Volumetric, Giles',** with bulb, glass stopper and two graduation marks, for making normal solutions, the 10% extra volume in the bulb and neck facilitating titration, leaving an exact volume for correction:

Capacity cc	500–50	1,000–100	2,000–200
Each	2.60	3.60	5.25

6495 **Flasks, Wash Bottle,** heavy wall and ring neck, without fittings:

Capacity cc	250	500	1,000	2,000
Each	.22	.32	.43	.68

6500 **Flask, Rubber Extraction, Pyrex Glass,** 500 cc, 72 in case, stopper No. 9 ..... .32

6505 **Flasks, Soil Analysis,** with long condenser tube ground-in with air-tight joint:

Capacity cc	200	250	500
Each	2.40	2.70	3.00

6510 **Flasks, Sugar,** with two graduations, without stopper:

Capacity cc	50–55	100–110	200–220
Each	.42	.52	.76

6515 **Flasks, Sugar, Kohlrausch,** with enlarged neck:

Capacity cc	100	200	200.6	201.2	201.4	400	500
Each	.60	1.00	1.00	1.00	1.00	1.50	1.75

6520 **Flask, Sugar, Bates',** with flaring top, 100 cc ..... .90

6525 **Flasks, Sulphur,** with side delivery tube bent downward at right angles:

Capacity cc	250	500	1,000
a Resistance Glass	.90	1.20	1.70
b Pyrex Glass	..	.75	..

6530 **Flasks, Sulphur, Johnson's,** with heavy ring neck:

a Resistance Glass:
Capacity 275 cc, each ..... .40

b Nonsol Glass:
Capacity 250 cc, each ..... .60

c Pyrex Glass:
Capacity 275 cc, each ..... .32

6535 **Flask Heaters,** sheet iron, with asbestos strips and openings in side for ventilation:

Diam. inches	4½	5	6	7⅛	8¼	10½
Each	1.00	1.25	1.50	1.75	2.00	2.50

6540 **Flask Heater, Electric,** for 1,000 cc flask, complete with tripod, incandescent lamp 110 volts, cord and socket (without flask) 12.00

Forceps, Brass, length about 5 inches:

6545 **Straight Points** ..... .25

6550 **Curved Points** ..... .25

Forceps, Brass, With Ivory Tips, length about 4 inches:

6555 **Straight Tips** 1.75

6560 **Curved Tips** 2.00

6565 **Forceps, Solid Nickel:**

a Straight 1.25

b Curved 1.25

6570 **Forceps, Steel,** fine points, nickel plated ..... .60

6575 **Forceps, Steel,** plain:

5-inch ..... .15

6-inch ..... .18

6580 **Forceps, Platinum Tips,** straight, about 5 inches long (approx.) 15.00

6610 **Funnels, Glass, 60°, Bunsen's,** ground to point, hand made:

a Long stem, about 6 inches.

b Short Stem.

Diam. mm	25	40	50	65	75	90	100
Each	.24	.24	.28	.30.	.34	.36	.40
Diam. mm	125	150	175	200	225	250	300
Each	.54	.68	.94	1.04	1.42	1.80	2.50

6612 Funnels, Glass, Bunsen's, with extra long and thin stem:

Diam. mm	25	40	50	65	70
Each	.24	.24	.28	.30	.34
Diam. mm	75	90	100	125	150
Each	.34	.36	.40	.54	.68

6615 Funnels, Glass, pressed, short stems, fire polished:

Diam. inches	2½	2¾	3¾	4¼	5¾	7¼	8¾	10¼	13
a Plain	.16	.18	.20	.25	.40	.60	.90	1.50	3.00
b Ribbed	.14	.15	.16	.23	.34	.48	.75	1.20	2.60

6618 Funnels, Glass, Bunsen's, 60°, with constriction in top of stem, ground to point:

Diam. mm	50	65	75	100
Each	.28	.30	.34	40

6620 Funnels, Glass, Without Stems, as used for sugar analysis:

Diam. inches	2¾	3¾	4¾	5¾
a Plain	.25	.30	.40	.50
b Ribbed	.20	.25	.30	.40

6628 Funnels, Glass, Carbon Filter, pointed stem for use with Gooch Crucibles:

Diam mm	20	25	28	32	35	38
Each	.20	.24	.40	.56	.64	.72

6630 Funnels, Glass, With Bulb, for filtering through glass wool:

Diam. inches	3½	4½	5½	7	8½	10
Each	.60	.75	.85	1.00	1.50	2.50

Funnels, Buchner, Porcelain, with fixed perforated plate and straight walls.

6640a Coors:

Size No.	0	1	2	2a	3	4	4a	5
Diam. mm	48	59	85	108	112	150	160	200
Height mm	81	85	135	140	167	215	200	255
Distance plate from rim	20	25	38	43	33	40	56	49
Each	.75	.90	1.50	1.95	2.10	3.60	4.20	5.40

6640c Ohio:

Diam. mm	50	60	80	100	150	200	250	300
Height of walls mm	20	25	30	40	60	90	100	120
Each	.75	1.00	1.25	1.75	2.70	5.50	8.50	14.00

Funnels, Hirsch, Porcelain, with fixed perforated plate.

6642a Coors:

Size No.	000	00	0	1	2	3	4
Diam. mm	50	75	92	103	120	140	163
Height mm	64	82	105	122	140	165	190
Diam. perforated plate mm	36	44	57	59	59	59	112
Dist. plate from rim	10	20	26	34	50	65	38
Each	.60	.75	.90	1.20	1.50	2.10	2.70

6655 Funnels, Hard Rubber:

Capacity ounces	2	3¾	8	14	25
Each	.55	.65	.95	1.20	1.50

6660 Funnels, Agateware, with handle:

Diam. inches	3¾	4¼	5½	7½	9
Each	.50	.60	.70	.80	.90

6665 Funnel, Agateware, Wide Mouth, suitable for transferring salts into jars and bottles having wide mouth ..... .50

6670 Funnels, Copper, plain:

Capacity cc	125	250	500	1,000
Each	1.25	1.50	1.75	2.00

6675 Funnel, Copper, Ribbed, 4 in. diam., for sugar analysis 1.25

6680 Funnel, Copper, Suspended in Ring Burner, including iron support 20 inches high:

a **Single Wall** 8.00

b **Double Wall,** with constant water level attachment 14.00

6685 Funnel, Copper, With Coil, for hot water or steam, single wall 5.00

6700 Funnel, Hot Filtration, Double Wall, Plantamour's:

a **Tin** 4.00

b **Copper** 6.00

6705 Funnels, Copper, Hot Filtration, Koch's, on tripod:

a **Single Wall** 4.00

b **Double Wall** 6.00

6710 Funnels, Dropping, Walter's, for delivering one drop at a time:

Capacity 60 cc 2.25

6730 Funnels, Separatory, Globe Shape, Long Stem, with glass stopper and stopcock:

Capacity cc	30	60	125	250	500	750	1,000	2,000
a Plain Glass Stopper	1.45	1.55	1.95	2.35	2.85	3.25	4.00	6.50
b With Air Vent in Glass Stopper	...	...	2.50	3.00	3.60	...	5.00	7.75

6735 Funnels, Separatory, Globe Shape, Short Stem, Heavy Glass, with glass stopper and stopcock:

Capacity cc	500	1,000	2,000	4,000
Each	7.00	9.00	12.00	20.00


6642


6640


6760

6752

6765


6730a


6750a


6750b

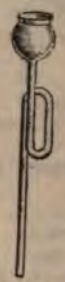

6705b


6890


6785


6795a


6780


6795b


6800a

6910


6895


6812


6832


6822

Funnels, Separatory, Cylindrical, open top:

Capacity cc	30	60	100	125	150	200	250
Each	1.25	1.45	1.75	1.90	2.00	2.10	2.20

Funnels, Separatory, Funnel or Bell Shape, open top:

Capacity cc	25	50	75	100
Each	1.20	1.50	1.65	1.90

Funnels, Separatory, Angle 60°, heavy glass, with stopcock:

Diam. inches	4	6	8
Each	4.00	6.00	7.50

Funnels, Separatory, Cylindrical, with glass stopper and long stem:

Capacity cc	60	125	250	300	500	1,000	1,250
a Plain	1.55	1.95	2.50	2.80	3.00	4.00	4.75
b Graduated	...	3.10	4.75	...	5.85	7.80	...

Funnels, Separatory, Cylindrical, with glass stopper and short stem:

Capacity cc	500	1,000
Each	3.75	4.90

Funnels, Separatory, Squibb's, pear shaped, with glass stopper:

Capacity cc	125	250	500	1,000	2,000
Each	2.35	3.45	4.30	6.50	10.50

Funnels, Separatory, for ether separations in nickel determination in iron and steel analysis:

a **With Glass Stopper and Stopcock,** capacity 160 cc 2.70
b **Carnot's,** body 200 cc, bulb 100 cc 4.50

Funnel, Straus', With Glass Stopcock, open top, for estimating lactic acid in gastric juice 1.90

Funnel, Separatory, with graduated tube and bulb, for sulphonation test of creosote, 125 cc, as used in the U. S. Forest Service 4.50

Funnel, Separatory, Terrapin, for immiscible liquids, with ground glass stopper and stopcock. Capacity 200 cc 4.50

Funnel Tubes, glass, straight stem:

Length mm	200	250	300	400
Conical Top 60°:	.15	.16	.18	.20
Thistle Top:	.12	.13	.14	.15

Funnel Tubes, Safety, with bend in stem:

Length mm	200	300	400
a **Conical Top 60°**	.35	.38	.42
b **Thistle Top**	.33	.36	.40

Funnel Tube, Safety, Double Bend, thistle top, with two bulbs. Length 300 mm ..... .48

Funnel Tube, Babo's, with thistle top 1.75

Funnel Tubes, Safety, thistle top, with bend and bulbs, length about 300 mm:

a **One Bulb** ..... .40
b **Two Bulbs** ..... .50

Funnel Tube, Safety, Double Bend and Short Stem, as used with Kipp's gas generator. Length 300 mm ..... .50

Furnace, Crucible, Hoskins Type FD-101, for use in vertical or horizontal position, for 110 and 220 volt circuits, A. C. or D. C. Size of heating chamber 2 in. diam x 2½ in. deep, 0.37 K. W.:

a **Furnace only** 28.00
b **Furnace and Rheostat** 40.00

Electric Furnace, Tube Form, Hoskins Type FD-302, tube form. The heat entirely surrounding the heating chamber, a uniform temperature is secured. The chamber measures 1¼ in. diam. x 12 in. long. Full load 0.55 K. W.:

a **Furnace only** 30.00
b **Furnace and Rheostat** 42.00

Furnace, Muffle, Hoskins Type FD-201 to 204:

Size of Heating Chamber	Furnace Only	With Rheostat
a 3⅛ x 2½ x 7 inches	70.00	84.00
b 4½ x 3 x 10 inches	85.00	101.00
c 5¼ x 3¾ x 12 inches	115.00	136.00
d 7½ x 5¼ x 14 inches	150.00	185.00

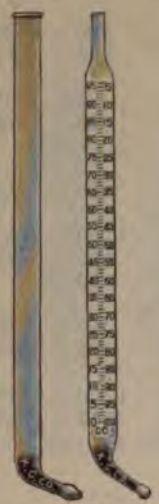
Furnace, Crucible, Fletcher's Injector, for gas:

a **No. 41 Type.** 6½ in. diam. outside, the inside dimensions being 3½ in. deep by 3½ in. diam. 12.00
b **No. 41a Type.** 9 in. diam. outside, the inside dimensions being 5½ in. deep by 4¾ in. diam. 15.00

Furnace, Crucible, Fletcher's, with Injector Gas Burner, consisting of pot, lid and burner mounted on cast-iron base. Gas supply pipe ⅜ in. Maximum gas consumption is about 24 cubic ft. per hour. Operates on illuminating, natural or gasoline gas without alteration. Accommodates No. 00 Crucible. Outside diam. 4⅛ in. Pot, inside, measures 2⅝ in. diam. by 2½ in. deep 7.50

Furnace, Combined Crucible and Muffle, for use with illuminating, natural or gasoline gas. Accommodates No. 6 crucible, or will hold about 12 lbs. of metal. Outside diam. 9½ in., inside dimensions of pot measuring 6½ in. deep by 6 in. diam. 27.50

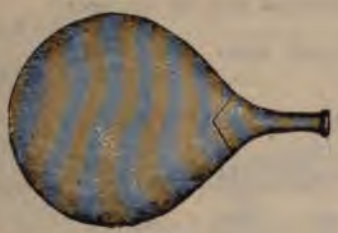

7630


7305a

7300

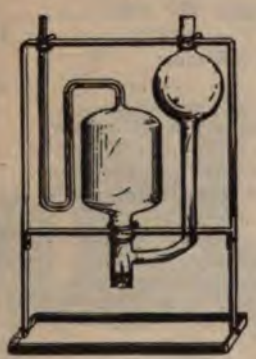

7310a

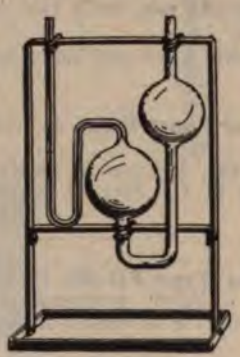

7320a

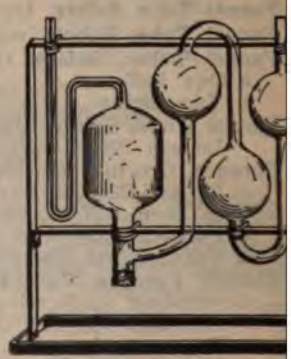

7405

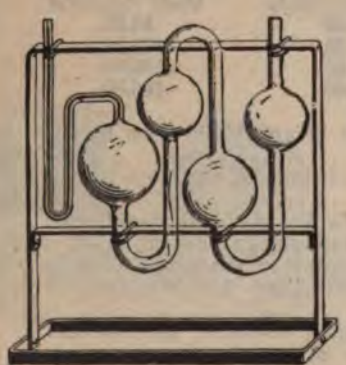

7470

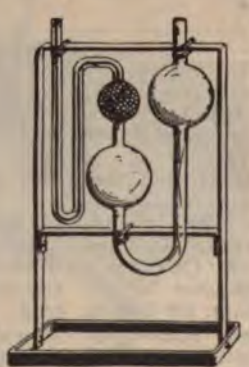

7370

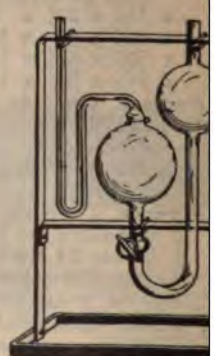

7330a


7330b


7330c


7330d


7335


7340

Gas Analysis Apparatus, Orsat, for CO_2, CO, and O_2, especially for use in testing furnace and flue gases. Includes 3 absorption pipettes, manifold tube with stopcocks, burette and aspirator bottle, in wooden carrying case 45.00

Gas Analysis, Williams' Model A, for analysis of combustible gases, in wooden case 17½x12x4 inches 60.00

Gas Analysis Apparatus, Williams' Model B, for analysis of flue gases, in wooden case 17½x9½x4 inches 45.00

Gas Balloons, glass, for weighing gases:
- a **Plain,** with two outlets 1.50
- b **With Glass Stopcock,** one outlet 2.25
- c **With Two Outlets** 2.25
- d **With Two Outlets** and glass stopcocks 3.75

Gas Burette, Hempel's, including one plain tube, and one graduated to 100 cc by fifths:
- a **Without stopcock** 4.00
- b **With Glass Stopcock** 5.50

Gas Burette, Bunte's graduated 50 cc by tenths, with two stopcocks:
- a **Without Water Jacket** 7.50
- b **With Water Jacket** 8.60

Gas Clock Regulator, with tube connections, the valve being controlled by lever action, shutting off the gas at the desired moment 7.50

Gas Collecting Tubes, 125 cc, with two stopcocks:
- a **Long Form** 3.75
- b **Short Form** 3.75

Gas Collecting Tube, with bulb in center and two stopcocks 3.75

Gas Pipette, Hempel's Absorption, with adjustable clamps on iron support:
- a **Simple Absorption,** for solid or liquid reagents 5.00
- b **Simple Absorption,** for liquid reagents only 4.50
- c **Double Absorption,** for solid and liquid reagents 6.00
- d **Double Absorption,** for liquid reagents only 6.00

Gas Pipette, Hempel's Simple Absorption for Ethylene, with glass beads, on iron support 6.50

Gas Pipette, Hempel's Simple Explosion, with glass stopcock and platinum electrodes, on iron support 11.00

Gas Pipette, Hempel's Explosion, with stopcock, platinum electrodes and separate leveling bulb and tube, on support 12.00

Gas Pipette, Hempel's Explosion, tall form with electrodes for producing oxygen and hydrogen, on iron support 12.50

Gas Pipette, Hempel's Double, for preparation of pure oxygen, on iron support 12.00

Gas Pipette, Winkler's, for Methane, on metal support with adjustable clamps 12.00

Gas Stopcock, Brass, for use with Gas Bags 7405 ..... 1.25

Gas Washing Bottles, Bunsen, with rubber stopper and tube:

Capacity cc	125	250	500
Each	.60	.75	.90

Gas Washing Bottles, Allihin's, double action, with ground-in stopper:

Capacity cc	250	500	1,000
Each	3.00	4.00	5.00

Gas Washing Bottle, Muencke's, wide mouth with ground-in tubes, 250 cc 3.50

Gasometers, Berzelius and Pepy's improved:

Capacity gallons	5	10
a **Copper**	32.00	40.00
b **Zinc**	27.00	33.00

Gas Meter, Constant Pressure, Laboratory Type, 2 cu. ft. capacity, with vertical guides and scale reading to 0.01 cu. ft. Includes stopcocks and manometer, pulleys and counterpoise 60.00

Gas Bags, Rubber, oval form, without stopcock:

Capacity gallons	1	2	3	5
Each	3.00	3.50	4.00	5.00

Gas Distributing Cocks, brass, mounted on heavy iron base:
- a With 2 outlets 4.00
- b With 3 outlets 5.00
- c With 3 outlets, including center tube 6.00
- d With 4 outlets 6.00
- e With 4 outlets, including center tube 7.00

Gas Generators, Kipp's, glass, complete with safety funnel tube, stopcock and glass stoppers:

Capacity cc	250	500	1,000	2,000
Each	10.00	12.00	15.00	20.00

Gas Generator, Oxygen, from oxone or sodium peroxide, the metal case measuring 9½ inches high 20.00

Gas Generator, Hydrogen, from hydrone 35.00

Gas Generating Bottles, or Flasks, heavy wall:

Capacity pints	½	1	2	4
Plain	.25	.35	.45	.60
Fitted With Rubber Stopper, Funnel and Delivery Tubes	.60	.70	.80	1.00


7415c


7415e


7512


7620


7415d


7415b

7642


7699


7670


7702


7696c


7701


7645

Gas Tank, Copper, with brass top, inlet and outlet tubes, stopcocks, pulleys and counterpoise. Capacity 10 gallons 35.00

Gases, Liquefied or Compressed in Cylinders. Prices on application:

Ammonia, Anhydrous, liquefied, in cylinders of 10 and 25 lbs.

Carbonic Acid, liquefied, in 20-lb. cylinder.

Chlorine, liquefied, in 100-lb. cylinders.

Sulphur Dioxide, liquefied, in 6-lb. cylinder.

Oxygen, compressed, high or low pressure.

Hydrogen, 200 cu. ft. cylinder, compressed to 1,800 lbs.

Coal Gas, compressed, 225 lbs. pressure.

Gas Washing Bottles, Dreschsel's, with ground-in stopper:

Capacity cc	100	150	250	500
High Form	1.25	1.50	2.00	2.25
Low Form	1.50	1.75	2.50	3.00

Gas Measuring Tubes, Bunsen's, straight form, closed at one end, graduated:

Capacity cc	25	50	100	200
Subdivided by	1/5	1/5	1/2	1
Plain	1.25	1.75	2.00	2.50
With Stopcock	3.00	3.25	3.50	4.00

Gas Regulator, Constant Pressure, dial form, for use with Gas Cylinders.

a Indicates the delivery as well as the residual pressure 35.00

b Indicates delivery only, for use with high pressure cylinders 25.00

Gauge, Combination, Vacuum and Pressure, Dial Form, 3½ in. diam., iron case with nickel plated trimmings, range 0-30 lbs. pressure, and 0-30 inches vacuum 10.00

Gauge, Differential (Pitot Tube), including brass tube and glass manometer with metric and English scale one-half meter long. Designed to measure the flow of liquids and gases 15.00

Gauge, Draft, V-Form, Pocket Size, with metal fittings, scale 6 inches long by tenths 10.00

Gauge, Draft, V-Form, with metal fittings and scale graduated to 1/10 inch:

Length inches	4	6	8	12	18	24
Each	3.50	4.50	5.00	5.50	6.00	10.00

Gauge, Pressure, for Air, Steam, or Water, Dial Form, 3½ inches diam., in iron case with nickel plated trimmings:

a Range 0-30 lbs. 7.50

b Range 0-100 lbs. 7.50

Gauge, Standard Test, Dial Form, 3½ in. diam., very accurate, with stopcock and nipple for attaching rubber tubing:

a **Pressure,** 0-100 lbs. 18.00

b **Vacuum,** 0-30 inches 18.00

c **Combined Pressure and Vacuum** as above 20.00

Gauge, Vacuum [Manometer], the glass U-tube being filled with mercury and provided with glass stopcock and adjustable metric scale with mirror, mounted on wooden support 20.00

Gauge, Vacuum, Dial Form, 3½ in. diam., iron case with nickel plated trimmings, range 0-30 inches 7.50

Glass Beads, with hole through center, lb. 2.00

Glass Cutter:

a **Simple Form,** with steel wheel ..... .20

b **Turret Form,** with 6 cutting wheels of hardened steel ..... .60

c **Diamond Point,** for cutting or writing on glass 7.50

Glass Cutter, Parker's, with copper head burner and gas supply tube 2.50

Glass Tubing Cutter, with lever arm and clamp, for attaching to table top 9.00

Glass Tube Cutter, for cutting inside of tubing 3/8 to 1-inch diam. to a depth of about 12 inches from end 1.50

Glass Tube Cutter, for cutting exterior surface of tube; can be used at any point regardless of length of tube 1.75

Glass Knife, highly tempered steel, wooden handle, as used by glassblowers in cutting glass tubing 1.50

Glass Plates, Circular, for covers:

Diam. mm	60	80	100	120	150
a **Plain Edges,** doz.	.75	1.00	1.50	1.80	2.00
b **Ground Edges,** doz.	1.00	1.25	2.00	2.40	2.75
c **Ground One Side,** plain edges, doz.	1.50	1.75	2.00	2.50	3.00

Glass Plates, Circular, With Opening, for use with stirring rod, plain edges:

Diam. mm	50	75	100	125	150
With Central Hole, doz.	4.00	4.50	5.00	5.50	6.00
With Side Slot, doz.	4.00	4.50	5.00	5.50	6.00

7845

7750

7755

7848

7930

7938

7915

Hydrometer
(See page 88

7940a

7935b

7935a

Glass Plates, Square, for covers, plain edges:

Size mm	50	75	100	150	200	250
Single Thick, doz.	.36	.48	.60	1.08	1.80	3.00
Double Thick, doz.	.60	.72	.84	1.20	2.40	3.60

[An extra charge is made if ground on one surface.]

Glass Plates, Colored, for flame tests, plain edges:

Size mm	50x50	50x75	75x75	75x100	100x100
a **Blue** [Cobalt], each	.10	.12	.15	.20	.25
b **Red,** each	.10	.12	.15	.20	.25

Glass Rod, resistance quality:

Diam. mm	2–3	3	4–5	6–7	8–13
a **Flint,** lb.	.80	.60	.48	.40	.40
b **Amber,** lb.	.92	.72	.60	.52	.48
c **Blue,** lb.	1.00	.80	.68	.60	.56

Glass Tubing, approximate number of feet to a pound:

Diam. outside mm	4	5	6	7	8	9	10	11	12	13	14
Regular wall ft.	63	47	38	31	27	23	21	19	17	17	15
Heavy wall ft.	50	36	28	23	19	17	15	13	12	8	8
Diam. outside mm	15	16	17	18	19	20	21	22	23	24	25
Regular wall ft.	14	13	12	12	11	7	6	6	6	5	5
Heavy wall ft.	7	7	6	6	5	5	5	5	4	4	4

Glass Tubing, Soft, resistance quality, free from lead, especially adapted for glass blowing and bending. Sizes refer to outside diam.

Diam. mm	3–4	5–6	7–8	9	10–11	12–14
a Regular Wall, lb.	1.20	1.00	.80	.50	.40	.40
b Heavy Wall, lb.	...	...	1.00	.65	.55	.55
Diam. mm	15-21	22–25	26–30	30–38	38–51	
a Regular Wall, lb.	.40	.40	.40	.40	.60	
b Heavy Wall, lb.	.55	.55	.55	.55	.75	

Glass Tubing, Barometer:

Bore, mm	1	2	3	4	5
Diam. outside mm	5–14	9–15	7–17	7–17	12–17
Per lb.	.80	.90	1.00	1.00	1.00

Glass Tubing, Pyrex, for laboratory use. Standard length 36 inches.

a **Light Wall:**				
Diam. outside mm	4.7–12.3	12.7–18.7	19–31.4	31.8–37.7
Wall thickness mm	.6	.8	1.0	1.2
Per lb.	1.28	1.48	1.92	2.56
b **Standard Wall:**				
Diam. outside mm	4.7–12.3	12.7–18.7	19–31.4	31.8–37.7
Wall thickness mm	1.2	1.6	2.0	2.4
Per lb.	.64	.74	.96	1.28
Diam. outside mm	38–50.4	50.8–53.6	54–63	63.5–69.5
Wall thickness mm	2.4	2.4	2.4	2.4
Per lb.	1.60	1.92	2.40	2.88

c **Heavy Wall for Combustion:**					
Diam. outside mm	4.7–12.3	12.7–18.7	19–31.4	31.8–37.7	38–50.4
Wall thickness mm	2.4	3.2	4.0	4.8	4.8
Per lb.	.96	1.11	1.44	1.92	2.40

Glass Tubing, Capillary, ½ to 1 mm bore, about 6 mm outside diam.:

Bore mm	½	¾	1
Per lb.	.80	.90	1.00

Glass Tubing, Thermometer, 6 to 7 mm diam., fine capillary bore, as used for thermometers:

Clear lb. .75

White Back lb. 1.00

Glass Wool, for filtering:

a **Fine,** oz. .50

b **Extra Fine,** oz. .75

Goldbeater's Skin, 6 inches square .15

Graduates, Conical, with pour-out and broad base:

Apothecary's Measure:

Capacity ounces	1	2	4	8	16	32
Each	.40	.45	.50	.60	1.00	1.50

Metric Measure:

Capacity cc	10	30	60	100	125	250	500	1,000
Each	.40	.40	.45	.50	.50	.60	1.00	1.75

Double Scale, in ounces and cubic centimeters:

Capacity ounces	1	2	3	4	8	16	32
Capacity cc	30	60	100	125	250	500	1,000
Each	.50	.55	.60	.70	1.00	1.50	2.50

7855 **Graduates, White Enameled Steel,** graduated on inside in ounces and cubic centimeters:

Capacity cc	250	500	1,000
Each	1.50	2.00	2.75

7915 **Heater, Hot Water, Fletcher's Instantaneous,** making water hot in three seconds. Complete with burner for illuminating gas. (Burner can be altered for use with natural gas without extra cost) 1

7928 **Hot Plates, Rectangular, Electrically Heated,** 9x12 inches, cast iron, three heats, 300 to 880 watts, for 110 volts, including 4 ft. cord and plug 3

7930 **Hot Plates, Round, Electrically Heated,** slate base, for 110 volts, including 6 ft. cord and plug:

Diam. inches	4½	6	7	8	10	12
a One Heat	8.00	...	10.00	18.00	...	...
b Three Heats	12.00	18.00	...	22.00	35.00	45.00

7935 **Hot-Plates, Electric, Hoskins,** for 110 or 220 volt circuits, A. C. or D. C. Complete with 6-ft. cable and plug:
- a **Type MA-101, Round,** 6-in. diam. 500 watts, max. temp. 900° F. .....
- b **Type MA-111, Square,** 12 x 12 in. 500 watts, max. temp. 500° F. at center, and 250° F. at edge 1

7938 **Hot-Plates, Three-Heat, Hoskins Type MA,** giving temperatures of 475° F., 600° F., and 750° F. Complete with cable and plug:
- a Size 12 x 12 in. 4
- b Size 12 x 18 in. 5
- c Size 18 x 24 in. 8
- d Size 18 x 36 in. 11

7940 **Hot-Plates, for Coal or Natural Gas:**
- a **Two Burner,** size 11½ x 18¾ in. 1
- b **Three Burner,** size 19½ x 22½ in. 1
- c **Five Burner,** size 21 x 35 in. 4

HYDROMETERS
Standard Form and Size

7968 **Acid, Baumé Scale,** each 1
Ranges: 0°-70°; 0°-35°; 35°-70°

7969 **Alkali, Baumé Scale,** each 1
Ranges 0°-60°; 0°-20°.

7972 **Battery Hydrometer, Specific Gravity Scale,** 1.150 to 1.300, in .01 graduations:
- a 3½ inches long .....
- b 4 inches long .....

7975 **Battery Hydrometer (Syringe),** sp. gr. scale 1.150 to 1.300 in .005 graduations, with rubber bulb, 14 inches, in box with directions.
- a **Best Grade** 3
- b **Medium Grade** 2
- c **Commercial Grade** 1

7978 **Baumé Scale, Heavy Liquids,** each 2
Ranges: 0°-10°; 10°-20°; 20°-30°; 40°-50°; 50°-60°; 60°-70°.

7979 **Baumé Scale, Light Liquids:**

Ranges	10°–20°	20°–30°	30°–40°	40°–50°
Each	2.25	2.25	2.25	2.25
Ranges	50°–60°	60°–70°	70°–80°	80°–90°
Each	2.25	2.25	2.75	3.00

7987 **Gasolene, Baumé Scale,** 40° to 90°, in 1° graduations, 5 inches long, with test jar in wooden case 1

7992 **Lactometer Scale, 0°-120°, Spence, N. Y. Dairy Commission Pattern, for Milk,** 2° graduations, 13 in. long, thermometer in stem, with correction scale and certificate:
- a **Best Grade** 5
- b **Medium Grade** 4

7993 **Lactometer Scale (For Milk), New York Board of Health Pattern,** 0° to 120°, length 11 inches, plain, without thermometer.....

7994 **Lactodensimeter Scale,** 14° to 42° (1.014 to 1.042 sp. gr.).. **Quevenne Pattern, for Milk,** 1° graduations, 13 in. long, thermometer at top of stem, with certificate:
- a **Best Grade** 5
- b **Medium Grade** 4

7996 **Lactometer Scale (for Milk),** 24° to 37° (1.024 to 1.037 sp. gr.), as used by Dairy Division of U. S. Dept. of Agriculture, length 11 inches, plain, without thermometer..... 5

7997 **Lactodensimeter Scale (for Milk), Quevenne Pattern, 14° to 42°** (1.014 to 1.042 sp. gr.), length 11 inches, plain, without thermometer, medium grade .....

8012 **Salinometer, Special Sea Water Scale,** 0° to ½°, temp. 190° to 200° and 210° F..... 1

8015 **Salt Salometer,** 0° to 100°, in .01 graduations.....

8026 **Specific Gravity Scale, Heavy Liquids,** .01 graduations, range 1.000 to 2.000:
- a **Quality** .....
- b **Quality** .....

Specific Gravity Scale, Heavy Liquids, in .005 graduations:

Ranges	1.000–1.200	1.200–1.400	1.400–1.600	1.600–1.800	1.800–2.000
Each	1.80	1.80	1.80	1.80	2.10

Specific Gravity Scale, Heavy Liquids, in .002 graduations:

Ranges	1.000–1.100	1.100–1.200	1.200–1.300	1.300–1.400	1.400–1.500
Each	2.70	2.70	2.70	2.70	2.70
Ranges	1.500–1.600	1.600–1.700	1.700–1.800	1.800–1.900	1.900–2.000
Each	2.70	2.70	2.70	2.70	3.00

Specific Gravity Scale, Heavy Liquids, .001 graduations:

Ranges	1.000–1.050	1.050–1.100	1.100–1.150	1.150–1.200	1.200–1.250
Each	3.30	3.30	3.30	3.30	3.30
Ranges	1.250–1.300	1.300–1.350	1.350–1.400	1.400–1.450	1.450–1.500
Each	3.30	3.30	3.30	3.30	3.30
Ranges	1.500–1.550	1.550–1.600	1.600–1.650	1.650–1.700	1.700–1.750
Each	3.30	3.30	3.30	3.30	3.30
Ranges	1.750–1.800	1.800–1.850	1.850–1.900	1.900–1.950	1.950–2.000
Each	3.30	3.75	3.75	3.75	3.75

Specific Gravity Scale, Light Liquids, in .01 graduations, range 1.000 to 0.600 ..... 1.50

Specific Gravity Scale, Light Liquids, 1.000 to 0.700, in .005 graduations.

a Quality 1.80

b Quality ..... .75

Specific Gravity Scale, Light Liquids in .002 graduations:

Ranges	1.000–0.900	0.900–0.800	0.800–0.700	0.700–0.600
Each	2.10	2.10	2.40	3.30

Specific Gravity Scale, Light Liquids, in .001 graduations:

Ranges	1.000–0.950	0.950–0.900	0.900–0.850	0.850–0.800
Each	3.30	3.30	3.30	3.30
Ranges		0.800–0.750	0.750–0.700	0.700–0.650
Each		3.30	3.30	4.50

Sulphuric Acid, Specific Gravity Scale, 1.800 to 1.850, in .001 graduations, for Babcock's milk test:

a 6 inches long 1.00

b 7 inches long 2.25

Twaddle Scale, in ½° graduations, each 1.50

Number	1	2
Ranges	0°–24°	24°–48°
Number	3	4
Ranges	48°–72°	72°–100°
Number	5	6
Ranges	100°–134°	134°–180°

Incubator, Freas' Electric, made of heavy asbestos transite and solid cast aluminum frame, with interior glass door, inside dimensions 12 x 12 x 12 inches 140.00

Jars, Aquarium, Round, Low Form, with rim:

Diam. inches	7	8	9	10	11	12
Height inches	4½	5	5½	6½	7	7½
Each	1.50	1.65	1.75	2.00	2.25	2.50
Diam. inches	13	14	15	16	17	18
Height inches	7¾	8½	8½	9¼	9¾	10½
Each	3.00	5.00	6.00	7.50	9.00	12.00

Jars, Aquarium, Round, High Form, with rim:

Diam. inches	6	7	8½	9	10	11
Height inches	5	6	8	8	9	10½
Each	1.00	1.50	2.00	2.25	3.50	4.00
Diam. inches		12	13	14	15	16
Height inches		11	12	13	14	15
Each		5.00	7.50	9.00	10.00	12.50

Jars, Battery, Round, hand-made:

Diam. inches	4	4	5	5	5	6	9
Height inches	4	5	6	7	11	8	12
Each	.50	.60	.75	.90	1.25	1.00	3.00

Jars, Battery, Round, with seam:

Diam. inches	4½	5	6
Height inches	5	7	8
Each	.35	.50	.60

Jars, Battery, Rectangular:

Top inches	4x4	2½x4¼	4x4
Height inches	4	6	8
Each	.40	.50	.60

Jars, Fruit, with glass cover, rubber ring and spring clamp:

Size	1 pt.	1 qt.
Dozen	1.75	2.00

Jars, Mason's Fruit, with glass cover, rubber ring and screw cap:

Size	1 pt.	1 qt.	2 qts.
Dozen	1.00	1.25	1.50

8850

8600

8845

8855

8875

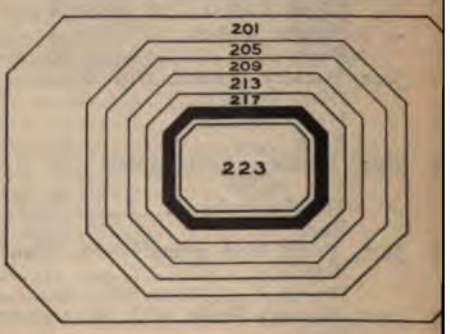
8910

8920

8895

9000

9225



9205

8895 **Jars, Museum, Glass,** with glass cover, rubber ring and spring clamp:

Diam. inches		3½	5	6¼	6¼
Height inches		6	8	8	12
Each		1.90	3.65	4.75	5.25

[Other sizes quoted on application.]

8910 **Jars, Precipitating, Glass,** conical, with lip or pour-out:

Capacity	½ pt.	1 pt.	1 qt.	½ gal.	1 gal.
Each	1.00	1.25	1.75	2.25	3.00

8920 **Jars, Specimen, Flint Glass,** extra wide mouth and glass stoppers:

Diam. mouth, in.	1¼	2	2½	3	3½	5
Height in.	3½	5½	6¼	8½	7¾	10
Each	.60	.80	1.05	1.56	1.95	3.40

8950 **Jars, Stoneware,** with cover and handles:

Capacity gallons	½	1	2	4	6	8
Each	.50	.75	1.00	2.00	3.00	4.00

9000 **Jars, Glass, Candy,** round with glass covers:

Capacity	1 qt.	½ gal.	1 gal.
Each	.75	1.00	1.50

9005 **Jars, Cylindrical, with Glass Cover:**

Diam. inches	3	4	5½	6	7½	8
Height inches	6	4	8	6	8¼	12
Each	1.50	2.00	3.00	3.50	5.00	6.00

9010 **Jars, Round, With Glass Cover:**

Size inches	2x2	4x4	4x5	5x5
Each	1.50	2.20	2.50	3.25

9020 **Jars, Stoneware,** with narrow mouth, side openings for level gauge and stopcock, suitable for storing distilled water, acids, etc. Capacity 50 liters 35.00

9030 **Jars, Surgical, Glass, Round, With Cover,** with round knob:

Diam. inches	3	4	5	6	8
Height inches	3	4	5	6	8
Each	.90	1.00	1.50	2.00	3.50

9040 **Jars, Utility, Round, With Glass Cover** and rubber ring:

Diam. inches	4½	5½	7	9	12
Height inches	5⅞	7¼	8½	11	14½
Each	.60	.90	1.75	3.00	9.00

9200 **Kettle, Agateware,** with cover and handle:

Capacity, quarts	2	4	8
Each	.75	1.00	1.25

9202 **Kjeldahl's Digestion Shelf, Round Form,** 16 in. diam., with 6 burners 20.00

9203 **Kjeldahl's Digestion Shelf,** oblong, sheet iron, with rod to support flasks:

a Six Burners 20.00
b Six Burners electrically heated 85.00
c Ten Burners 30.00
d Ten Burners electrically heated 125.00

9205 **Labels, Gummed, Rectangular,** white, with red border, per box ..... .10

Number	201	205	209	213	217
Size mm	64x40	42x34	37x28	30x24	27x20
Number	219	223	259	261	
Size mm	38x19	21x17	33x14	52x14	

9207 **Labels, Gummed, Rectangular,** white with red border, large sizes, in boxes of 100:

Number	2,001	2,002	2,003	2,004	2,005	2,006	2,007
Size, inches	1½x3⅞	1x3⅞	2x4¼	1x2¾	1⅞x4	1⅝x4	1⅝x2⅞
Per box	.25	.20	.30	.20	.25	.25	.20

9208 **Labels, Gummed, Rectangular, In Rolls,** perforated, 1,000 labels in roll:

Number	205	209	217
Size mm	42x34	37x28	27x20
Per Roll	1.00	.50	.75

9210 **Labels, Gummed, Rectangular, White With Red Border, In Book Form,** perforated, size about 5x9 inches, per book ..... .25

Number	201	205	209	213	217	219	223
Size mm	45x68	40x50	30x40	28x33	24x32	22x42	19x24
No. of labels	225	300	500	750	750	750	1,400

9212 **Labels, Gummed, Oval,** white with red border, Dennison's, per box ..... .10

Number	229	239	241
Size mm	42x30	27x17	21x14

9215 **Label Book, Chemical,** containing most of the chemicals and reagents, giving name and symbol; gummed, perforated and easily removed. 500 labels ..... .60

9220 **Ladles, Iron,** with lip and long handle, for fusing metals, etc.:

Diam. inches	2½	4
Each	.50	.75

9225 **Ladle, Iron, Detachable Handle,** about 4 inches diam. 1.00

9580 **Litmus Pencils,** combination red and blue for acids or alkalis 25

LITMUS AND OTHER TEST PAPERS

9585 **Litmus Paper: (x) Red; (y) Blue; (z) Neutral:**
- a Sheets 10x8 in. quire
- Sheets 10x16 in. quire
- b Books 25 strips, gross
- Books 50 strips, gross
- c Vials, 100 strips, doz
- d In Rolls, 100 Perforated strips, in slotted, tin box, doz.

9586 **Congo Red Paper:**
- a Sheets 10x8 in. quire
- Sheets 10x16 in. quire
- b Books 25 strips, gross
- Books 50 strips, gross
- c Vials 100 strips, doz

9587 **Lacmoid Paper:**
- a Sheets 10x8 in. quire
- Sheets 10x16 in. quire
- b Vials 100 strips, doz

9588 **Lead Acetate Paper:**
- a Sheets 10x8 in. quire
- Sheets 10x16 in. quire
- b Vials 100 strips, doz

9589 **Methyl Orange Paper:**
- a Sheets 10x8 in. quire
- Sheets 10x16 in. quire
- b Vials 100 strips, doz

9592 **Phenolphthalein Paper:**
- a Sheets 10x8 in. quire
- Sheets 10x16 in. quire
- b Vials 100 strips, doz

9593 **Methyl Red Paper:**
- Vials, 100 strips, doz

9594 **Potassium Iodide Starch Paper:**
- a Sheets 10x8 in. quire
- Sheets 10x16 in. quire
- b Vials 100 strips, doz

9596 **Tumeric Paper:**
- a Sheets 10x8 in., quire
- Sheets 10x16 in. quire
- b Books 25 strips, gross
- Books 50 strips, gross
- c Vials 100 strips, doz

9750 **Measures, Liquid,** with spout and handle:

Capacity pints	1	2	4	8
a Agateware	.50	.60	.75	1.00
b Copper	1.25	1.75	2.00	3.00
c Tin	.25	.30	.40	.50

9752 **Measures, Liquid, Metric,** brass:

Capacity cc	10	20	50	100	200	500	1,000	2,000
Each	.40	.50	.60	.75	.90	1.10	1.25	1.50

9780 **Melting-Point Tube, Thiele's,** hard glass:
- a Regular quality
- b Pyrex glass

MILK AND BUTTER TESTING APPARATUS

Milk Tester or Centrifuge, Babcock's, standard form, ball bearings, including a set of bottles, pipette, acid measure and acid for 50 to 100 tests, with directions:

Number of Bottles	4	6	8	10	12
9805 Hand Power	20.00	22.00	24.00	25.00	27.50
9810 Electric, 110 volts	75.00	77.50	78.50	80.00	85.00

9815 **Milk Tester or Centrifuge, Babcock's, Junior Model, Hand Power,** with clamps for attaching to table top, including test bottles, pipette, acid measure and acid:

Number of bottles	2	4
a For milk	6.00	7.00
b For Milk and Cream	6.50	7.50

9820 **Milk Tester or Centrifuge, Babcock's, Traveling Outfit,** in wooden case, including:
- 3 Test bottles for milk.
- 2 Test bottles for cream.
- 2 Test bottles for skim milk.
- 1 Pipette.
- 1 Acid measure.
- 1 Brush.
- 1 Quevenne's lactometer.
- 1 Jar for lactometer.

(Continued)

9820—(Continued)
1 Floating thermometer.
1 Acid bottle.
1 Set directions.
a Two-Bottle size 13.75
b Four-Bottle size 15.00

0 **Lactometer, or Milk Hydrometer,** ordinary scale, 0° to 120° by 2° divisions, about 11 inches long ..... .60

5 **Creamometer, Chevalier's,** for measuring the percentage of cream in milk.
a Test Tube, graduated ..... .75
b Cylindrical Jar, graduated 1.50
c Cylindrical Jar, graduated with glass stopcock 3.00

8 **Creamometers, Cylindrical Jars:**

Graduated	0–90	0–30
Height inches	10	12
Each	.75	.60

2 **Acid Tester, Marschall's,** for determining the acidity of milk, cream or whey 10.00

5 **Acid Test Apparatus, Mann's,** for ascertaining the extent of lactic fermentation in cream, also in cheese making. Includes burette stand and clamp, 50 cc burette, 50 cc pipette, 4 oz. Beaker, stirring rod and funnel 7.50

0 **Tablets, Alkaline, Farrington's,** for acidity of milk, cream or whey, 50 to box ..... .40

5 **Slide Rule, Richmond's,** for calculating the total solids in milk with correction scale for specific gravity 6.50

0 **Pipette, Acid, Automatic, Farrington's,** including two-neck Woulff bottle, automatic pipette 17.6 and rubber bulb 7.50

5 **Dishes, Aluminum,** for milk analysis, straight sides:

Diam. inches	2	2½	3	3½	4
Height inches	½	⅝	¾	⅞	1
Each	.25	.30	.35	.40	.50

5 **Paper, Fat Extracted,** in boxes of 50 strips, for determining fat in milk 3.50

6 **Bottles, Acid,** for holding sulphuric acid:
a **Automatic,** the burette holding 6 charges. 7.50
b **Combined,** with 17.5 cc pipette and stopcock 6.20
c **Stand, Tilting,** for above "b" 3.00

7 **Bottles, Milk Test,** 6 inch, 18 gram:

Capacity %	5	6	8	10
Graduated into %	1/10	1/10	1/10	⅕
Dozen	3.60	3.60	3.80	4.00

8 **Bottle, Milk Test,** according to Bureau of Standards, 6-inch, 8%, 18-gram, doz. 4.40

9 **Bottles, Cream Test,** 6-inch, 9-gram, doz. 4.20

Capacity %	30	40	50
Graduated into %	½	½	½

20 **Bottle, Cream Test,** according to Bureau of Standards, 6-inch, 50%, 9-gram, doz. 4.90

21 **Bottles, Cream Test,** 6-inch, 18-gram, doz. 4.00

Capacity %	20	25	30	35	40	40
Graduated into %	⅕	⅕	½	1	½	1
Capacity %	45	45	50	50	60	
Graduated into %	½	1	½	1	½	

22 **Bottles, Cream Test,** 9-inch, 9-gram, doz. 4.20

Capacity %	30	40	50
Graduated into %	½	½	½

23 **Bottle, Cream Test,** according to Bureau of Standards, 9-inch, 50%, 9-gram, doz. 5.10

24 **Bottles, Cream Test,** 9-inch, 18-gram, doz. 4.20

Capacity %	30	40	50	55	60
Graduated into %	⅕	½	½	½	½

25 **Bottles, Milk Test,** 9-inch, 18-gram, capacity 10%, graduated in ⅕%, doz. 4.00

26 **Bottles, Butter Test,** 9-inch, graduated to 100%, by 1%, doz. 5.00

30 **Bottles. Screw Cap,** for holding samples of milk or cream:

Capacity ounces	1	2
Dozen	.75	1.00

32 **Bottle, Casein,** graduated, doz. 3.00

35 **Cylinders, Milk,** 100 cc capacity, graduated to 1 cc:
a Reading up ..... .55
b Reading up and down ..... .60

40 **Dish, Aluminum, With Cover,** 2 in. diam. by 1 inch deep ..... .50

43 **Funnel, Acid,** for filling milk and cream test bottles with acid, doz. 1.20

44 **Pipette, Standard Babcock,** according to Bureau of Standards, 17.6 cc, doz. 3.10

45 **Bottles, Skim Milk Test,** graduated to 50/100% into 1%, doz. 9.20

46 **Moisture Test Apparatus, for Cheese, Ames'** 6.50

47 **Moisture Test Apparatus for Butter, Gray's,** including flasks, jacket, spirit lamp, rubber stoppers and cylinder, with directions 4.00

49 **Pasteurizing Oven,** for steam or hot water, with rack for holding bottles of milk, complete with bottles and brush 6.00

9848


9875

9965


10190


10195


10201


10210

10272a

10278d

10272g


10400

10278b


10278a

10278c

10272c

Pipettes, Combined, Milk and Cream, doz. 2.50

Capacity cc	5.9	6.04	8.8	9	17.6	18

Pipettes, Combined, Milk and Cream, 17.6 and 18 cc, doz. 3.00

Pipette, Automatic Milk Test, with rubber bulb, capacity 17.6 cc 2.50

Pipette, Improved, Babcock Test, with suction tube and trap, capacity 17.6 cc 3.00

Measures, Acid, glass cylinders, with pour-out and foot:

Capacity cc	2	8	8.8	9	17.5	25
Dozen	1.20	1.20	1.20	1.20	1.20	2.40

Dippers, Acid, glass, with handle, dozen 3.60

Capacity cc					8.8	17.5

Brushes for cleaning milk test bottles, doz. 1.20

Burettes, Acid, graduated:

Capacity cc	17.5	17.5	17.5	17.5	18
No. of charges	3	6	12	25	25
Each	2.00	2.00	2.50	3.00	3.00

Tablets, Corrosive Sublimate, for keeping milk sweet, as well as for composite tests. Colors milk to prevent mistakes.

a **Small Size,** 50 tablets .40

b **Large Size,** 50 tablets .60

Test Tubes, Cream, for samples, straight sides, flat bottom, 5 inches long, dozen 1.00

Diam. inches					1	1¼

Thermometer, Dairy, Floating, 10-inch, 10° to 110° F. 3.00

Mortars, Agate, with pestle:

Diam. mm	30	40	50	60	75
Each	4.50	6.00	7.50	9.00	15.00

Mortar, Diamond, hardest steel:

Diam. of pestle mm				15	25
Each				6.00	7.50

Mortars, Iron, bell shape, with pestle:

Capacity		1 pt.	1 qt.	2 qts.	1 gal.
Each		1.50	2.00	3.00	4.50

Mortars, Glass, with lip, including pestle:

Capacity, ounces	2	4	8	16	32
Each	.50	.75	1.00	1.25	2.00

Mortars, Porcelain, With Lip, glazed outside, with porcelain pestle glazed to grinding surface.

a **Coors:**

Size No.	0	1	2	3	4
Diam. mm	70	90	115	135	165
Inside Diam. mm	60	90	100	115	145
Height mm	45	60	70	80	105
Capacity cc	75	165	360	600	1,280
Each	.35	.60	.90	1.35	2.55

c **Ohio:**

No.	0	1	2	3	4	5	6	7	8
Diam. cm	65	80	100	110	130	150	165	185	213
Each	.30	.40	.50	.60	.80	1.10	1.15	1.30	1.50

) **Mortars, Wedgewood,** with pestle having wooden handle:

Diam. inches	3¼	4	5	6⅜	8	10
Each	1.50	1.90	2.25	3.00	4.50	6.00

2 **Nitrogen Bulbs:**

a **Volhard's** .75

b **Volhard's** new form .90

c **Troilius'** .75

d **Varrentrapp and Wills,** with three bulbs .55

e **Varrentrapp and Wills,** with four bulbs .70

f **French design** .40

g **Fresenius', 125 cc** .75

250 cc .90

8 **Nitrogen Bulb, Kjeldahl's:**

a **With bent connecting tube** 1.00

b **With two curved tips** inside of bulb 1.75

c **Jennings' new form** for water analysis 2.00

d **Hopkins'** 1.60

2 **Nitrometer, Du Pont's,** as used in manufacture of explosives, including glass parts only 35.00

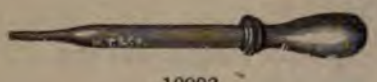
4 **Nitrometer, Lunge's,** glass parts only:

Capacity cc			50	100
Graduated to			1/10	⅕
Each			6.75	7.50

6 **Nitrometer, Schiff's,** 100 cc by ⅕, with reservoir, glass parts only 8.50

8 **Nitrometer, Lunge's,** as used in determination of nitrogen in gun powder, etc. Graduated from 100 to 140 cc by 1/10. Glass parts only 10.00

10284



10992

10986b

10800

11115

11130

10282

10900

11060

1070

10440b

10440a

11000

10982

11000

11045

Nitrogen Apparatus, Kjeldahl's, including copper condenser with block tin tubes, and digestion shelf with burners:
- a **Six Burners** 40.00
- b **Ten Burners** 55.00

Oven, Drying, copper, with openings for thermometer and gas regulator:

	6x8	8x10	10x12	12x16
a **Single Wall:**				
Size, outside, inches				
On legs	7.50	10.00	15.00	30.00
Enclosed base	8.50	11.50	17.00	33.00
b **Double Wall:**				
On legs	9.00	13.00	20.00	45.00
Enclosed base	10.00	14.00	22.00	48.00

Ovens, Drying, With Water Bath Top, copper, double wall:

	6x8	8x10	10x12	12x16
Size, outside, inches				
a **On legs**	10.00	15.00	20.00	45.00
b **Enclosed base**	11.00	16.50	22.00	48.00

Oven [Incubator] Triple Wall, Electrically Heated and Controlled, for A.C. or D.C. When ordering state voltage:

	9x7x7	12x9x9	14x12x10
Inside dimensions inches			
Each	125.00	150.00	165.00

Oven, Drying, Single Wall, Koehler's, With Double Bottom, Copper, two shelves, mounted on legs. Maintains constant temperature; moisture rapidly removed. Size of oven 10x10x12 inches 25.00

Oven, Drying, Double Wall, copper, with 2 shelves, mounted on sheet iron enclosing base:

	8x10x9	10x12x10
Dimensions, inside, inches		
a **Each, plain**	24.00	30.00
b **Each, with water bath top**	26.00	32.00

Oven, Drying, Double Wall, copper, with 3 shelves; chamber 11x10x8 inches, mounted on legs 40.00
- a With side opening for water 43.00

Ovens, Drying, Rammelsberg, Single Wall, copper:

	6x5	7x6
Size, inches		
Each	4.00	6.00

Oven, Drying, Rammelsberg, Double Wall, copper, inside dimensions 6x7 inches deep 18.00

Ovens, Drying, Freas' Electric, walls made of heavy asbestos transite, and solid cast aluminum frame, complete with electric cord and plug, adapted for current consumption not exceeding 1,000 watts. The heat is controlled by the well-known Freas' Patent Thermo-Regulator, which is kept constant within a fraction of a degree:
- a **Type R (100) Double Wall,** temperature range up to 175° C. Inside dimensions of oven 12 x 12 x 12 inches 135.00
- b **Type R (108),** similar to above but larger, the oven measuring 16 x 14 x 16 inches inside 245.00

Paper, Congo Red, in sheets 11x17 inches ..... .06
Paper Gage, Thickness, With Dial, reading up to 0.3 inch by thousandths 45.00
- a **Pocket Form** 25.00

Paper, Glazed, white, black or colored, 20x24 inches ..... .03
Paper, Lens, Japanese, very soft, and suitable for cleaning lens or highly polished surfaces:
- a **In sheets 9 x 12 inches,** per 100 ..... .75
- b **In sheets 12x 18 inches,** per 100 ..... 1.25

Paper, Parchment:
- a Vegetable, sheets 18x24 in ..... .10
- b Animal, sheets 17x22 in 2.00

Pencils, Wax, for writing on glass or porcelain; in blue, red or black, each ..... .15

	1	2	4	8
Percolators, Glass:				
Capacity pints				
a **Conical**	.60	.75	1.20	1.75
b **Cylindrical**	1.25	2.00	2.25	3.50

Phosphorus Tube, Goetz, graduated with glass stopper 1.50
Portable Photometer, Foot-Candle Meter, an instrument of new design for measuring the intensity and distribution of illumination where artificial lighting is employed. Its practical importance is apparent. Sufficient and proper illumination is a necessity not only for the protection of the eyes, but for successful work. Good lighting means success. This instrument eliminates guesswork. The scale can be used to measure the light intensity in the room at any point, or can be set to indicate a given intensity which would be considered normal. Instructions with each instrument 32.00
Pipes, Clay, smoker's, doz ..... .25
Pipettes, Automatic Dropping, with rubber bulb, 1 cc 1.58

Pipettes, Dropping, drawn to point, with rubber bulb:

	6	8	10	12	15
Length inches					
Dozen	.60	.75	.80	1.00	1.25

10986 **Pipettes, Dropping, (a) Straight, or (b) Curved,** with rubber bulb, doz. .....

10988 **Pipettes, or Medicine Droppers, With Bulb** blown in glass, provided with rubber bulb, straight or bent, doz. .....

10992 **Pipettes, or Medicine Droppers,** with rubber bulb:

Length, glass, inches.....	2½	2¾	3¼
Dozen	.36	.40	.45

10998 **Pipette, Mercury,** for taking up or delivering small amounts of mercury by lip suction

11000 **Pipettes,** Volumetric, with bulb at center of tube, accurately graduated at one mark:

Capacity cc	1	2	4	5	10	15
Each	.18	.18	.18	.18	.20	.28
Capacity cc	20	25	50	75	100	200
Each	.30	.35	.45	.60	.65	.75

11001 **Pipettes,** Volumetric, short form, bulb at lower end, accurately graduated:

Capacity cc	1	2	5	10	20	25	50
Each	.18	.18	.18	.20	.30	.35	.40

11002 **Pipettes,** Volumetric, **Without Bulb,** tapering end, graduated at one point:

Capacity cc	1	2	3	4	5	10
Each	.18	.18	.18	.18	.19	.20

11035 **Pipettes, Volumetric, Precision,** graduated at 20° C. according to the requirements of the Bureau of Standards:

Capacity cc	1	5	10	25	50	100
Each	1.00	1.25	1.50	1.75	2.00	2.50

(An extra charge is made for certification by U. S. Bureau of Standards.)

11045 **Pipettes, Mohr's,** accurately graduated in fractions of cubic centimeter:

Capacity cc	1	1	1	2	2	2
Subdivision	1/10	1/50	1/100	1/10	1/20	1/50
Each	.35	.40	.45	.35	.40	.45
Capacity cc	5	5	10	10	25	50
Subdivision	1/10	1/20	1/10	1/20	1/10	1/10
Each	.40	.45	.45	.50	.60	1.00

11048 **Pipette, Mohr's,** graduated, with glass stopcock:

Capacity cc	10	25	50	100
Subdivision	1/10	1/10	1/10	1/10
Each	1.60	1.80	2.00	2.50

11050 **Pipettes, Mohr's, Precision,** graduated at 20° C. according to the requirements of the Bureau of Standards:

Capacity cc	1	2	5	10	25	50
Subdivision	1/100	1/50	1/20	1/10	1/10	⅕
Each	2.00	2.50	3.00	3.50	4.00	5.00

(An extra charge is made for certification by U. S. Bureau of Standards.)

11060 **Pipettes, Overflow, Automatic,** with 3-way stopcock and reservoir for collecting excess:

Capacity cc	10	15	25	50	100
Each	4.00	4.50	5.00	5.50	6.50

11065 **Pipettes, Ostwald's,** for calibrating 2 cc, with two marks.....

11075 **Pipettes, Graduated, For Water Analysis,** as used by Hygienic Laboratory of the U. S. Public Health Service, each.....

Capacity cc	2	10	11

11090 **Pipette Rests, Porcelain,** size No. 1; length 75 mm; width 65 mm; with four depressions

Plates, Porous, for drying precipitates and crystals, dinner plate shape:

11110a **Coors:**
Diameter 225 mm.....

11110c **Ohio:**

Diam. mm	200	250
Per doz.	3.20	3.60

Plates, Porous, Round, unglazed, flat:

11112a **Coors:**
Size No. 1; diam. 145 mm; thickness 6 mm .....
Size No. 2; diam. 175 mm; thickness 6 mm .....
Size No. 3; diam. 220 mm; thickness 6 mm .....

11112b **Ohio:**

Diam. mm	140	190	230
Each	.80	1.00	1.80

Plates, Porous, Square, for drying crystals and precipitates:

11115a **Coors:**
Length 300 mm; width 200 mm; thickness 6 mm .....
Length 305 mm; width 305 mm; thickness 6.5 mm .....

Plates, Porcelain, flat surface, glazed throughout except bottom surface.

11124a **Coors:**
Length 175 mm; width 137 mm; thickness 6 mm .....

Plates, Streak, Unglazed Porcelain, as used for arsenic tests and by mineralogists.

Coors:

Size No.	1	2	3	4	5	6
Length mm	65	70	85	90	100	140
Width mm	50	40	60	65	60	90
Thickness mm	3	3	4	4	4	4
Each	.20	.20	.32	.35	.40	.50

Plates, Color, Porcelain, glazed throughout, with exception of bottom surface, for color reactions.

Coors:

Size No.	1	2	3	4
Dimensions mm	110x90	160x125	180x110	180x140
No. of depressions	12	12	24	30
Each	.70	.95	1.35	1.50

Ohio:

Size 110x90 mm; 12 depressions ..... .75

Platinum Ware. Information and a special list of these goods, will be sent on request.

Platinum Wire:

Size, B. & S.	18	20	22	24	25	26
Grams per foot	5.37	3.41	2.08	1.33	1.08	0.85
Size, B. & S.	27	28	30	32	36	
Grams per foot	0.65	0.56	0.33	0.21	0.09	

Platinum Gauze:

Mesh 45, wire No. 31 B. & S., weight 1.500 grams per square inch.
Mesh 52, wire No. 38 B. & S., weight 0.543 grams per square inch.

Platinum Foil:

a **Light Weight** (.001 in.) 0.353 grams per square inch.
b **Medium Weight** (.002 in.) 0.705 grams per square inch.
c **Heavy Weight** (.004 in.) 1.411 grams per square inch.
(Other thicknesses supplied on request.)

Platinized Asbestos. Prices on application.

Platinum Sponge. Prices on application.

Pneumatic Troughs, japanned, with sliding shelf and overflow.

Size inches	5x7x10	5x9x12	6x11x15	8x12x18	12x12x16
Each	1.75	2.00	2.75	3.25	4.00

Pneumatic or "Beehive" Shelf, for use in pneumatic troughs for collecting gases, zinc, 3 in. diam. ..... .60

Potash Bulbs:

a **Liebig's,** with 5 bulbs 2.00
b **Liebig-Dittmar,** with 5 bulbs 2.40
c **Liebig-Kyll** 2.40
d **Mohr's** plain 3.00
e **Mohr's,** with calcium chloride tube 3.75
f **Mohr's,** with rubber connections 4.50
g **Mohr's,** with tube ground-in 4.50
h **Geissler-Wetzel,** with ball float valve 6.00
i **Mitcherling's** 1.25
j **Norris'** 2.00
k **Winkler's,** small 4.00
l **Winkler's,** medium 5.00
m **Winkler-Kyll** 5.00

S-K Water-Jet Vacuum Pump, designed for laboratory use in quick filtration, percolation, evaporation, condensation or distillation. Operates on 10 to 20 lbs. water pressure. All connections are ¼ inch, and must be air tight. On 20 lbs. pressure it will produce a vacuum of 29½ inches mercury in about 5 minutes. Complete with vacuum gauge 25.00

PYROMETERS

We are prepared to recommend suitable equipment for taking temperatures either indicating or recording, on any kind of apparatus. We list below only a few of the instruments and couples, but complete information on auxiliary equipment, such as Protecting Tubes, Selective Switches, Enclosing Cabinets, method of cold end compensation, will be given on request.

Type PA Portable Pyrometer, Hoskins.

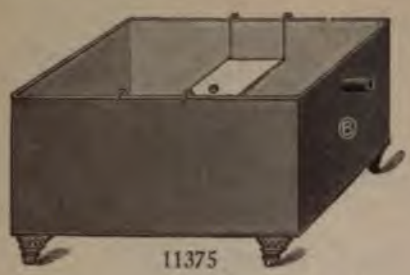
This meter is rugged in construction and is very useful around the laboratory or plant for taking temperatures. The movement is of high grade with a zero temperature coefficient winding and zero adjustor. It is mounted in an aluminum case, making the weight only 5 pounds.

Price of meter only with standard scale 60.00

Type PB Wall Mounting Pyrometer, Hoskins.

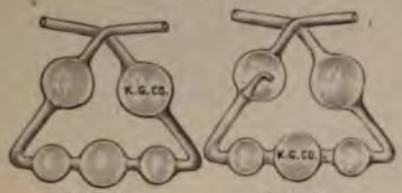
This meter is of the same rugged construction as the Portable meter listed above, the difference being that it is suited for permanent mounting at the furnace. A selective switch can be provided so that one meter can be connected to any number of furnaces as desired. Information on this will be supplied on application.

Price of meter only with standard scale 60.00


11375


11135


11378



11700a 11700b


11700c


12000
12050

11700e

11700d

11700f


11700i

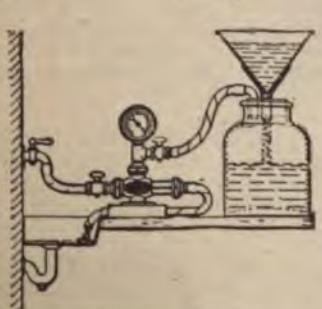
11700k

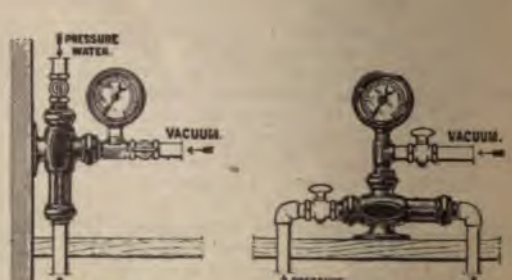
11700j

11700g

11700h

11700m





11800

Type HA High Resistance Portable Pyrometer, Hoskins.
This meter is designed especially for accurate work such as checking other pyrometers around the laboratory or plant. It has a zero temperature coefficient winding, zero adjustor, edgewise needle, and mirror scale to eliminate parallax.
Price of meter only with standard scale 75.00

Type HE High Resistance Wall Mounting Pyrometer, Hoskins.
This instrument is designed for permanent mounting and is especially recommended where a number of furnaces are to operate on the meter through a selective switch. The meter has a zero temperature coefficient winding, zero adjustor, mirror scale, and spot pointer.
Price of meter only with standard scale 75.00

Standard Scale for PA, PB, HA or HE Meter.

Fahrenheit	Degree for Division		Centigrade	Degree for Division
32°-1,000°	10°	or	0°- 550°	5°
32°-1,500°	20°	or	0°- 800°	10°
32°-2,000°	20°	or	0°-1,100°	10°
32°-2,550°	25°	or	0°-1,400°	20°

Thermo-couple for PA or PB meters:
For general use recommend 3 ft. couple, No. 8 B. & S. gauge elements, with handle and 20 ft. flexible leads.
Price complete 7.50
For use in small electric furnace recommend 18 in. couple, No. 14 B. & S. gauge elements, with handle and 20 ft. flexible leads.
Price complete 6.50

Thermo-couple for HA or HE meters:
For general use recommend 2 ft. couple, No. 8 B. & S. gauge elements, with couple connector and 20 feet alloy extension leads.
Price 9.00
For use in small electric furnace recommend 18 in. couple, No. 14 B. & S. gauge elements, with couple connector and 20 ft. alloy extension leads.
Price 7.75

Laboratory Pyrometer, Wilson-Maeulen, including portable indicator and Nork wire couple, for use in combustion furnaces, carbon determination furnaces and other high temperature zones where the entrance and clearance to the temperature to be measured is not more than ⅛ x ¼ in. Scale 25-1100° C.
a **Portable Indicator,** in oak case with carrying handle 60.00
b **Nork Wire Couple,** 12, 14 or 16 inches long, fitted with 10 ft. cold junction leads... 11.50

Reduction Tubes, Pyrex Glass, with bulbs at center:

Number of Bulbs	1	2	3
Each	.45	.60	.75

Reduction Tubes, Pyrex Glass, with bulb at end. Length 6 inches ..... .30

Reductor, Blair's, for determining phosphorus in steel by the reduction of the solution by filtration through zinc 3.00

Retorts, Glass, usual form:

Capacity cc	60	125	250	500	750	1,000	2,000
Plain	.60	.80	.95	1.15	1.40	1.60	2.60
Tubulated	.80	1.00	1.25	1.35	1.75	2.00	3.00
With Glass Stopper	.90	1.15	1.50	1.65	2.20	2.50	3.50

Retorts, With Tubulation, Pyrex Glass:

Capacity cc	125	250	500
Each	1.60	2.00	3.00

Retort Receivers, glass:

Capacity cc	125	250	500	1,000
a **Plain**	.75	.80	.90	1.00
b **With Tubulature and Glass Stopper**	1.00	1.10	1.25	1.50

Retorts, Copper, with iron clamp and brass delivery tube ½ inch diam.:

Capacity, pints	½	1	2	4
Each	3.00	3.50	4.00	5.00

Retort, Copper, Conical Shape, for making oxygen, ½ gal. capacity 10.00

Retorts, Iron, with cover, clamp and delivery tube, for distilling mercury:

Capacity cc	250	500	1,000	2,000
Each	4.50	5.50	6.00	7.50

Rings, Iron, Concentric, with clamp for ring stand:
a Set of 3 rings, 6 in. outside diam ..... .75
b Set of 4 rings, 8 in. outside diam 1.00

Rings, Iron, Extension, without clamp:

Diam. inches	2	3	4	5	6
Each	.15	.18	.20	.25	.30

Rings, Iron, with clamp for attaching to ring stands:

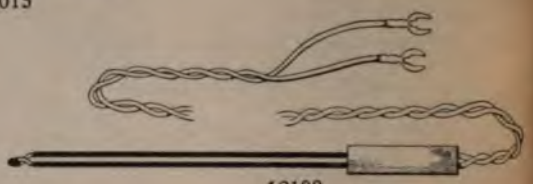
Diam. inches	1¼	2	3	4	5	6
Each	.20	.22	.25	.28	.32	.35

12020

12015

12100

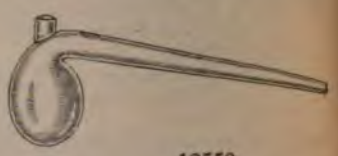
12010



12100

12545

12555



12550

12652a

12652c

12525

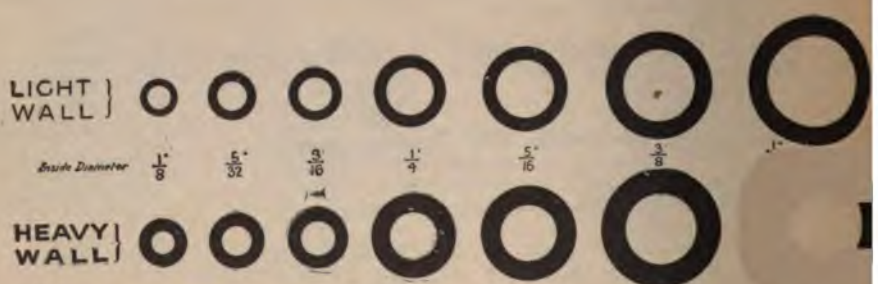
12580

12600

12595

12560

12675



12694 (Light Wall)

12695 (Heavy Wall)

Rings, Suberite, for supporting flasks, dishes, etc.:

Diam. inside mm	30	60	90	120	150	180
Each	.40	.60	.80	1.00	1.50	2.00

Rubber Caps, flat, for test tubes:

Diam. inches	½	⅝	¾	1
Dozen	1.25	1.30	1.35	1.50

Rubber Cement, oz. ..... .25

Rubber Finger Tips:

a **Small,** doz. ..... .75

b **Large,** doz. 1.00

Rubber Gloves, with gauntlet:

a Small size best 1.50

b Large size best 2.00

c Small size, ordinary ..... .50

d Large size, ordinary ..... .75

Rubber Scraper, with hard rubber handle, and soft pointed tip ..... .25

Rubber Policemen:

a **Narrow,** flat end, with glass rod, each ..... .12

b **Narrow,** without glass rod ..... .07

c **Wide,** with glass rod ..... .15

d **Wide,** without glass rod ..... .10

Rubber Mats, soft and pliable, adapted for use under flasks, beakers, bottles:

Thickness inches	¼	⅜	½	¾
Sq. foot	1.00	1.25	1.50	2.00

Rubber Sheet (Dam), tissue, pure gum, oz. ..... .25

Square ft. ..... .30

Rubber Stoppers, Chemical Laboratory, soft, pliable and durable, lb. 1.75

Size	00	0	1	2	3	4	5	6
Diam. Top mm	14	17	18	20	23	25	27	32
Diam. Bottom mm	10	12	15	16	18	20	23	26
No. to lb. Solid	120	80	60	55	42	33	28	20
No. to lb. 1-hole	130	90	65	60	45	35	30	21
No. to lb. 2-holes	138	94	70	64	47	38	32	22

Size	7	8	9	10	11	12	13
Diam. Top mm	37	41	45	50	56	65	70
Diam Bottom mm	30	33	37	42	50	59	60
No. to lb. Solid	15	12	11	8	6	5	4
No. to lb. 1-hole	16	13	11	8	6	5	4
No. to lb. 2-holes	17	14	12	8	6	5	4

Rubber Tubing, White, Cloth Impression, excellent quality, much used for laboratory and burner connections:

Light Wall, Approx. ⅛ inch:

Bore inch	⅛	3/16	¼	5/16	⅜	½	⅝	¾
Per foot	.04	.06	.08	.10	.14	.20	.28	.35

Heavy Wall, Approx. ⅛ inch:

Bore inch	⅛	3/16	¼	5/16	⅜	½	⅝	¾
Per foot	.07	.10	.14	.18	.24	.30	.45	.55

Rubber Tubing (Labruco), **Pure Gum, Black or Red,** very elastic and durable. It clings to glass tubing thus eliminating the use of wire to insure a perfectly tight connection:

Bore inch	⅛	3/32	3/16	¼	5/16
Light Wall, ft.	.06	.09	.12	.18	.24
Bore inch	⅜	½	⅝	¾	1
Light Wall, ft.	.35	.50	.80	.90	1.15
Bore inch	⅛	3/32	3/16	¼	5/16
Heavy Wall, ft.	.10	.12	.15	.28	.36

Rubber Tubing, Pure Gum, Black, very elastic, best quality:

a **Light Wall, Approx. ⅛ inch thick:**

Bore inch	⅛	3/16	¼	5/16	⅜	½
Per foot	.08	.10	.15	.17	.25	.42

b **Heavy Wall Approx. ⅛ inch thick:**

Bore, inch	3/32	3/16	¼	5/16	⅜	½
Per foot	.15	.17	.22	.27	.42	.60

Rubber Tubing, Pure Gum, For Gooch Crucibles, thin wall, very elastic:

Outside width when flat, in	1	1¼	1½	1¾	2⅛
Per foot	.20	.24	.25	.30	.40

Rubber Tubing, Red Antimony, very elastic and durable, giving excellent service for laboratory or burner connections:

Light Wall, Approx. ⅛ inch:

Bore inch	⅛	3/16	¼	5/16	⅜	½
a **Machine Made,** ft.	.05	.07	.09	.12	.18	.25
b **Hand Made,** very flexible, ft.	.06	.09	.12	.16	.24	.32

Rubber Tubing, Red Antimony—(Continued).

12715 **Heavy Wall, Approx. 1/8 inch:**

Bore inch	1/8	3/16	1/4	5/16	3/8	1/2
a **Machine made.** ft.	.08	.12	.16	.20	.26	.35
b **Hand Made,** very flexible, ft.	.09	.14	.20	.25	.32	.45

12720 **Rubber Tubing, Acid,** pure black rubber, especially compounded to resist acids:

Bore inch			1/4	1/4	3/8
Wall inch			1/16	3/16	3/16
Per foot			.40	.60	.75

12730 **Rubber Tubing, Pressure, Heavy Wall, Cloth Insertion,** suited for air pump connections:

Bore inch	1/8	1/4	5/16	3/8	1/2
Per foot	.12	.15	.16	.18	.22

12732 **Rubber Tubing, Pressure, Flexible,** semi-pure gum, black, with heavy wall approx. 1/8 inch:

Bore inch			1/8	1/4
Per foot			.50	.60

12735 **Tubing, Flexible, Metallic,** with rubber packing, with rubber ends for making tight connections. Excellent for burners, hot plates, etc.

Bore inch	1/4	5/16	1/4	5/16
Length, feet	2	2	3	3
Per length	.25	.30	.35	.40

(Extra rubber connections at 10 cents per pair.)

12740 **Rack for Holding Rubber Tubing,** to prevent kinking. Can be readily screwed to wall.

12745 **Rubber Tubing Expander,** indispensable for stretching rubber tubing or bulbs when making connections

B1200 **Scalometer Pocket Rule,** celluloid, 6 inches long, graduated with 2 protractors, scale of inches and centimeters, and a new scale with factors by which heights and distances can be measured. The line and plumb-bob, in combination with the protractors, also serve as a clinometer. The most useful pocket rule on the market.
(Special prices will be made on quantity orders.)

12780 **Sand Bath, Electric, Three-Heat,** 110 volts, 4 amperes. Top 7½ in. square, receptacle 4¾ in. diam. by 1⅜ in. deep

Sand Baths, sheet iron:

12785 **Shallow,** flat bottom:

Diam. inches	2	3	4	5	6	7	8	10
Each	.08	.09	.10	.15	.20	.30	.35	.75

12787 **Deep Form, Spherical;** round bottom:

Diam. inches	2	3	4	5	6	7	8	10
Each	.08	.10	.14	.20	.25	.35	.40	.90

12788 **Sand Baths, or Hot Plates,** sheet iron, on 4 leg support:

Size inches			6x8	8x10	10x12
Each			2.00	2.75	3.50

12789 **Sand Bath, or Hot Plate, Ruedorff's,** cast iron, 11x17½ inches, including adjustable burner

12790 **Sand or "Hour" Glasses:**

Minutes	1	2	3	5	10	30	45	60
Each	1.25	1.30	1.40	1.50	2.00	3.25	4.00	5.00

12810 **Scoops, Horn:**

Length cm			10	12	14	16
Each			.20	.25	.30	.40

12812 **Scoops, With Handle:**

a **Agateware**
b **Tinware**
c **Aluminum**

12822 **Scorifiers, Dixon's:**

a **Shallow Form.**
b **Deep Form.**

Diam. inches	1½	2	2½	3	4
Each	.12	.15	.18	.20	.25

12842 **Shaking Apparatus,** for holding six Erlenmeyer or Florence flasks of 6 to 24 ounces capacity. Pulley 6 in. for use with motor

13070 **Slide Rule, Chemists', Duplex,** 10 inches long

13185 **Spatulas, Aluminum,** with blade at both ends:

Length mm	130	150	210	250	300
Each	.50	.60	.75	1.00	1.50

13190 **Spatula, Glass,** 6 inch, with blade on both ends, width 5/8 in.

13195 **Spatulas, Hard Rubber,** with handle, flexible blade, moulded into one piece, polished:

Length inches				4	6
Each				.75	.90

Spatulas, Horn:

Length inches	4	5	6	8
13200 **Double,** each	.15	.20	.25	.35
13205 **Single,** each	.10	.12	.15	.25

13208 **Spatula, Nickel,** with blade both ends, about 18 cm long

Spatulas, Porcelain, Glazed Throughout, Spatula on Both Ends.

Coors:

Size No.	1	2	3	4	5	5a
Length mm	105	120	150	195	212	225
Each	.25	.35	.42	.55	.72	.85

Ohio:

Length mm	120	145	195	250	310	360	420
Price each	.25	.30	.40	.60	.70	.90	1.50

Spatulas, Porcelain, Glazed Throughout, long spatula one end, knob on the other.

Coors:

Size No.	1	2	3	4	5	5a	6
Length mm	115	155	200	275	310	345	442
Each	.35	.42	.62	.85	1.10	1.30	2.65

Ohio:

Length mm	120	145	195	250	310	360	420
Each	.25	.30	.40	.60	.70	.90	1.50

Spatulas, Porcelain, Spoon on One End, Spatula on the other.

Coors:

Size No.	1	1a	2	3	4	4a	5	6
Length mm	96	120	140	160	190	203	247	490
Each	.21	.27	.38	.50	.60	.75	.85	2.75

Ohio:

Length mm	120	145	195	250	310
Price each	.25	.30	.40	.60	.70

Spatulas, Flexible Steel, wooden handle:

Blade inches	3	4	5	6	8	10	12
Each	.50	.60	.70	.80	1.00	1.75	3.00

Spatula, Rigid Steel Blade, 4 in. long, with wooden handle 1.00

Sphygmomanometer, Self-Verifying, dial form, for measuring blood pressure, complete in case 25.00

Sponges, Laboratory, for cleaning purposes:

a Medium (12 to 14 to lb.), lb 1.25

b Large (6 to 8 to lb.), lb 1.75

Spoon, Aluminum, table size, medium ..... .30

Spoons, Bone, with spatula on one end:

Length mm	150	170
Each	.40	.50

Spoons, Glass:

a **Small** ..... .30

b **Medium** ..... .50

c **Large** ..... .75

Spoons, Deflagrating, with handle about 15 inches long:

a Iron ..... .10

b Brass ..... .12

Spoons, Horn:

Length inches	4	5	6	8
a Pointed handle, each	.15	.18	.20	.30
b Spatula end, each	.25	.30	.35	.40

Spoon, Pure Nickel, with spatula end, 18 cm long 1.25

Spoons, Sodium:

With Wire Gauze, cover and handle ..... .40

With Ramrod, Brownlee's ..... .35

Cartridge Shells, about 8x13 mm, doz ..... .15

Stencils, Celluloid, with outline of most common chemical utensils, for making rapid and well-proportioned drawings in note-books ..... .15

Still, Glass, Demonstration Type, With Tripod and Clamps, without burner:

Capacity of flasks, cc	500	1,000
Each complete	10.00	15.00

Still [Retort], Laboratory Type, copper, tin-lined, with removable head:

Capacity gals.	½	1	2	3	5
Each	9.00	12.00	15.00	20.00	30.00

Still, Condenser, Laboratory, Type, made of zinc with block tin worm:

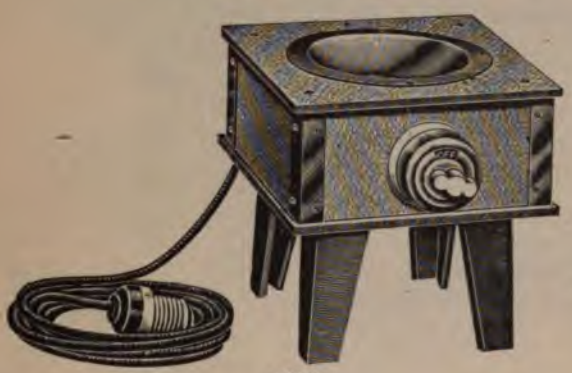
Capacity gals.	½	1	2	3	5
Each	7.50	9.00	11.00	15.00	18.00

Still, Laboratory, Including Copper Retort With Water Gauge, and Condenser of Zinc With Block Tin Worm:

Capacity gals.	½	1	2	3	5
Each	20.00	25.00	36.00	40.00	50.00

B1200 (See page 104)

13557

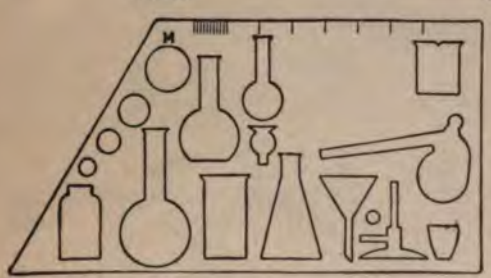


12780

13555

12745

12785



13550

13215

13225

13488

12810

12822

13561 **Still, Water, Ralston's,** easily filled and used on stove or burner. Will not burn dry. Made of copper and tin. Capacity from 1 to 3 quarts per hour, depending upon heat used. Height 14 in., diam. 9 in. 15.00

13562 **Stills, Water, Acme,** wall type, automatic, made of copper and brass, tin-lined, the exterior being nickel plated.

Capacity, gals. per hour	1	2
For gas	35.00	70.00
For gasolene	48.00	...
For steam	...	75.00

13563 **Still, Water, Automatic, Jewell's,** wall type, cast iron, porcelain enameled, durable, easily cleaned, operated at low cost.

Capacity per hour, liters	2	4	6
Each	35.00	55.00	80.00

13564 **Stills, Water, Jewell-Polar,** automatic, copper, the interior being tin-lined:

Capacity, gals. per hour	½	1	2	5
For gas, on base	...	80.00	125.00	225.00
For gas, wall type	35.00	60.00	110.00	...
For steam [laboratory type]	...	...	100.00	150.00

13565 **Stills, Water, Stokes',** wall type, automatic, cast-iron, brass condenser tubes tin-lined. The covers are porcelain-lined, except in larger sizes which are made of tin-lined copper:

Capacity, gals. per hour	½	¾	2¾
For gas	30.00	35.00	70.00
For gasolene	40.00	...	...
For steam	...	35.00	90.00

(Larger capacities quoted on request.)

13566 **Stills, Water, Barnstead,** made of copper, tin-lined:

Capacity, gals. per hour	1	2	5
For gas	65.00	100.00	175.00
For electricity	85.00	130.00	325.00

13567 **Still, Water, Green's,** wall form, automatic, cast-iron, retort and body, copper condensing tube heavily tinned, heated by gas burner. An inexpensive, efficient and durable form 40.00

13568 **Still, Oil,** for destructive distillation of heavy oils and other liquids, requiring high temperture. Made of heavy copper:

Capacity gals.	½	1	2	3	5
Each	20.00	35.00	45.00	60.00	75.00

13569 **Still, Water, Automatic,** made of heavy copper with steam coil, water gauge, block-tin condensing worm enclosed in zinc holder. Operated by steam heat.

Capacity gals.	3	5
Each	60.00	75.00

13570 **Still [Retort],** heavy copper, brazed, for high temperature, easily taken apart by thumb screws attached to flanges:

Capacity gals.	½	1	2	3
Each	40.00	45.00	60.00	80.00

13572 **Still, Mercury, Hulett's,** as used by U. S. Bureau of Mines. Includes flasks 500 cc with stopcock, side tube, condenser and receiver 15.00

13575 **Stills, Automatic Water, Stokes':**

a **For Gas** 25.00
b **For Gasoline Burner** 35.00
c **For Kerosene Burner** 35.00
d **For Steam** 30.00

13578 **Stills, Water, Automatic, Acme,** made of copper and brass, tin-lined and nickel plated:

a Size, capacity 1 gal. per hour, for coal or natural gas, including burner 35.00
b Size, capacity 2 gal. per hour, for coal or natural gas, including 4 burners 60.00
c Size, capacity 2 gal. per hour, but with steam coil inside of retort 60.00

13580 **Stirring Apparatus, Electric,** for A. C. or D. C., including 3-step pulley, chuck, bracket, stand and motor:

Volts	110	220
A. C.	35.00	40.00
D. C.	35.00	40.00

13582 **Stirring Apparatus, Turbine,** high speed, for water baths, etc.:

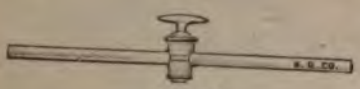
Length inches	8	10	12
Each	8.00	10.00	12.00

13583 **Stirring Apparatus, Conical Pulley,** 3-steps, with chuck for holding stirring rod, and bracket arm for attaching to a support 6.00

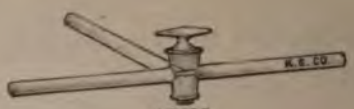
13585 **Stirring Rods, Glass,** both ends rounded:

Length, inches	4	5	6	8	10	12	15
Diam., inches	⅛	⅛	5/16	5/16	¼	5/16	⅜
Dozen	.30	.40	.45	.60	.90	1.50	1.75

13650 13620 13600 13610 13615 13605



13660

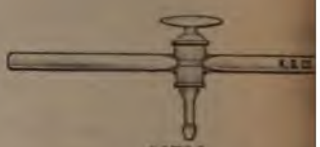


13685

13700

13665

13688

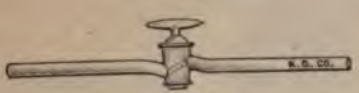


13702

13670

13695

13708



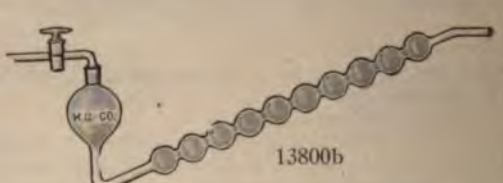
13680

13698

13712

13848a

13848b



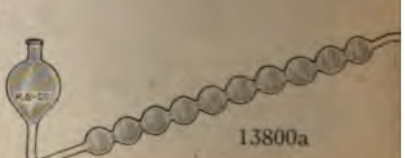
13800b

13825 13830

13848d

13848c

13827



13800a

Stopcocks, Brass, standard laboratory form, air-tight joints:

Bore inch	1/8	1/4
Both ends tapering	1.00	1.50
One end tapering (male)	1.00	1.50
One end tapering (female)	1.00	1.50
Both ends male	1.00	1.50
Both ends female	1.00	1.50
Male and female	1.00	1.50

Stopcocks, Brass, For Gas, with extra long tapering nipple, corrugated, male thread, 3/8 inch 1.00

Stopcock Nipples, brass, as used on Stopcocks 13595, etc.:

Bore inch	1/8	1/4
With Female Thread	.30	.35
With Male Thread	.30	.35

Stopcocks, Glass, For Burettes:

Bore mm	1	2	3
Each	1.25	1.35	1.50

Stopcocks, Glass, Geissler's, straight form:

Bore mm	1	2	3	4	5	6	8
Each	1.10	1.25	1.60	1.75	2.00	2.75	3.50

Stopcocks, Glass, Geissler's, with capillary bore:

Bore mm	1	2
Each	1.25	1.50

Stopcocks, Glass, Two-Way, with plug bored at angle, 2 mm bore 1.75

a **With Capillary Side Tubes** 2.00

Stopcocks, Glass, Three-Way:

Bore mm	2	3	4
Each	1.50	1.75	2.00

Stopcocks, Glass, Four-Way:

Bore mm	2	3	4
Each	2.25	2.75	3.00

Stopcocks, Glass, Three-Way, Geissler's, with capillary side tubes, 2 mm bore 2.00

Stopcocks, Glass, Three-Way, Mercury Seal, with double outlet on one side:

Bore mm	2	4
Each	4.50	6.25

Stopcocks, Glass, Two-Way, Mercury Seal:

Bore mm	2	4
Each	3.75	5.00

Stopcocks, Glass, Three-Way, with downward outlet at end of stopper:

Bore mm	2	4
Each	2.00	3.50

Stopcocks, Glass, Three-Way, **With Downward Outlet** at end of stopper:

Bore mm	1	2
Each	1.75	2.00

Stopcock, Glass, With Double Outlet, capillary bore, on same side, oblique holes, 2 mm bore 2.75

Stopcocks, Glass, With Double Outlet, on same side, oblique holes:

Bore mm	2	4
Each	2.25	4.00

Stopcocks, Glass, Three-Way, Geissler's, with downward outlet at end of stopper, and capillary side tubes:

Bore mm	1	2
Each	2.75	3.00

Stopcocks, Glass, Fresenius.

Bore mm	1	2
Each	1.50	1.75

Stopcock Grease, for lubricating ground surfaces and glass stopcocks, preventing leaks. Superior to vaseline, oz. ..... .30

Sulphur Apparatus, Meyer's, bulb tubes, for determination of sulphur in iron by bromine:

a **Plain** 3.00

b **With Glass Stopcock** 5.00

Sulphur Apparatus, set of 3 glass parts, for determining sulphur in oils 4.00

Supports, Ring Stands, Rectangular Base:

Size	Small	Medium	Large	Extra Large
Base, inches	4x6	5½x7½	6½x8½	6½x11
Rod, inches	18x3/8	20x3/8	24x7/16	36x½
Support only	.45	.60	.80	1.60
Complete with rings	.85	1.25	1.65	2.40
Number of rings	2	3	4	4

Supports, Ring Stand, Rectangular Base, with rod in CENTER of base:

a **Base** 6½x8½ in., rod 24x7/16 in. 1.00

b **Base** 6½x11 in., rod 30x½ in. 1.50


13848e


13848d


13848g


13950

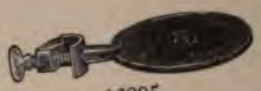

13960


13955


13870

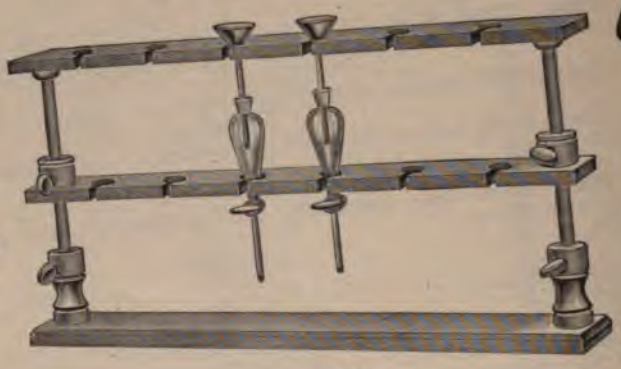

13965


13972


13895


1402


13970


14046


14045


14035

Supports, Ring Stands, Triangular Base:

Size	Small	Medium	Large	Extra Large
Rod inches	18x3/8	20x3/8	24x7/16	36x1/2
30 **Support only**	.55	.70	.90	1.75
32 **Complete with rings**	.90	1.35	1.80	2.50
Number of rings	2	3	4	4

38 **Support, Ring Stand, Complete With Extension Rings and Clamps:**

	Small	Medium	Large	Extra Large
Number of rings	2	3	4	4
a **Rectangular Base**	1.50	2.00	2.50	3.50
b **Triangular Base**	1.60	2.25	2.75	3.75

48 **Supports, Burette, Wooden,** on base with adjustable clamp, cork lined, and vertical rod:

a **For 1 Burette,** clamp with round hole 2.25
b **For 1 Burette** 1.75
c **For 2 Burettes** 2.25
d **For 2 Burettes** with steadying arm 3.00
e **For 2 Burettes,** clamp with round holes 3.00
f **For 2 Burettes,** with steadying arm, the clamp having round holes 3.25
g **For 4 Burettes** 3.25

Support, Burettes, Chaddock's, wooden rod and base with white glass plate, spring brass clamps:

65 **For 1 Burette** 3.00
70 **For 2 Burettes** 4.00
75 **For 3 Burettes** 5.00

80 **Support, Burette, Wooden.** for two burettes, designed for attaching to the reagent shelf of laboratory table. By means of the hinged clamp it can be turned out of the way when so desired 5.50

895 **Support Plate, Iron, Round,** 5 in. diam., with clamp for attaching to ring stand ..... .60

940 **Support, Funnel, Aluminum, Stoddard's,** with iron base and rod for four funnels:

a For 2 inch funnels 3.00
b For 2½ inch funnels 3.80

950 **Support, Funnel, Wooden,** single arm, wide form for holding beaker as well as funnel ... 1.75

Support, Funnel, Wooden, with single supporting rod, adjustable clamp and arm with holes for funnels:

955 **For 1 Funnel,** plain hole, side arm 1.40
960 **For 2 Funnels,** plain holes, side arm 1.50
965 **For 2 Funnels,** plain holes, double arm 1.60
970 **For 4 Funnels,** with side slots, double arm 2.00
972 **For 4 Funnels,** plain holes, double arm 1.75

Support, Funnel or Filter Arm, Wooden, with clamp for attaching to ring stand or support rod:

975 **For 3 Funnels** ..... .75
978 **For 4 Funnels** ..... .90
980 **For 5 Funnels** 1.25

Support, Funnel, Wire Form, for one funnel:

1010 **Adjustable** for height 6 to 10 inches, diam. 2 in. 1.25
1020 **Plain,** diam. 2½ in. ..... .75

1030 **Supports, Funnel, Wooden, Round or Triangular,** with hole for one funnel, to be placed over beaker:

Diam. mm	50	100	150	200
Each	.30	.35	.40	.50

Supports, Funnel, Wooden, on base with support at each end, adjustable for height, holes provided with side slots:

1035 **For 6 Funnels, Single Row** 7.00
1040 **For 12 Funnels, Single Row** 10.00
1045 **For 12 Funnels, Double Row** 7.50
1046 **Leach's, Double Row,** for 6 funnels 10.00

1052 **Supports, Funnel, Wooden,** on base with support at each end, adjustable for height, plain holes without side slots:

a **Short Form** 6.00
b **High Form** 5.00

1055 **Support, Pipette, Wooden, Revolving,** for 12 pipettes 4.00

1058 **Support Table, Wooden, Round Top,** adjustable for height 10 to 15 inches, base loaded with lead to give stability 2.50

1059 **Support, Universal, Gay Lussac's, Wooden,** with adjustable clamp on rod 2.00

1060 **Support, Universal, Schellbach's, Wooden,** adjustable clamp 2.50

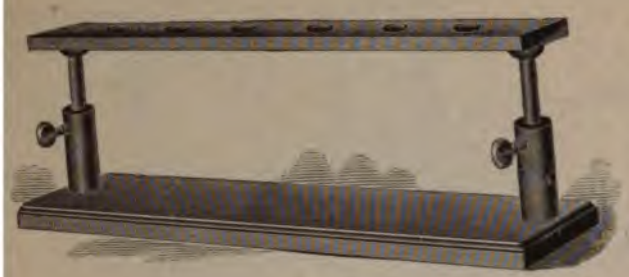
1095 **Support, Universal,** with long adjustable clamp on vertical rod ½ in. diam. 2.30

1100 **Supports, Test Tube, Wooden, Single Shelf,** with standard sized holes and pins:

Number of Test Tubes	4	6	10	12	24
Each	.75	.90	1.00	1.10	1.25

1110 **Supports, Test Tube, Wooden, Single Shelf,** with 12 holes but without pins:

Diam. of holes, inch	¾	⅞	1⅛
Each	.90	1.00	1.10



14052a

14095

14059

14052b

14060

14055

14192

14110

14058

14100

14155

14165a

14118

14190

14205

14210

14

14118 **Support, Test Tube, Wooden,** for 12 test tubes, the holes measuring ⅜ and 1⅛ in. diam., with draining pins ..... .90

Supports, Test Tube, Wooden, two shelves, with pins:

14155 For 13 Test Tubes 1.00

14158 For 16 Test Tubes 1.25

14160 For 25 Test Tubes 1.50

14165 **Support, Test Tube, Wooden,** dissectible form, two shelves, with pins:

a For 16 Test Tubes 1.25

b For 25 Test Tubes 1.50

14175 **Support, Test Tube, Wire Form, Rectangular,** holding 36 to 40 test tubes 1.25

Support Rack for Test Tubes, with pins of different lengths, in rows. Can be attached to wall or placed on table:

14185 With 25 Pins 2.00

14190 With 50 Pins 2.25

14192 **Support, Test Tube, Wooden,** two shelves, with pins, and two tall rods for funnels 2.20

14196 **Support, Test Tube, Wire Form,** with 1 inch openings:

Round, 7½ in. diam 1.25

Square, 7½x7½ in 1.25

14197 **Support, Test Tube, Metal,** nickel plated on Japanned iron base, for 10 test tubes, 11 inches long. Holes ⅜ in. diam 1.75

14198 **Support, Test Tube, Stamped Steel,** black enamel finish, ¾ and 1 inch holes, with 7 drying pins:

a For 14 Test Tubes ..... .50

b For 18 Test Tubes ..... .75

A NEW LINE OF PRACTICAL SIPHONS FOR LABORATORY OR INDUSTRIAL USE IN SIPHONING LIQUIDS

Considerable development work has been done by us in perfecting this new line of siphons. The different models and various sizes, have been found to be best suited to actual requirements.

Besides its great convenience in transferring liquids from one container to another, the siphon is particularly important to use when corrosive, poisonous or valuable liquids are being used. They not only prevent waste, but accidents and bodily injuries.

The Model A, has the novel feature of starting automatically on the normal hydrostatic pressure of the liquid into which it is inserted. The depth of the liquid should not be less than two or three times the length of the starting bulb. It is especially useful with light liquids. It cannot be relied on for viscous or heavy liquids, such as oils, sulphuric acid, etc.

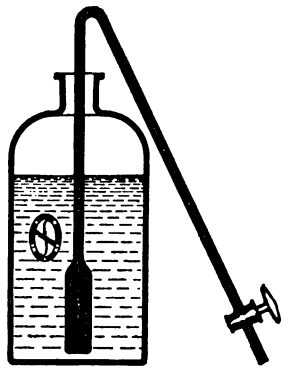
Model B Stansiphon has considerable power and wide latitude. It can be successfully used with either light, heavy or viscous liquids. Its operation does not depend upon the hydrostatic pressure or depth of the liquid, although there should be sufficient liquid to nearly cover the bulb. This however is simply a matter of volume or quantity of the liquid.

Stansiphon, Model A, automatic or self-starting, made as follows:

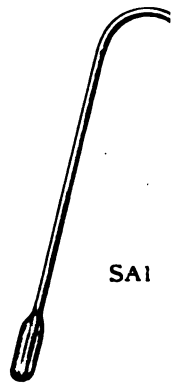
	Sizes:	I	II	III	IV
	Bulb or starting chamber	½x2 in.	¾x3 in.	1 to 4 in.	1½x5 in.
	Length, overall	12 in.	15 in.	18 in.	24 in.
	Bore of delivery tube	⅛ in.	⅛ in.	3/16 in.	¼ in.
	Outside diam. of delivery tube	¼ in.	¼ in.	3/16 in.	⅜ in.
SA1	Glass, one piece	2.00	2.50	3.00	3.50
SA2	Glass, two pieces, with rubber joint	2.00	2.50	3.00	3.50
SA5	Glass, two pieces, with long rubber joint and glass delivery tube	2.25	2.75	3.25	4.00
SA8	Glass, one piece, with glass stopcock	5.00	5.60	7.20	8.00
SA10	Glass, two pieces, with rubber joint, glass delivery tube and glass stopcock	5.30	6.00	7.50	8.50
SA12	Glass, self-starting bulb only, which may be attached to glass or other tubing by rubber connections	1.50	2.00	2.50	3.00
SA20	Carboy model, glass, one piece or with rubber joint	—	—	—	3.75
SA21	Same as A20 but with glass stopcock	—	—	—	8.00
SA25	Battery model, glass, either one piece or with rubber joint	2.00	2.20	2.50	3.25
SA26	Same as A20, but made of lead	3.75	5.00	6.25	10.00
SA30	Brass, nickel plated, one piece	5.00	6.25	7.50	12.00
SA35	Brass, nickel plated, two pieces, with heavy wall rubber connection	5.30	6.60	8.00	12.50

(Continued)

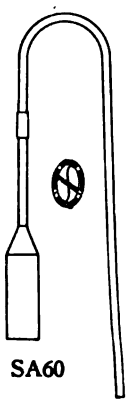
SA5



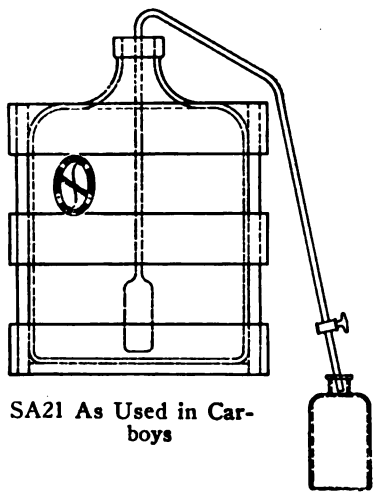
SA8



SA1

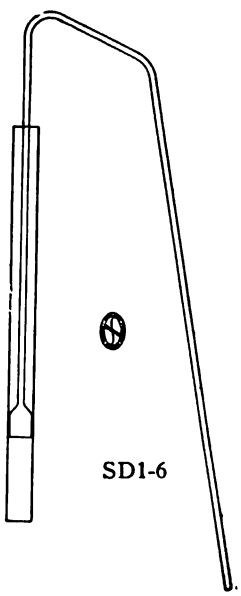


SA60

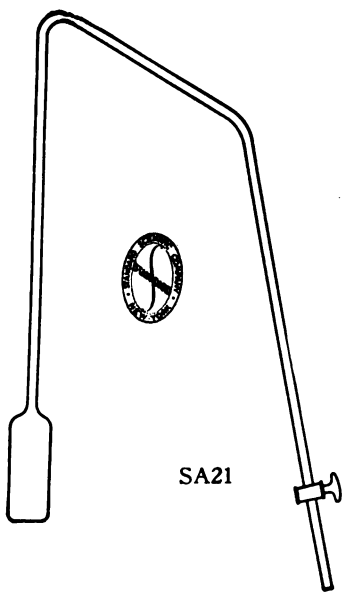


SA21 As Used in Carboys

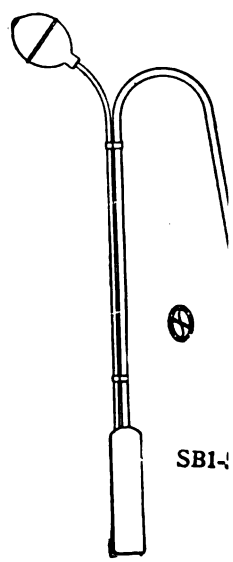
SC1



SD1-6



SA21



SB1-

(Continued)

0 Brass, nickel plated, two pieces, with flexible connecting tube of lead..... 6.00 7.25 8.75 13.50

0 Laboratory Set of **Stansiphons,** Model A, will be found convenient for various sizes of bottles. This will include sizes I, II, III, IV, made of glass. Set..... 10.00

0 **Aquarium Model,** bulb 1½x4 inches, metal with rubber delivery tube..... 1.25

Pinchcocks, Extra:

No. 3540 Spring form, Mohr's, each..... .15
No. 3555 Screw form, Hofmann's, each..... .25

siphon, Model B (Patented), with pressure bulb for starting. Operated on the hydraulic press principle. It makes a powerful siphon of wide range of usefulness, with either light, heavy or viscous liquids. Made in the following sizes:

	Outside Diameter of Starting Bulb	Height Overall	Bore of Delivery Tube	Glass	Nickel Plated Brass, or Lead
SB1	¾ inch	18 inches	3/16 inch	5.00	7.50
SB2	⅞ "	24 "	¼ "	5.25	8.00
SB3	1 "	20 "	¼ "	5.50	8.75
SB4	1½ "	24 "	⅜ "	6.50	10.00
SB5	2 "	28 "	½ "	8.00	11.25

In ordering, specify inside diameter of neck of bottle or container and height overall; also average depth and kind of liquid to be siphoned.

Glass or metal stopcocks charged extra, according to size and kind desired.

Special sizes made to order.

siphon, Model C, with compression bulb of rubber, operating on the air-lift and gravity principle. A simple design, easily operated, made in the following sizes:

	Length (not including Rubber Bulb)	Bore of Delivery Tube	Glass	Nickel Plated Brass, or Lead
SC1	12 inches	⅛ inch	3.00	5.00
SC2	12 "	3/16 "	3.50	5.25
SC3	18 "	3/16 "	4.00	6.00
SC4	18 "	¼ "	4.50	6.50
SC5	24 "	¼ "	5.00	7.50
SC6	24 "	⅜ "	5.50	8.00
SC7	26 "	⅜ "	6.00	9.00
			(Specify whether all glass, or with rubber joint is desired.)	(Specify which metal is desired.)

In ordering, specify inside diameter of neck of bottle or container and height overall; also average depth and kind of liquid to be siphoned.

Glass or metal stopcocks charged extra, according to size and kind desired.

Special sizes made to order.

siphon, Model D, with piston pressure (Patent applied for). A simple design consisting of two parts, namely: a glass cylinder and a delivery tube which operates like a piston. Made in the following sizes:

	Outside Diameter of Cylinder	Length of Cylinder	Height of Piston	Bore of Delivery Tube	Glass	Nickel Plated Brass, or Lead
SD1	¾ inch	12 inches	15 inches	3/16 inch	2.50	5.00
SD2	1 "	16 "	18 "	3/16 "	3.00	5.50
SD3	1¼ "	20 "	22 "	¼ "	3.50	6.00
SD4	1½ "	22 "	24 "	¼ "	4.00	7.00
SD5	1¾ "	24 "	26 "	⅜ "	4.50	7.50
SD6	2 "	26 "	28 "	½ "	5.00	9.00
					(Specify whether all glass, or with rubber joint is desired.)	(Specify which metal is desired.)

In ordering, specify inside diameter of neck of bottle or container and height overall; also average depth and kind of liquid to be siphoned.

Glass or metal stopcocks charged extra, according to size and kind desired.

Special sizes made to order.

Syphons, Glass:

	Length inches	8	12	15	18	24	30
5	**Plain, bent**	.30	.30	.36	.48	.90	1.20
0	**With Side Suction Tube**	.42	.48	.60	.78	1.20	1.55
5	**With Side Suction Tube With Glass Stopcock**	1.50	1.80	2.10	2.70	3.00	3.60

0 **Tapers, Wax,** 12 in box..... .20

N608

14860

N608—Showing Method of Attaching Wire

14255

14265

14260

14270a

14275

14490

14300

15000

15005

14949

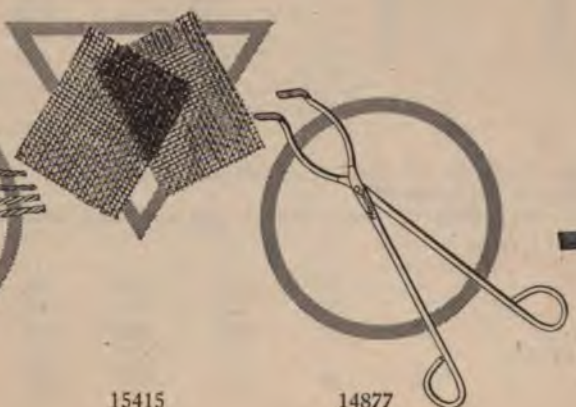
14950

14948

15014

15016

14958



15415

14877

Meliorate Solderless Terminals, Electric, easily attached to wires or leads without the use of solder. Saves times and economizes wire. The variety of tips or contact faces are adapted to most electrical connections. Made in two sizes, **A** and **B**. The A size accommodates wires up to No. 16 B. & S. gauge, and the B size up to No. 14 B. & S. gauge. Furnished with fibre insulating and protecting sleeve in red or black:

(Patented)	A Size Doz.	B Size Doz.
Style 100 with Central Hole	3.00	3.60
Style 101 with End Slot	3.00	3.60
Style 102 with Side Slot	3.00	3.60
Style 105 with Spring Test Clip	...	4.80

(Special prices will be made when ordered in quantity.)

Test Glasses, Conical, with lip, tall form, for sedimentation:

Capacity ounces	1	2	4	6	8	16
a **Plain,** each	.50	.60	.70	.80	1.00	2.00
b **Graduated in Ounces, each**	.65	.80	1.00	1.10	1.50	2.75
c **Graduated in cc, each**	.80	.90	1.00	1.25	1.75	3.00
d **Double Scale, each**	.90	1.00	1.25	1.50	2.00	3.25

Test Tubes, usual form, suitable for ordinary laboratory uses where a resistant glass is not required:

Size inches	3x½	4x½	5x½	5x⅝	6x⅝
Dozen	.15	.20	.20	.24	.25
Gross	1.75	2.00	2.25	2.40	2.60

Size, inches	6x¾	6x1	7x⅞	8x1	10x1	12x1
Dozen	.30	.35	.40	.55	.65	1.25
Gross	2.75	4.00	4.75	6.00	7.75	15.00

Test Tubes, "Perfection," superior quality resistant glass for chemical work, thin wall with lip, usual form:

Size inches	3x½	4x½	5x½	5x⅝	6x⅝	6x¾	6x1	7x⅞	8x1
Dozen	.30	.35	.40	.45	.50	.55	.65	.75	1.00
Gross	3.25	3.50	3.75	4.00	4.50	4.75	7.25	8.00	10.00

Test Tubes, with side neck:

Size inches	5x⅝	6x¾	7x⅞	8x1	9x1
Dozen	1.30	1.45	1.55	1.80	2.35

Test Tubes, With Bulb Near Top, preventing contents from boiling over, or spilling when laid down:

Size inches	5x⅝	6x¾
Dozen	1.75	2.00

Test Tubes on Foot, usual form with lip:

Size inches	4x½	5x⅝	6x¾	7x⅞	8x1	10x1	12x1
Dozen	.65	1.20	1.50	1.95	2.60	3.75	5.85

Test Tubes, Graduated, usual form, with lip, with or without foot:

Capacity cc	5	10	15	20	25	30
Subdivision	1/10	1/10	1/10	1/10	1/10	⅕
a **Without Foot,** each	.24	.30	.36	.45	.48	.54
b **With Foot,** each	.42	.48	.54	.63	.66	.72

Test Tubes, Ignition, special quality hard glass, heavy wall:

Size inches	4x½	5x⅝	6x¾	7x⅞	8x1
Plain, Without Lip, dozen	.60	.75	.85	1.00	1.50
With Lip, dozen	.65	.80	.90	1.10	1.60
With Lip and Bulb at Bottom, dozen	.75	.90	1.00	1.25	1.75

Test Tubes, Ignition, Pyrex Glass, light wall:

Size mm	75x10	100x12	125x15	150x16
Each	.05	.06	.08	.10

Size mm	150x18	100x25	150x25	200x25	250x25
Each	.11	.14	.16	.24	.34

Size mm	300x25	200x29	300x29	200x32
Each	.38	.38	.43	.44

Test Tubes, Ignition, Heavy Wall, Pyrex Glass:

Size mm	70x10	100x14	125x16	150x20	200x25
Each	.08	.11	.13	.22	.34

Test Tubes, Culture, for Bacteriological work, medium weight glass, without lip, round or flat bottom:

Size inches	4x½	5x⅝	6x¾	7x⅞	8x1
a **Round Bottom,** gross	3.15	3.60	3.90	6.75	8.25
b **Flat Bottom,** gross	3.15	3.60	3.90	6.75	8.25

Thermit, a well known compound of metallic oxide and granulated aluminum which, when ignited, produces a chemical reaction that reaches a temperature of 3,000° C. Used commercially for welding purposes. The following sets are selected to perform striking experiments:

a **Set I,** for welding a piece of steel to a plate, complete with 2 cans of thermit..... 3.00

(Continued)

(Continued)

b **Set II,** for burning a hole through a steel plate, complete .....
c **Set III,** for welding a large boss to a steel plate, showing the method of welding used in industries, complete materials.....
d Set IV, for pipe welding, complete equipment .....
e Thermit, black, lb.....
f Igniting Mixture, lb.....

14300 **Thermometers, Chemical,** etched scale, white back:

a **Fahrenheit Scale.**

Length	Range	
10 inches	220° F.	
10 inches	300° F.	
12 inches	220° F.	
12 inches	300° F.	
14 inches	400° F.	
14 inches	500° F.	
15 to 16 inches	600° F.	
15 to 16 inches	700° F.	

b **Centigrade**

Length	Range	
8 inches	110° C.	
10 inches	110° C.	
10 inches	150° C.	
12 inches	110° C.	
12 inches	150° C.	
12 inches	200° C.	
14 inches	300° C.	
14 inches	360° C.	

c **Double Scale C. & F.**

Length	Range	Div.	
12 inches	220° F.	2° F. 1° C.	
12 inches	300° F.	2° F. 1° C.	
14 inches	400° F.	2° F. 1° C.	
14 inches	500° F.	2° F. 1° C.	
16 inches	600° F.	2° F. 1° C.	
16 inches	700° F.	2° F. 1° C.	

14305 **Thermometers, Chemical, Lens or Magnifying front,** engraved scales:

a **Fahrenheit**

Length	Range	Div.	
8 inches	220° F.	1°	
10 inches	220° F.	1°	
12 inches	300° F.	1°	
14 inches	400° F.	1°	
14 inches	500° F.	2°	
15 to 16 inches	600° F.	2°	
15 to 16 inches	700° F.	2°	

b **Centigrade**

Length	Range	Div.	
8 inches	110° C.	1°	
10 inches	110° C.	1°	
10 inches	150° C.	1°	
12 inches	110° C.	1°	
12 inches	200° C.	1°	
12 inches	300° C.	1°	
14 inches	360° C.	1°	

c **Double Scale C. and F.**

12 inches	220° F.-110° C.	1° F. 1° C.	
12 inches	300° F.-150° C.	2° F. 1° C.	
14 inches	400° F.-200° C.	2° F. 1° C.	
14 inches	500° F.-250° C.	2° F. 1° C.	
16 inches	600° F.-310° C.	2° F. 1° C.	
16 inches	700° F.-360° C.	2° F. 1° C.	

F58 **Thermometer, Chemical,** with enclosed milk glass scale. Outside diameter from 8 to 10 mm. Graduations as follows:

Graduations	
110 C. or 220 F.	
150 C. or 300 F.	
200 C. or 400 F.	
250 C. or 500 F.	
300 C. or 600 F.	
360 C. or 700 F.	
220 F. and C.	

(Continued)

-(Continued)

300 F. and C.	3.40
400 F. and C.	3.90
500 F. and C.	4.70
600 F. and C.	5.20
700 F. and C.	5.85

House Thermometer, standard grade, japanned metal case:

a 8 inch	1.00
b 10 inch	1.35

Thermometers, Chemical, With Certificate, superior quality, annealed by special process to insure permanent accuracy, carefully tested and inspected indelible scale, engraved. Diam. approximately 7 mm:

Length	Range	Sub-Div.	
8 inches	—20 to 120° F.	1°	2.25
8 inches	0 to 120° F.	1°	2.25
8 inches	0 to 220° F.	2°	2.25
10 inches	0 to 300° F.	2°	2.50
12 inches	—20 to 120° F.	1°	2.75
12 inches	0 to 220° F.	2°	2.75
12 inches	+30 to 300° F.	2°	2.75
12 inches	+30 to 400° F.	2°	3.00
12 inches	+30 to 500° F.	2°	3.75
14 inches	+30 to 400° F.	2°	3.75
14 inches	+30 to 500° F.	2°	4.00
14 inches	+30 to 600° F.	2°	4.50
16 inches	+30 to 600° F.	2°	4.75
16 inches	+30 to 750° F.	2°	6.50
8 inches	0 to 50° C.	1°	2.25
8 inches	0 to 100° C.	1°	2.25
10 inches	0 to 150° C.	1°	2.50
12 inches	0 to 100° C.	1°	2.75
12 inches	0 to 150° C.	1°	2.75
12 inches	0 to 200° C.	1°	3.00
14 inches	0 to 200° C.	1°	3.75
14 inches	0 to 300° C.	1°	4.50
16 inches	0 to 200° C.	1°	4.00
16 inches	0 to 300° C.	1°	4.75
16 inches	0 to 360° C.	1°	5.00
16 inches	0 to 400° C.	1°	6.50
12 inches	120° F. and C.	1°	3.50
12 inches	220° F. and C.	2° F. 1° C.	3.50
12 inches	300° F. and C.	2° F. 1° C.	3.50
14 inches	400° F. and C.	2° F. 1° C.	4.50
16 inches	600° F. and C.	2° F. 1° C.	5.50

Thermometers, Chemical, High Temperature, normal glass, nitrogen filled, scale etched on stem, diam. 7 mm, length 16 inches:

Single Range, 750° F. (or) 400° C.	3.50
Double Range, 750° F. (and) 400° C.	4.50
Single Range, 800° F. (or) 450° C.	4.00
Double Range, 800° F. (and) 450° C.	5.00
Single Range, 900° F. (or) 500° C.	4.50
Double Range, 900° F. (and) 500° C.	5.50
Single Range, 1,000° F. (or) 550° C.	5.00
Double Range, 1,000° F. (and) 550° C.	6.00

Thermometers, High Temperature, Chemical, Borosilicate Glass, filled with Carbon Dioxide to prevent boiling of mercury, engraved scale, white enameled back, diam. approximately 7 to 8 mm:

Length	Range F.		Range C.	
16 inches	900° F.	(or)	500° C.	8.00
16 inches	1,000° F.	(or)	550° C.	10.00
18 inches	900° F.	(or)	500° C.	8.50
18 inches	1,000° F.	(or)	550° C.	11.00
20 inches	900° F.	(or)	500° C.	9.75
20 inches	1,000° F.	(or)	550° C.	12.00

Thermometers, Chemical, with Fractional Division:

Length	Range	Div.	Each
12 inches	0-120° F.	1/2° F.	3.00
16 inches	30-220° F.	1/2° F.	3.25
20 inches	30-120° F.	1/10° F.	3.50
24 inches	30-220° F.	1/10° F.	4.25
26 inches	100-220° F.	1/10° F.	4.50
15 inches	0- 50° C.	1/10°	3.25
16 inches	0-100° C.	1/5°	3.25
24 inches	0-100° C.	1/10°	4.00

F52 Thermometers, Chemical, Normal Resistance Glass, accurately calibrated:

a Fahrenheit.

Length	Range	E
8 inches	120° F.	
8 inches	220° F.	
10 inches	120° F.	1
10 inches	220° F.	1
10 inches	300° F.	1
12 inches	120° F.	1
12 inches	220° F.	1
12 inches	300° F.	1
14 inches	400° F.	1
14 inches	500° F.	1
16 inches	600° F.	1
16 inches	700° F.	1

b Centigrade.

Length	Range	E
8 inches	110° C.	
10 inches	110° C.	1
10 inches	150° C.	1
12 inches	110° C.	1
12 inches	150° C.	1
12 inches	200° C.	1
12 inches	300° C.	1
14 inches	360° C.	1

c Double Scale C. and F.

Length	Range	Div.	E
12 inches	220° F.	1° F. 1° C.	1
12 inches	300° F.	1° F. 1° C.	1
14 inches	400° F.	1° F. 1° C.	1
14 inches	500° F.	1° F. 1° C.	2
16 inches	600° F.	1° F. 1° C.	2
16 inches	700° F.	1° F. 1° C.	2

F55 Thermometers, Precision, engraved scales, with certificates, in special cases:

a Fahrenheit

Length	Range	Div.	E
12 inches	+30 to 120° F.	1/2°	1
12 inches	0 to 120° F	1/2°	1
12 inches	+30 to 212° F.	1/2°	1
15 inches	+30 to 120° F.	1/5°	2
15 inches	0 to 120° F.	1/5°	2
15 inches	+30 to 212° F.	1/2°	2
15 inches	0 to 212° F.	1/2°	2
18 inches	+30 to 120° F.	1/5°	3
18 inches	0 to 120° F.	1/5°	3
18 inches	+30 to 212° F.	1/5°	3
18 inches	0 to 212° F.	1/5°	3
18 inches	+30 to 300° F.	1/5°	4

b Centigrade

Length	Range	Div.	E
12 inches	0 to 50° C.	1/5°	1
12 inches	—15 to 50° C.	1/5°	1
12 inches	0 to 100° C.	1/5°	1
15 inches	0 to 50° C.	1/10°	2
15 inches	0 to 50° C.	1/5°	1
15 inches	—15 to 50° C.	1/10°	2
15 inches	0 to 100° C.	1/5°	2
15 inches	—15 to 100° C.	1/5°	2
18 inches	0 to 50° C.	1/10°	3
18 inches	—15 to 50° C.	1/10°	3
18 inches	0 to 100° C.	1/10°	4
18 inches	—15 to 100° C.	1/10°	4
18 inches	0 to 150° C.	1/5°	4

F70 Thermometers, Chemical, Meximum Registering. When the mercury rises it passes through a narrow contraction, which prevents it from falling back until shaken. The top of the mercury column indicates the maximum temperature reached.

Length	Range	Div.	E
8 inches	100 to 220° F.	2°	
8 inches	100 to 300° F.	2°	
8 inches	100 to 400° F.	2°	
8 inches	20 to 50° C.	1°	
8 inches	30 to 100° C.	1°	
8 inches	50 to 150° C.	1°	
8 inches	50 to 200° C.	2°	

Thermometer, Normal Allihn, set of 3, 12 inches long, with zero and boiling point corrections, enclosed milk glass scale, in leather case 48.00

Thermometers, Normal Standard, With Enclosed Milk Glass Scale, length 20 to 24 inches:

Range	Sub-Div.	Each
0- 50° C.	1/10	17.00
0-100° C.	⅕	17.00
0-100° C.	1/10	21.00
0-200° C.	⅕	21.00
100-200° C.	⅕	19.00
200-300° C.	⅕	26.00

Thermometer, Low Temperature.

a —20° to 40° C. in 1° div., 25 cm 2.50
b —50° to 50° C. in ⅕° div., 30 cm, (Alcohol Filled) 6.00
c —200° to 50° C. in 1° div., 35 cm, (Pentane Filled) 12.00
d —100° to 50° C. in 1° div., 30 cm (Toluol Filled) 10.00

Thermometer, Tin Case, Ordinary Quality, Japan finish, white figures, —40 to +120° F.

Length inches	8	10	12
Each	.60	.75	1.00

Thermometers, Tin Case, black Japan finish, oxidized brass scale with white figures.

Length inches	8	10	12
Each	1.00	1.25	1.50

Thermometer, Wall, Coppered Metal Case, black oxidized brass scale with white figures, magnifying tube, —40° to +120° F.

Length inches	8	10
Each	1.00	1.25

Thermometer, Floating, Dairy, Churn and Pasteurizing, range —20 to +150° F., length 8 inches 1.00

Thermometer, Cabinet, Range —40°, +120° F., Ordinary Grade, metal scale on wooden back, with ring for hanging on wall:

Length inches	7	8	10
Each	.60	.75	1.00

Thermometer, Cabinet, Range —10° to +120° F., First Quality, metal face on wooden base.

Length inches	6	8	10	12	18
Each	1.50	2.00	2.50	3.00	5.00

Thermometer, Window, brass with black scale and white marks, magnifying tube, range —60° to +120° F., length 11 inches, with arms for attaching permanently to window casing:

Length inches	8	10
Each	1.00	1.25

Thermometers, Clinical. 4-inch, in hard rubber case, with certificate:

½ minute 1.00
1 minute 1.25
2 minutes 1.50

Thermometers, Beckmann, for exact determination of slight changes in temperature. Graduated to 1/100 degree over a range of 5° or 6° C., with an auxiliary scale —10° to 120° C. Constructed and graduated according to the U. S. Bureau of Standards:

a **Without Certificate** 25.00
b **With Certificate by Bureau of Standards** (about) 45.00
c **Without Auxiliary Scale and Without Certificate** 25.00
d **With Auxiliary Scale and With Certificate by Bureau of Standards** (about) 45.00

Thermometer Reading Lens, to fasten to stem of thermometers to facilitate accurate reading 3.00

Thermometers, Chemical, Standard, Graduated in Fractional Degrees, With Certificate:

Length	Range	Degree Sub-Div.	
12 inches	0- 50° C.	⅕	10.00
16 inches	0- 50° C.	1/10	11.00
16 inches	0-100° C.	⅕	11.00
24 inches	0-100° C.	1/10	15.00
20 inches	100-200° C.	⅕	15.00
24 inches	0-100° C.	⅕	12.00
24 inches	100-200° C.	1/10	17.50
20 inches	30-120° F.	1/10	12.00
24 inches	30-220° F.	⅕	15.00

Thermometers, Chemical, In Armored Case, to lessen liability of breakage, scale engraved on stem:

Single Range, 6 in. 120° F. (or) 50° C. 2.25
Double Range, 6 in. 120° F. (and) 50° C. 3.00
Single Range, 10 in. 220° F. (or) 110° C. 3.00
Double Range, 10 in. 220° F. (and) 110° C. 3.75
Single Range, 12 in. 500° F. (or) 250° C. 4.00
Double Range, 12 in. 500° F. (and) 250 C. 5.00
(Other ranges quoted on request.)

14550 **Thermometers, Armored, for Asphalt Testing,** ranges and prices on application.

14565 **Thermometer and Storm Glass, Combined,** marked "Fair," "Rain" and "Stormy" at side, black oxidized scale, magnifying tube, range —60° to 120° F., oak back 9 inches long

14570 **Thermometers, Pocket Chemical,** in metal case with chain and pin, length 5 inches:

Range	
—30 to 120° F.	
+30 to 120° F.	
—30 to 220° F.	
+30 to 220° F.	
0 to 100° C.	
+10 to 100° C.	

14712 **Thermometer, Dairy,** metal back, black-oxidized brass scale, white figures, range 20° to 220° F.:

Length inches	8	10
Each	1.00	1.25

14835 **Tongs, Crucible, Steel, Nickel Plated:**

Length mm	225	300
a **Single Bent**	.75	.90
b **Double Bent:**	.75	.90

Tongs, Crucible, brass:

Length mm	225	250	300
14840 **Single Bent**	.75	1.00	1.25
14841 **Single Bent Nickel Plated**	1.25	1.50	1.75
14845 **Double Bent**	.75	1.00	1.25
14846 **Double Bent Nickel Plated**	1.25	1.50	1.75

14860 **Tongs, Crucible, Steel,** 9 inches long, double bent:

a **Plain**

b **Nickel Plated**

14875 **Tongs, Crucible, Solid Nickel,** double bent, 9 inches long

14877 **Tongs, Crucible, Nickel Chromium Alloy,** double bent, 9 inches long

14880 **Tongs, Crucible, Platinum Tipped,** prices on application.

14945 **Tray Porcelain, Photographic, Glazed, With Lip.** Foot and impression bottom. (Inside measurements.)

Size No.	1	2	3	4	5	6
Length mm	135	188	200	264	268	300
Width mm	110	138	150	188	205	250
Depth mm	32	32	38	44	44	50
Each	.80	.90	1.25	2.00	2.50	3.00

14948 **Triangles, Iron Wire,** twisted ends:

Size inches	1½	2	2½
Dozen	.50	.55	.60

14949 **Triangles, Iron Wire, Covered With Plain Clay Sleeves:**

Size inches	1½	2	2½	3
Dozen	.75	.80	.90	1.00

14950 **Triangles, Iron Wire, Covered With Clay Sleeves Having Projections on Side:**

Size inches	2	2½	3½
Dozen	1.00	1.20	1.50

14955 **Triangles, Solid Nickel:**

Size inches	1½	2	2½	3	4
Each	.30	.35	.40	.45	.60

14958 **Triangles, Chromel,** made of heavy square section wire, free from iron, and highly resistant to acids, fusion or oxidation:

Size inches	1½	2	2½	3
Each	.30	.35	.40	.45

14960 **Triangles, Nichrome Wire,** non-corrosive, high melting point:

Size inches	1½	2	2½	3
Each	.16	.18	.22	.25

14980 **Triangle Holder With Clamp to Fit Ring Stand**

15000 **Tripods, for Water Baths,** 8 in. high, Japanned iron, legs at angle:

Diam. inside, inches	3	4½	6	8	10
Each	.44	.60	.80	1.00	1.25

15005 **Tripods, With Concentric Rings,** Japanned iron, 8 inches high:

Diam. outside inches	5	6	8	10	12
Number of Rings	2	3	4	5	6
Each	.70	.90	1.20	1.60	2.30

15010 **Tripods, For Water Baths,** 9 in. high, Japanned iron, straight legs:

Diam. inside, inches	5	6	8
Each	.48	.64	.84

Tripods, Iron, usual form:

15014 **Light Pattern,** 6 in. high, ring 2½ in. inside diam.

15015 **Bent Leg Pattern,** 8 in. high, ring 3½ in. inside diam.

15016 **Medium Pattern, Straight Legs,** 8 in. high, 3 in. inside diam. of ring

120 **Tripod, With Adjustable Lamp Bracket,** 8 in. high, ring 3 in. inside diam..... .75

125 **Tripod, Iron, With Chimney** to protect flame, 9 in. high:

Diam. inches	3½	5	6
Each	1.20	1.50	2.00

128 **Tubes, Combustion, Porcelain,** for high temperature work, in lengths of one meter. (Longer or shorter sizes furnished.)

a Coors (specify glazing desired):

Size No.	0	1	2	3	4	6
Outside diam. mm	10	14	20	28	38	60
Inside diam. mm	6	10	15	20	28	43
Each	5.60	5.60	7.00	8.40	11.20	14.00

145 **Tumbler, Glass,** heavy.

a Short Form ..... .10

b Tall Form ..... .15

148 **Tubes, Connecting, Glass, Straight Form,** with corrugated tips for attaching rubber tubing.

Diam. inches	¼	⅜	½
Length inches	2½	2¾	3
a Both Ends Same Size, each	.05	.05	.05
b Ends Different Sizes, each	.05	.05	.05

149 **Tube, Reducer, Brass,** about 1½ inches long, one end smaller than other to connecting rubber tubing of different diameters from 1/16 to 3/32 in. ..... .25

150 **Tubes, Connecting, "T" Shape, Glass:**

Diam inches	⅛	3/16	¼	5/16	⅜	½	¾
Each	.08	.09	.10	.11	.12	.17	.45

151 **Tubes, Connecting, "T" Shape, Glass, With Two Stopcocks,** bore 5 mm..... 3.00

152 **Tubes, Connecting, "T" Shape, Made of Brass:**

Bore inches	⅛	3/16	¼	5/16	⅜	½
Each	.40	.50	.55	.60	.65	.70

153 **Tubes, Connecting, "Y" Shape, Glass:**

Diam. inches	⅛	3/16	¼	5/16	⅜	½	¾
Each	.08	.09	.10	.11	.12	.17	.45

154 **Tubes, Connecting, "Y" Shape, Made of Lead:**

Bore inches	⅛	3/16	¼	⅜	½
Each	.25	.30	.35	.40	.50

155 **Tubes, Connecting, "Y" Shape, Made of Brass:**

Bore inches	⅛	3/16	¼	5/16	⅜	½
Each	.40	.50	.55	.60	.65	.70

156 **Tube, Connecting, "Y" Shape, Made of White Metal,** corrugated ends for ⅜ in. rubber tubing ..... .25

157 **Tubes, Connecting, "U" Shape, Glass:**

Diam. inches	¼	⅜	½	¾
Each	.10	.12	.17	.45

202 **Vapor Density Apparatus. Victor Meyer's,** complete with outer jacket of glass, 25 inches long by 1½ in. diam. (Without bottle for testing liquid.) 3.00

a Bottles, Glass Stoppered, for use with above, each ..... .30

205 **Vials, Homeopathic,** usual form for cork:

Capacity drams	½	1	1½	2	3	4	6	8
Per Gross	1.25	1.25	1.50	1.50	2.00	3.00	4.00	5.00

215 **Vials, Shell, Flat Bottom,** plain, packed one gross in box:

Capacity drams	½	1	1½	2	3	4	6	8
Per Gross	1.25	1.25	1.50	1.50	2.00	3.00	4.00	5.00

220 **Vials, Homeopathic, With Screw Metal Cap,** packed one gross in box:

Capacity drams	1	1½	2	3	4
Gross	3.25	3.75	3.75	4.25	5.50
Capacity drams	6	8	10	12	14
Gross	8.00	9.00	10.50	11.75	13.00

222 **Viscosimeter, Engler's,** for light or heavy oils, etc., with oil container gold-plated and platinum outlet tube, stirring arrangement, ring burner and tripod

a Latest Form 50.00

b Ubbelohde's modification 75.00

223 **Viscosimeter, Scott's,** for oils, etc. 17.50

235 **Watch Glasses,** annealed, with smooth ground edges:

Diam. inches	2	2½	3	3½	4	4½	5	5½	6
Dozen	1.00	1.30	1.50	1.75	2.00	2.20	2.40	2.65	2.90

240 **Watch Glass, Syracuse,** diam. 2⅝ in.:

a Unfinished, gross 10.40

b Rough Top Edge, gross 19.20

c Polished Top and Bottom, gross 27.20

d Polished Top and Bottom With Roughed Top Edge, gross 35.20

15050

15051

15052

15055

15048

15135

15140

15115

17030

15240

Quartz Glass Ware (See page 126)

15120

Watch Glass, Minot's, 2¾ in. diam.:
a **Unfinished,** gross 10.40
b **Unfinished Rough Top Edge,** gross 19.20
c **Polished Top and Bottom,** gross 27.20
d **Polished Top and Bottom, With Roughed Top Edge,** gross 35.20

Watch Glass, Syracuse, diam. 2⅝ in., with ground in groove for stacking up and to be air tight, gross 24.00

Watch Springs, Steel, for burning in oxygen, doz. ..... .25

Water Analysis Outfit, in Portable Case, including apparatus and reagents for examination of water samples at source of supply 35.00

Water Testing Apparatus, for determination of ammonia in water, as used by Dept. of Health, New York City, including: metal condenser with block tin coil, 2 support stands, 8 Nessler jars, graduated at 50 and 100 cc in revolving support, flask and burner 35.00

Water Baths, Copper, with concentric rings:

Diam. inches	4	5	6	8	10	12
Plain	1.30	1.50	2.00	3.25	6.00	10.00
With Water Level Regulator	2.50	3.00	3.50	4.75	7.50	12.00
With Steam Valve	...	...	7.00	8.25	11.00	16.00

Water Bath, Copper, Deep Form, With Tripod, concentric rings and water level regulator, diam. 6 inches by 4 in. deep 7.50

Water Bath, Freas', Electric Heated, copper tank with heavy asbestos outer covering, regulated by the Freas' Thermo-Regulator, giving a temperature control within about 1° C. Temperature range, without cover, is up to 65° C.; with cover it is about 100° C. Oven 4 x 12 x 18 inches:
a **With Cover** 180.00
b **Without Cover** 150.00

Water Baths, Copper, With Multiple Openings and Concentric Rings, Water Level Regulator, mounted on legs:
a **Size 23x13½x5 in., With 7 Openings,** 3 of 6 in., and 4 of 4 in. diam. 30.00
b Ditto with steam coil 37.50
c Ditto with electric heating attachment 95.00
d **Size 28x14x5 in., With 8 Openings,** 5 in. diam. 40.00
e Ditto with steam coil 48.00
f Ditto with electric heating attachment 105.00
g **Size 14x14x5 in., With 4 Openings,** 5 in. diam. 20.00
h Ditto with steam coil 27.50
i Ditto electrically heated 75.00

Water Bath, Griffin's, Copper, for hot filtration and evaporation, 13x7x5 inches with copper funnel and 5-inch hole with concentric rings, provided with water level regulator, mounted on four legs 15.00

Wire Gauze, Brass:

Mesh	10	20	40	60	80	100
Square foot	.70	.75	.80	.90	1.10	1.60

Wire Gauze, Copper:

Mesh	20	40	60	80	100
Square foot	.80	1.00	1.10	1.20	1.80

Wire Gauze, Iron:

Mesh	6	10	14	16	20	30	40	50
Square foot	.35	.40	.40	.45	.45	.50	.75	.90

Wire Gauze, Cut In Squares, 20 mesh:

Size inches	4x4	5x5	6x6	8x8	12x12
Brass, each	.10	.14	.20	.40	.70
Copper, each	.12	.18	.24	.50	.80
Iron, each	.06	.09	.12	.18	.40

Wire Gauze, Nichrome, rust-proof, high melting point, very durable:

Size inches	4x4	5x5	6x6	12x12
No. 16 Mesh	.45	.65	.95	3.50
No. 20 Mesh	.70	.90	1.30	5.00

Wire Gauze, Iron, With Asbestos Center:

Size inches	4x4	5x5	6x6
Each	.12	.15	.18

ALUNDUM WARE

Alundum Capsules:

Capacity cc	7	10	18	25
Each	.50	.50	.60	.75

Alundum Cement (Refractory), for imbedding or covering electric wires used in high temperature electrical work. Easily mixed with water:
RA 162, 5-lb. bag 2.00
RA 355, Finer, 5-lb. bag 2.50

17020	**Alundum Combustion Boats:**							
	Size inches				3½x½	3¾x⅝	4½x⅝	5x¾
	Each				.35	.40	.50	.50
17030	**Alundum Crucibles:**							
	Capacity cc			10	15	20	25	30
	Each			.50	.50	.50	.50	.60
	Capacity cc			40	70	80	90	160
	Each			.60	.75	.90	1.25	1.50
17040	**Alundum Crucibles, Melting,** for pure metals:							
	Diam. inches		1⅜	1½	2	2⅜	2¾	3
	Each		2.50	1.00	2.50	1.50	2.50	2.50
17050	**Alundum Dishes, Incineration:**							
	Size inches						4⅝ Square	2¾ Ro
	Each						2.00	.75
17060	**Alundum Filter Crucibles:**							
	Capacity cc						25	35
	Each						.40	.50
17070	**Alundum Filter Discs:**							
	Diam. inches	¾	1	2	3	4	5	6
	Each	.50	.55	.60	.75	.90	1.25	1.50
17080	**Alundum Filter Dishes:**							
	Diam. inches					2½	4	5⅝
	Capacity cc					50	300	400
	Each					1.10	1.50	2.50
17090	**Alundum Filter Cones,** to fit ordinary funnel of 60° angle:							
	Diam. inches				1¾	2½	3	4½
	Each				.40	.75	1.00	1.80
17100	**Alundum Tubes,** serviceable as a refractory support for quartz combustion tubes:							
	Bore inches		½	¾	1	1¼	1½	2
	12-Inch Length		2.40	2.40	2.50	3.00	3.75	5.00
	18-Inch Length		3.75	3.75	4.00	4.50	5.50	7.50

(Other sizes and lengths can be supplied. Information on request.)

QUARTZ GLASS WARE, FUSED SILICA, OPAQUE AND TRANSPAREN

Quartz Glass, prepared from pure rock crystal quartz, no foreign ingredient be introduced in its manufacture, is absolutely homogeneous in structure. The coe cient of expansion being only about one-seventeenth that of glass or platinum, ware withstands rapid changes of temperatures without breakage. Objects n even be heated to incandescence and plunged into cold water without the least jury. It may be exposed to a continuous temperature of 1,200° C. and for sh periods to a much higher temperature. Quartz glass is non-hygroscopic, insolu in water and most acids, less soluble in alkaline solutions than the best kinds glass. It is, however, attacked at high temperatures by basic oxides and alkalies

This ware is especially recommended for Combustion and Pyrometer Tubes, S phuric and Nitric Acid condensing and cooling apparatus, high temperature analysis, electric furnace construction, etc., and as a most satisfactory substitute platinum and similar high cost substances in chemical, scientific and technical h temperature work.

18000	**Quartz Beakers, Tall or Low Form,** without lip. If lip is desired, a small additional cha of 15 cents will be necessary:							
	Capacity cc			25	50	100	150	200
	a **Opaque,** each			...	1.75	2.00	2.15	2.40
	b **Transparent,** each			4.00	6.00	10.00	12.00	13.50
	Capacity cc			250	300	400	500	800
	a **Opaque,** each			3.00	3.40	3.85	4.35	5.25
	b **Transparent,** each			15.00	17.50	20.00	25.00	...
18010	**Quartz Capsules, Circular:**							
	Capacity cc	10	15	20	30	35	40	40	75
	Diam. mm	35	44	51	57	60	70	51	81
	Depth in center mm	13	13	13	13	13	16	25	25
	Opaque:								
	a **Capsules, unglazed,** each	.60	.60	.90	.90	1.00	1.25	...	...
	b **Capsules, glazed,** each	.85	.85	1.15	1.15	1.35	1.65	1.65	1.65
	Transparent:								
	c **Capsules,** each	2.00	2.25	2.50	3.25	3.75	5.50	3.25	7.50
18020	**Quartz Combustion Boats:**							
	Length mm				44	76	76	102	
	Width mm				13	13	16	16	
	Depth mm				8	8	10	10	
	a **Opaque, unglazed** each				.50	.75	.90	1.15	
	b **Opaque, glazed** each				.75	1.15	1.35	1.75	
	c **Transparent** each				1.50	2.75	3.00	3.75	

150 **Quartz Combustion Tubes, Opaque, With Transparent Section.** Quartz combustion tubes have almost entirely displaced those of porcelain, because they can be heated rapidly and withstand violent temperature changes without cracking. One disadvantage of the opaque quartz tubes now very generally used is that the progress of combustion cannot be conveniently observed. This is overcome by providing such tubes with a section that is transparent. Some standard tubes are listed below:

Bore mm	15–16	15–16	19	19	22	22	25	25
Over all Length mm	610	762	610	762	610	762	610	762
Width 4 in. (100 mm) Transparent Section..	10.50	12.00	13.00	14.75	13.75	15.75	16.00	18.00
With 6 in. (150 mm) Transparent Section..	11.75	13.25	14.75	16.50	15.50	17.50	18.00	20.25

175 **Quartz Crucibles, Low Form, Wide:**

Capacity cc	4	10	15	25	40	65	145	225
Height mm	19	19	25	28	37	44	51	73
Diam. Top mm	41	41	41	48	57	67	81	86
Opaque:								
a Crucibles, unglazed, each.	...	.60	.60	.75	.90	1.25	1.50	2.00
b Covers, unglazed, each	...	.50	.50	.60	.75	.90	1.10	1.25
c Crucibles, glazed, each	.65	.85	.85	1.00	1.15	1.65	2.00	3.00
d Covers, glazed, each	.55	.55	.55	.65	.85	.85	.85	2.00
Transparent:								
e Crucibles, each	1.00	1.50	2.00	2.50	3.75	5.00	6.50	...
f Covers, each	1.00	1.65	1.65	2.00	3.00	3.75	5.00	...

Quartz Crucibles, High Form:

Capacity cc	10	15	20	30	50
Height mm	32	34	35	38	51
Diam. Top mm	19	32	35	43	51
Opaque:					
a Crucibles, unglazed, each	...	...	1.25	1.25	1.25
b Covers, unglazed, each	...	...	.50	.50	.60
c Crucibles, glazed, each	...	...	1.35	1.35	1.65
d Covers, glazed, each	...	...	.55	.55	.65
Transparent:					
e Crucibles, each	1.50	2.00	2.25	2.50	4.75
f Covers, each	1.25	1.50	1.65	1.90	2.50

Transparent Quartz Deflagrating Spoons, about 10 cm over-all, per doz. 3.00

Quartz Flat Dishes, With Lip:

Capacity cc	20	30	75	150
Diam. mm	63	73	95	124
Depth mm	13	13	18	21
Opaque:				
a Unglazed each	1.15	1.25	1.35	1.85
b Glazed, each	1.50	1.65	1.85	2.50
c Transparent	2.50	3.75	6.25	8.75

Opaque Quartz Distillation Flasks, With Side Delivery Tube.

Capacity cc	50	100	150	200	250
Each	2.50	4.80	6.50	7.50	9.00

Transparent Quartz Distillation Flasks, With Side Delivery Tube:

Capacity cc	15	25	50	100	150	200	250	500	750
Each	4.25	5.35	6.75	11.00	14.10	18.20	21.25	27.50	33.75

Quartz Evaporating Dishes.

Capacity cc	25	45	80	90	100	200	400		
Diam. mm	51	70	82	89	98	108	137		
Depth mm	21	25	30	29	30	44	57		
Opaque:									
a Unglazed each	1.00	1.15	1.25	1.35	1.60	1.85	2.85		
b Glazed each	1.35	1.50	1.65	1.85	2.15	2.50	6.15		
c Transparent	2.25	3.75	5.50	6.00	6.25	8.75	...		
Capacity cc	500	600	700	800	1,200	1,400	1,800	1,800	2,500
Diam. mm	130	152	152	178	178	203	203	229	229
Depth mm	63	63	76	70	95	82	108	89	120
Opaque:									
a Unglazed, each	3.00	3.15	3.50	3.75	3.90	4.35	5.00	6.00	6.75
b Glazed, each	6.35	...	...	...	...	...	...	...	...

300 **Spun Quartz Fibres,** in length of about 40 cm, graded in strengths down to 0.006 mm, in skeins of at least 1 gr. weight. Per gramme 2.50
Special prices for quantities.

18350 Quartz Flasks, Round Bottom, Long Neck:

a Opaque:

Capacity cc	10	20	30.	40	50	60	70	
Each	.70	.90	1.20	1.50	1.75	2.00	2.30	
Capacity cc	80	90	100	150	200	300	500	1,000
Each	2.60	3.00	3.50	4.00	5.00	6.00	7.50	12.00

b Transparent:

Capacity cc	15	25	50	100	150
Each	2.75	3.75	5.00	9.00	12.00
Extra for ground-in Stoppers	1.25	1.50	2.00	2.50	3.00
Capacity cc	200	250	500	750	1,000
Each	16.00	19.00	25.00	31.00	36.00
Extra for ground-in Stoppers	3.50	4.00	5.00	6.50	8.00

18400 Quartz Plates, up to 12x15 in. are made in thickness up to ⅛ in.; plates up to 12x8 in. are made in ⅛-½ in. thickness; prices for round plates are figured as per square plates. For plates smaller than 16 sq. inches, prices for 16 sq. inches will apply.

Thickness mm	1.5	3	4–5	6–7	12–15
a Opaque, per sq. in.	...	.03	...	.06	.08
b Transparent, per sq. in.	.50	.75	1.00	...	....

18500 Quartz Retorts:

Capacity cc	50	100	150	200	250
a Opaque, plain, each	2.00	4.00	5.50	6.50	7.50
b With ground Stopper, each	3.00	5.50	6.25	8.50	10.00
c Transparent, each	12.50	17.20	32.00	...	...

18550 Opaque Quartz Rods, in lengths up to 6 feet (182 cm):

Diam. mm	1–2	3	4–5	6–7	8	9–10
Per foot	.40	.50	.75	1.00	1.25	1.40
Diam. mm	11	12–13	14	15–16	17–18	19
Per foot	1.50	1.60	1.70	1.75	2.00	2.15

18560 Transparent Quartz Rods (furnished in different lengths as desired):

Diam. mm	1	2	3	5	7	10
Per 10 cm	.12	.35	.60	1.35	2.50	6.25

18600 Quartz Test Tubes, Opaque:

Diam. mm	13	13	16	16	19	22
Length mm	101	127	127	152	152	178
Each	.50	.65	.70	.80	.85	1.15

18610 Quartz Test Tubes, Transparent:

Diam. mm	10	15	15	20	20	25
Length mm	100	100	125	125	150	150
Each	1.10	2.60	3.00	4.00	4.50	5.75

18620 Opaque Quartz Trays, Three Sided:

Length mm	102	162	244	379	406	406
Width mm	70	109	162	241	346	346
Depth mm	25	25	32	38	19	41
Each	1.00	2.15	2.25	4.65	5.00	6.00

18630 Opaque Quartz Trays, Four Sided:

Length mm	152	244	305	406	406
Width mm	92	60	111	203	355
Depth mm	25	25	25	32	41
Each	2.00	2.25	3.25	4.25	6.50
Length mm	508	609	609	609	609
Width mm	355	355	406	508	508
Depth mm	41	41	51	51	102
Each	8.00	10.00	14.00	16.00	20.00

18640 Opaque Quartz Triangles:

Length of Side mm	38	44	51	57	63	70
Each	.75	.75	.75	.90	.90	1.00
Nichrome	.50	.50	.50	.60	.70	.80
Length of Side mm	76	82	89	95	102	
Each	1.00	1.00	1.15	1.15	1.25	
Nichrome	.80	.90	.90	1.00	1.00	

18650 Transparent Quartz Triangles, made entirely of quartz rod:

Length of Side mm	50	65	75
Each	2.30	3.00	3.50

18660 Opaque Quartz Troughs, round bottom, up to four feet in length:

Diam. mm	19	31–32	44	51
Per foot	2.00	3.00	3.50	4.25

18670 Opaque Quartz Troughs, Flat Bottom:

Width mm	25	31–32	38	38
Depth mm	6–7	9–10	15–16	31–32
Length mm	305	305	305	457
Each	3.00	3.50	4.50	5.50

Transparent Quartz, Capillary Tubes. Furnished in any length and with a bore of about 1 mm:

Outside Diam. mm	2	4	6	8	10
Per 10 cm	1.00	3.00	5.00	7.00	10.00

Opaque Quartz Tubes, drawn in lengths up to 8 feet.

Bore mm	Wall Thickness mm	Price per foot (30 cm)	Extra price per tube for closed end	Extra price per foot for outside glazing
1–2	.5–3	.25	.10	...
3	1–2	.45	.15	...
4–5	1–2	.75	.20	...
6–7	1–2	.90	.20	...
8	1–2	1.10	.20	.25
9–10	1–2	1.25	.25	.25
11	1–2	1.40	.25	.25
12–13	1–2	1.50	.25	.25
14	1–2.5	1.60	.35	.50
15–16	1–2.5	1.75	.35	.50
17–18	1–2.5	1.90	.50	.50
19	1–3	2.10	.50	.50
22	1–3	2.30	.65	.50
25	1–3	2.50	.75	.75
28–29	2–4	2.75	.75	.75
31–32	2–4	2.90	.75	.75
35	2–4	3.00	.90	1.00
38	2–4	3.20	.90	1.00
41	2–5	3.35	.90	1.15
44	2–5	3.50	1.00	1.25
48	2–5	3.75	1.00	1.35
51	2–5	3.90	1.00	1.40
54	2–5	4.25	1.25	1.50
57	2–5	4.60	1.25	1.50
60	2–5	4.85	1.25	1.75
63	2–5	5.25	1.25	1.75
67	2–5	5.50	...	2.00
70	2–5	6.00	...	2.00

Lengths less than one foot (30 cm) 10 per cent extra. Special quotations for large quantities.

Transparent Quartz Tubing:

Bore mm	Max. Stand. Wall Thickness mm	Max. Stand. Length cm	Price per foot (30 cm)
1–1½	1–2	150	1.00
1–2	1–2	150	1.25
3	2	150	1.90
4	2	150	2.15
5	2	150	2.40
6	2	150	2.90
7	2	150	3.15
8	2	150	3.40
9	2	150	3.65
10	2	150	4.00
11	2	105	5.00
12	2	105	6.00
13	2	105	7.00
14	2	105	8.00
15	2	105	9.00
16	2	105	9.50
17	2	105	10.00
18	2	105	10.50
19	2	105	11.00
20	2	105	12.00
22	1½	60	13.00
25	1½	60	14.00
30	1½	45	17.00

(Special wall thicknesses and lengths can be supplied to order.)

Flotation Sphere, of hollow brass, accurately adjusted so as to float in cold water, but will sink in warm water 6.00

The same, made of glass 3.00

Wind Vane, 32 in. long, ball bearings, with electrical attachment having contacts for eight directions. (See Wind Indicator G1015). Height 4 feet 50.00

Vernier Model, Straight, large size, with sliding vernier for demonstration 4.00

Vernier Model, Circular, large size, with movable vernier, for demonstration 15.00

BM-12

B406b

BRMS-13

BBM-15

CLM-15

BCM-12

CM-12

CRM-18

BMP-12

1005 **Brass Connecting Tubes,** L, T and Y Shapes:
- a L-Shape, ¼ in. outside diam. ..... .25
- b T-Shape, ¼ in. outside diam. ..... .36
- c Y-Shape, ¼ in. outside diam. ..... .36

(Other sizes can be supplied.)

1006 **Drawing Instruments, In Sets,** made of brass and steel, in folding pocket case:
- a With ruling pen and compasses provided with divider points, pen, pencil and lengthening bar, in case, set 3.75
- b The same, but including combination bow instrument with reversible pen and pencil, in case, set 4.25
- c With ruling pen, compasses with divider points, pen, pencil and lengthening bar, combination bow instrument with reversible pen and pencil point, and plain divider 7.00
- d Same as above but including a steel spring bow divider 8.75

1007 **Drawing Instruments, In Sets,** made of nickel-silver and steel, in folding pocket case:
- a Including ruling pen, compasses with needle points, pen, pencil and lengthening bar, and metal handle for pen, pencil or divider point 4.75
- b The same, but including a combination bow instrument, with reversible pen and pencil point 6.50
- c The same as "b," but including plain dividers 8.75
- d The same as "c," but including steel spring bow dividers 10.00

1008 **Drawing Instruments,** made of brass and steel, in pocketbook case, containing ruling pen, compasses (complete), with steel spring bow, pencil and pen, set 14.75

PROJECTION LANTERNS AND ACCESSORIES

1-12 **Balopticon, Model B,** with 400-watt Mazda Projection lamp, 115 volts, 12 inch focus lens, complete in case. A compact, portable lantern giving excellent results 60.00

P-12 **Balopticon, Traveling, Model B,** with 400-watt Mazda projection lamp, 115 volts, 12 inch focus lens and carrying case. The case is designed for holding extra slides, etc., and may be used for supporting the lantern when in use 72.50

M-12 **Balopticon, Model BC,** with high power projection lamp of 600 watts, 110 volts, 12 inch focus lens and carrying case 72.50

M-15 **Balopticon, Double, for Dissolving Views,** with two Mazda projection lamps of 400 watts, 115 volts, two 15 inch focus lenses, single lamp house and carrying case ... 125.00

Balopticon, Model C, with 12-inch focus lens. Compact and efficient, regularly supplied with three different illuminants, in carrying case:

-12 **With Mazda Projection Lamp,** 400 watts, 115 volts 66.00

-12 **With Arc Lamp,** hand feed 62.50

-12 **With Acetylene Burner** 63.00

M-15 **Balopticon, Model CL,** with 1000-watt Mazda projection lamp, 115 volts, large lamp house, 15-inch focus lens 85.00

MS-13 **Balopticon, Duplex, for Opaque and Lantern Slide Projection,** adapted for home or class-room. Complete with 400-watt Mazda projection lamp, gas-filled, 115 volts, giving ample illumination for a 4-foot picture, including aluminum-coated screen 4½ ft. square 81.00

M-18 **Balopticon, Combined, for Opaque and Lantern Slide Projection,** including high-power 1000-watt Mazda projection lamp, 115 volts, 18-inch focus lens for opaque objects, and 10-inch focus lens for lantern slides 185.00
(This outfit can also be supplied with a lens of larger diam. and greater focal length. Price on application.)

A **Balopticon, Model D,** with optical bed 19½ in. long, accurately machined, on which various optical experiments can be performed:
- a With 10-inch projection lens 90.00
- b With 12-inch projection lens 95.00
- c With 15-inch projection lens 95.00

RA **Balopticon, Convertible,** a high grade instrument, designed for both opaque and lantern slide projection 325.00

10 **Standard Projection Lenses, as Used in Projection Lanterns:**

Focus inches	6	8	10	12	15	18
Each	14.50	14.50	21.50	21.50	21.50	21.50

1200 **Tables, Metal, for Projection Lanterns:**

Size of top inches			30x14	32x16½	40x17
Each			15.00	24.00	45.00

1150 **Projection Screens,** on spring rollers:

Size feet	6	7	8	9	10	12
a **White**	8.00	10.50	14.50	22.50	27.50	53.50
b **Aluminum Coated**	11.50	15.50	20.00	23.00	35.00	60.00
c **Sateen**	7.00	10.00	....	16.00	....	24.00

910 **Slide Holders,** for standard lantern slide 3¼x4 inches:
- a **Plain,** for 2 slides 2.00
- b **Rapid Changing,** new form 5.00

960 **Rheostats,** for 110 volts:

Capacity amperes	8	15	5–10–15	15–25	20–35
Each	12.50	10.25	18.00	27.00	40.50

M275

M250

M740

M265

M922

M920

M850

1010 **Wire, Twin Cable, Rubber Covered:**

Size No.	10	12	14	16
Amperes	25	15	..	..
Per foot	.25	.20	.12	.08

35 **Mazda Projection Lamps** (Bulbs only):
- a **400-watts** 5.50
- b **1000-watts** 10.00

50 **Carbons, Soft Core,** 6 inches long:

Diam. inches	5/16	7/16	5/8	1/4
Each	.05	.04	.05	.04

PHOTOGRAPHIC SUPPLIES

250 **Kodak, Vest Pocket, Autographic,** 1⅝x2½ in. pictures:
- a **With Achromatic Lens** 9.49
- b **With Rapid Rectilinear Lens** 10.58
- c **With Anastigmat Lens f. 7.7** 22.58

265 **Kodak, Autographic, 1A,** folding, pictures 2½x4¼:
- a **With Rapid Rectilinear Lens** 25.02
- b **With Anastigmat Lens f. 7.7** 30.66

275 **Kodak, Autographic, No. 3,** folding, pictures 3¼x4¼:
- a **With Rapid Rectilinear Lens** 24.93
- b **With Anastigmat Lens f. 7.7** 30.56

740 **Graflex Camera, 3A,** 3¼x5½, with anastigmat lens f. 6.3 ..... 156.80

850 **Revolving Back Cycle Graphic Cameras,** including double plate holder and case:

	4x5	5x7
a **With Rapid Rectilinear Lens and Automatic Shutter**	95.14	110.87
b **With Anastigmat Lens f. 6.3 and Volute Shutter:**	143.86	182.68
c **With Convertible Protar Lens VIIa, and Volute Shutter** ...	193.99	229.62

920 **View Camera, Empire State,** 11x14 in., including plate or film holder and carrying case 79.20

922 **View Camera Outfit, No. 1,** including camera with rapid rectilinear lens, automatic shutter, 6 plate or film holders, tripod, focusing cloth and carrying case:
- a Size 5x7 inches 82.98
- b Size 6½x8½ inches 96.72
- c Size 8x10 inches 110.41

000 **Universal Laboratory Outfit,** including laboratory stand, copying camera, combination bromide paper and plate holder, negative holder, set of spring finger kits, ground glass:
- a **Size No. 1,** 5x7 in. 99.59
- b **Size No. 2,** 8x10 in. 167.17

12 **Enlarging Camera, Revolving Back,** 8x10 inches, without lens 44.80

30 **Lantern Slide Camera, Century,** without lens, 3¼x4 in. 46.54

40 **Enlarging Camera for Vest Pocket Kodak,** making enlargements 3¼x5½ in. from negative 1⅝x2½ in. 3.71

48 **Kodak Enlarging Outfit,** including camera, lens, easel, cord and lamp house 25.22

14 **Exposure Meter, Harvey's** 2.50

18 **Exposure Meter, Wynne's,** with standard tints and sensitive paper, for calculating exposures by means of scales:
- a **Hunter Meter** 3.00
- b **Negative Meter,** in F. or U. S. systems 3.00
- c **Snapshot Meter,** in F. or U. S. systems 3.00

55 **Portrait Attachments,** .75 to 1.50, according to size and camera.

75 **Light Filters,** prices on application.

20 **Tripods, Standard:**
- a **Standard,** 3-sections 3.00
- b **Flexo,** 2-sections, for cameras 4x5 and smaller 1.25
- c **Kodak Metal,** 3-sections 3.50
- d **Kodak Metal,** 4-sections 4.75
- e **Sliding,** 2-sections, 5x7 and smaller 2.50
- f **Combination,** 3-sections, for 6½x8½ and smaller 5.00
- g **Crown,** 4-inch top 9.25
- h **Crown,** 6-inch top 9.75

8 **Plate Holders, Graphic:**

Size, inches	3¼x4¼	3¼x5½	4x5	5x7	6½x8½	8x10
Each	2.00	2.00	2.00	2.20	2.75	3.00

2 **Plate Holders, Eastman's View:**

Size inches	5x7	6½x8½	7x11	8x10
Each	1.75	1.85	2.00	2.00

0 **Plate Holders, Universal,** for Premo, View or Empire State Cameras:

Size inches	5x7	6½x8½	8x10	11x14
Each	1.75	1.85	2.00	5.00

3 **Focusing Cloth:**
- a **Heavy Rubber,** 1¼ yds. bound 1.75
- b **Silk Finish,** 40x48 in., bound 2.00
- c **Rubber, Medium,** 1 yd 1.20

M1000

M1554

M1465

M1570

M1480

M1531

☛ WE CAN SUPPLY EVERYTHING IN THE PHOTOGRAPHIC LINE

324 **Lamps, Dark-Room:**
- a **Kodak Candle Lamp** ..... .35
- b **No. 2 Kodak Lamp** 1.00
- c **Velox and Dark Room Lamp** 2.25
- d **Wratten Safelight Lamp No. 1, including electric lamp, cord and plug** 10.00

40 **Electric Lamps or Bulbs, Tipless,** 110 volts, Edison socket:
- a **Ruby,** 4, 8 or 16 C. P. 1.10
- b **Amber,** 4, 8 or 16 C. P. 1.30

Ruby and Orange Glass Plates:

Size inches	4x5	5x7	8x10	10x12
Each	.20	.25	.45	.65

30 **Aprons:**

Length inches	40	46	52
a **Rubber**	1.75	1.90	2.10
b **Laboratory**	1.75	1.90	2.10

52 **Sleeve Protectors,** 14 inch:
- a **Rubber,** per pair 1.25
- b **Laboratory,** per pair 1.25

4 **Gloves,** Rubber—pair 1.25
(In ordering state size of glove worn, i.e., 7, 7½, 8, 8½ or 9.)

6 **Finger Tips, Rubber,** set of 3 ..... .15

8 **Film Tanks, Kodak:**
- a **Vest Pocket** 3.50
- b **For 2½-inch films or less** 5.00
- c **For 3½-inch films or less** 6.00
- d **For 5-inch films or less** 7.00
- e **For 7-inch films or less** 8.50

5 **Plate Tanks, Eastman's,** including solution cup, plate cage, loading fixture and adjustable kit:

Sizes inches	4x5	5x7	8x10
Each	4.00	6.00	12.00

) **Developing and Printing Outfit, Eastman's,** 3A, complete 1.65

) **Enameled Trays,** Photographic:

Size inches	4x5	5x7	8x10	10x12	11x14	14x17
Each	.65	1.00	1.75	2.40	3.75	5.50

5 **Hard Rubber Trays, Photographic:**

Sizes inches	4x5	5x7	8x10	10x12
Each	.75	.90	1.80	2.65

5 **Hard Rubber Fixing Boxes:**

Size inches	4x5	5x7	8x10	11x14
Each	3.50	4.50	6.50	13.75

5 **Hard Rubber Developing and Fixing Boxes:**
- No. 2 for 4¼x6½ and 5x7 in. films or plates 5.00
- No. 3 for 4¼x6½, 5x7, 6½x8½ or 8x10 in. films or plates 8.00

) **Negative Washers, R. O. C.:**
- 4x5 for 25 plates 6.00
- 5x7 for 25 plates 8.00
- 8x10 for 30 plates 10.00

3 **Fixing and Washing Box, Wooden,** finished in black acid and alkali-proof paint:
- a **Size 5x7 inches,** 50 grooves 10.00
- b **Size 8x10 inches,** for 17 negatives 12.00
- c **Size 10x12 inches,** for 17 negatives 12.00
- d **Size 11x14 inches,** for 12 negatives 12.00

) **Graduates, Glass,** engraved:

Capacity ounces	1	2	4	8	16	32
Each	.35	.35	.40	.55	.85	1.65

1 **Negative Racks:**
- a **Premo, for 12** ..... .35
- b **Premo, for 24** ..... .45
- c **R. O. C.** 1.00
- d **Century** 2.00

5 **Film Clips, Eastman's Developing:**
- 3½-inch, pair ..... .30
- 5-inch pair ..... .50

8 **Kodak Amateur Printer,** adjustable to any size up to 4x5½ in., including electric light, cord and socket 10.00

4 **Print Rollers:**
- a **Kodak, double,** 6-inch 1.00
- b **Eastman, single** 4.75
- c **Eastman, double** 5.25

M1570 Trimming Boards, with steel blade and rule, Kodak:

Size inches	5x5	5x7
Each	.65	.85

M1572 Trimming Boards, Standard, with steel cutting blade and rule, of accurate and substantial construction:

Blade, inches	6	8	10	12	15	18
Each	2.00	3.00	4.00	6.00	12.00	20.00

M1585 Blotting Paper, 19x24 inches, per doz

M1620 Gum Paper, in rolls of 300 yds., ½ inch, in black or white, per roll

M1635 Dry Mounting Tissue:

a Per Package of 3 doz., any size from 1⅛x2⅛ to 3¼x4¼ in.

b Per package of 2 doz., any size from 3¼x5½ to 4x5 in.

c Per package of 1 doz., any size from 4x6 to 5½x7¾ in.

d Per package of 1 doz., any size from 6x8 to 10x12 .15 .20 and

M1658 Condensing Lenses:

Diam. inches	6½	8	9	10	12	14
Focus inches	10	12	14	15	18	21
Unmounted each	6.75	13.50	16.50	22.00	40.00	55.00
Pair mounted	20.50	35.00	42.00	54.00	92.00	123.00

M1740 Lantern Slide Mats, 100 to pkg

M1750 Lantern Slide Cover Glasses, 3¼x4 inches:

	Doz.	Gross
a Regular	.36	3.60
b Superfine	.60	5.00

M1755 Lantern Slide Box, wooden, cloth covered, with hinged cover and cardboard partitions:

a For 50 Slides

b For 100 Slides

M1760 Binding Strip, Paper, gummed, for lantern slides, 50 to pkg.

M1800 Ground Glass Plates for screens:

Sizes inches	4x5	5x7	6½x8½	8x10	11x14	14x17	18x22
Each	.25	.30	.45	.55	1.00	2.50	4.00

M1812 Opal Glass Plates:

Sizes inches	7x7	8x10	10x10	10x12	11x14	14x17	16x20
Each	.75	1.00	1.25	1.50	2.00	3.00	4.00

M1820 Ferrotype Plates:

10x14 Light

10x14 Heavy

14x20 Heavy

18x24 Heavy

M1975 Scales, Photo, Eastman's

M4000 Publications on Photography:

a "How to Make Good Pictures

b "Wratten Light Filters"

c "Photomicrography"

d "Fundamentals of Photography"

Photographic Papers, prices on application.

Films and Plates, prices on application.

Photographic Chemicals.

Acid Hardener, pkg.

Intensifier, 8 oz.

Acid Fixing Powder, lb.

"Hypo" granular, lb.

"Hypo" crystals, lb.

Hydrochinon, oz. .34, lb

Hydrochinon Developer Powder, doz.

Pyro, crystals, oz. .35, lb

Pyro Developer Powder, doz.

Tank Developer Powders:

For Brownies, 6 powders

For 2½x3½ in. film, or 4x5 in. plate tanks, 6 powders

For 5x7 in. tank, 6 powders

For 5x7 in. plate tank, 6 powders

For 8 x 10 in. plate tank, 6 powders

M5000 Glass Plates, as used by photographers:

Size inches	4x5	5x7	6½x8½	8x10	11x14
a Ground Glass, Fine	.15	.20	.40	.50	1.50
b Ground Glass, Ordinary	.12	.15	.25	.35	.75
c Opal	.60	1.00	1.25	1.50	2.00
d Ruby	.25	.35	.50	.60	1.25
e Orange	.25	.35	.50	.60	1.25

MICROSCOPES, ACCESSORIES AND BIOLOGICAL SUPPLIES
SECTION R

Eyepieces, Huyghenian, as used on B. & L. Compound Miscroscopes:

Magnifying Power, times	5x	6.4x	7.5x	10x	12.5x
Focal Distance mm	50	40	33	25	20
Each	2.50	2.50	2.50	2.50	2.50

Achromatic Objectives, as used on the B. & L. Compound Microscopes:

Focal Distance mm..	48	32	16	8	4L	4S	3	1.9	1.9
Working Distance mm	53	38	7.0	1.6	0.6	0.3	0.2	0.15	0.13
Numerical Aperture..	0.08	0.10	0.25	0.50	0.65	0.85	0.85	1.30	1.32
Each	6.50	6.50	8.50	13.00	13.00	13.00	13.00	42.00	78.00

Table of Magnifying Power obtained with the B. & L. Objectives and Eyepieces, calculated for a standard tube length of 160 mm:

Objectives / Focus	Eyepieces 5x	6.4x	7.5x	10x	12.5x
43 mm	10x	13x	15x	20x	25x
32 mm	20x	26x	30x	40x	50x
16 mm	50x	64x	75x	100x	125x
8 mm	100x	130x	150x	200x	260x
4 mm	215x	275x	320x	430x	560x
3 mm	285x	365x	420x	570x	740x
1.9 mm	475x	610x	720x	950x	1260x

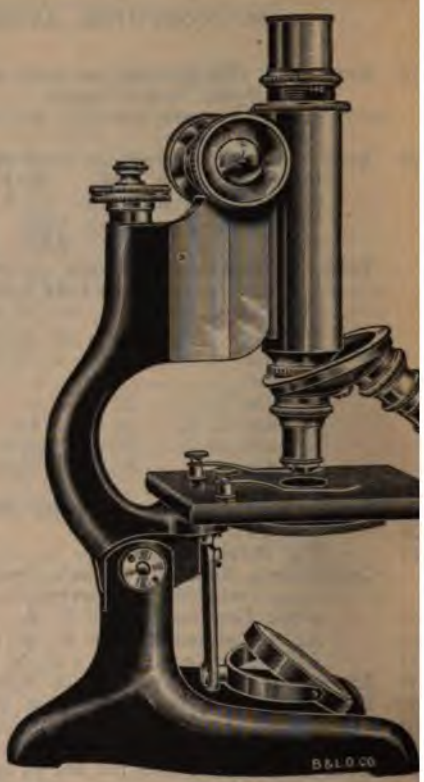
Revolving Nosepieces, Circular Form, for holding objectives:

For two objectives 6.50
For three objectives 9.00

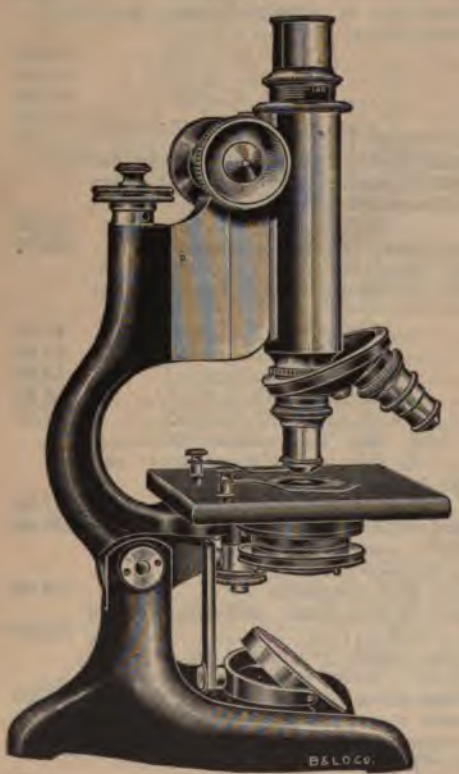
Condensers, Substage, Abbe's, designed to transmit sufficient light through the objective to completely fill the aperture:

Abbe Condenser, 1.20 N. A., 12 mm focus 12.00
Abbe Condenser, 1.20 N. A., 8.7 mm focus 14.50
Aplanatic Condenser, 1.20 N. A., 12 mm focus 36.00
Iris Diaphragm, for use with Aplanatic Condenser **R54** 6.50
Dark-Ground Illuminator, with iris diaphragm 21.50
Hand-Feed Arc Lamp, on support, with bulls-eye condenser, special 22.50
Rheostat, 110 volts 8.75
Uranium Glass Plate, for use in centering the Dark-Ground Illuminator **R60** 2.50
Microscope A, B. & L., with coarse adjustment only, with objective of 16 and 32 magnification, and one eye-piece 7.5x, complete in wooden case 31.50
Microscope F, B. & L., with both coarse and fine adjustments, in wooden case. Each equipment includes two objectives of 16 mm and 4 mm focus:
F1 With 7.5x eyepiece 54.00
F2 The same as above, including double nosepiece 60.50
F3 With two eyepieces of 5x and 10x 56.50
F4 The same as above, including double nosepiece 63.00
F6..The same as above, but including an Abbe Condenser 1.20 N. A 76.00
Microscope FF, B. & L., with fine and coarse adjustments, also substage attachment for condenser, including wooden case. Equipped with two objectives of 16 mm and 4 mm focus, two eyepieces of 5x and 10x, and Abbe Condenser of 1.20 N. A.:
FF6 With double nosepiece 84.00
FF8 With additional objective of 1.9 mm focus, including triple nosepiece 128.50
Microscope FS, B. & L., with side adjustments for both fine and coarse focusing. Includes two objectives of 16 mm and 4 mm focus, with hardwood case. To the stage is attached an iris diaphragm:
FS1 With eyepiece 7.5x 57.50
FS2 The same, with double nosepiece 64.00
FS3 With two eyepieces 5x and 10x 60.00
FS4 The same, with double nosepiece 66.50
FS6 The same, with addition of Abbe Condenser 1.20 N. A 79.50
Microscope FFS, B. & L., with side adjustments for both fine and coarse focusing, swing-out substage for condenser; two objectives of 16 mm and 4 mm focus; two eyepieces of 5x and 10x; Abbe Condenser of 1.20 N. A.; in wooden case:
FFS6 With double nosepiece 87.50
FFS8 With additional objective of 1.9 mm focus, and triple nosepiece 132.00
Binocular Microscope KA, B. & L., with paired objectives and eyepieces giving great depth of focus and long working distance; including wooden case:
KA1 With one set of paired objectives 40 mm focus, and eyepieces 10x 108.00
KA3 With one set of paired objectives of 48 mm and 32 mm focus, and eyepieces of 6.4x and 10x 133.00
Chemical Microscope M, B. & L., with circular revolving stage, graduated in degrees; substage polarizer; analyzer eyepiece, in wooden case. Includes two objectives of 16 mm and 8 mm focus, and two eyepieces with cross-hairs 10x and 12.5x 140.00
Mechanical Stage, Model B, the verniers adjusted by rack and pinion 27.50
Camera Lucida, Model A, designed for attaching to eyepiece of microscope 14.50
Bulls-Eye Condenser, on adjustable support, for obtaining parallel rays:
a 38 mm diam. 5.75
b 56 mm diam. 7.25
c 75 mm diam. 1.50

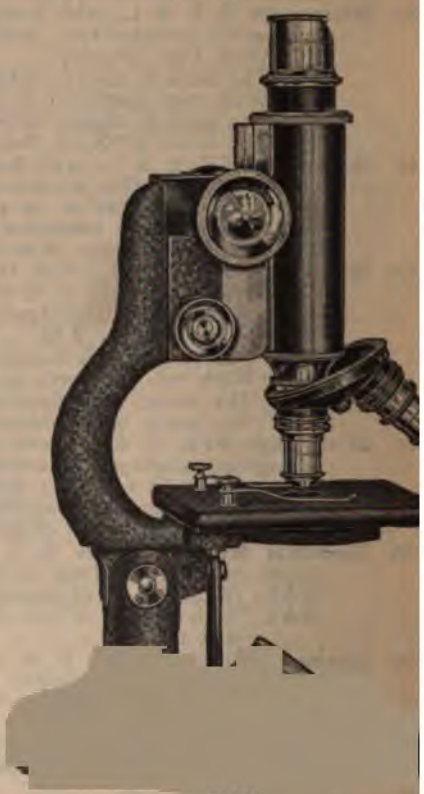
R100



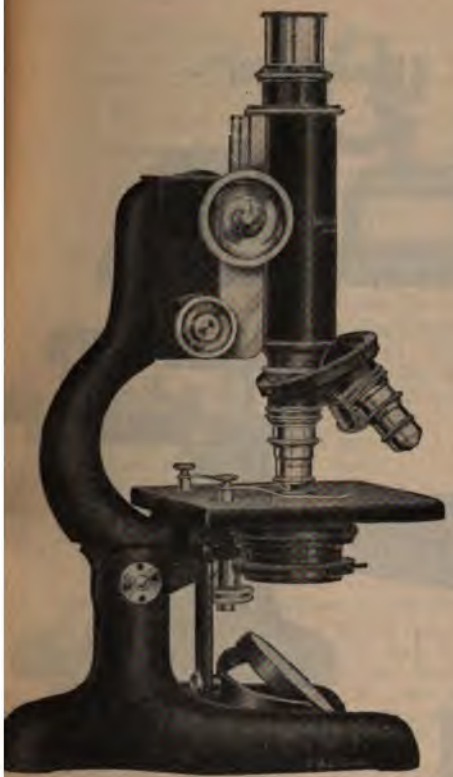
R130



R140



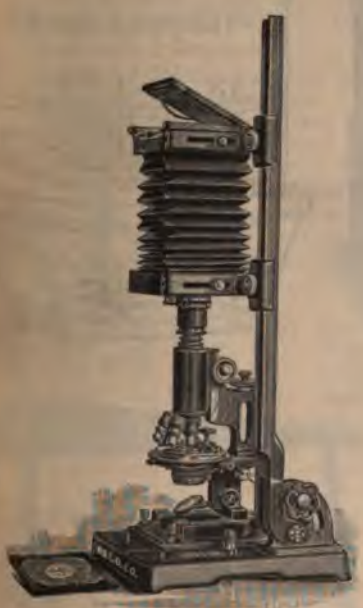
R150



R160

R170

R380



R450

R300

R360

R400

R500

R510

R625

R632

R630

R640

R600

R645

Gage Illuminator, with 100-watt Mazda lamp, with optical glass filter giving same effect as day-light 14.50

Substage Lamp, Electric, with Mazda lamp of 15 watts for 110-115 volts D. C. or A. C., with cord and plug 6.00

a The same, with Optical Glass Filter producing effect of day-light 7.00

Illuminator for Microscopes, Silverman's (Patented), consisting of a circular source of light surrounding the objective, which gives a uniform illumination over the field. Especially adapted for the examination of opaque objects, and for photomicrography. Applicable to any standard miscroscope. Complete, including: 1 illuminator holder, 2 lamps, 1 rheostat, with switch and key, and flexible cord. For 104-124 volts..... 50.00

Illuminator, Electric, for Microscopes, giving direct or deflected light, including 15-watt gas-filled lamp, 110 volts. Can be fitted permanently to table top by boring a hole 2⅛ in. diam., thus giving direct light under the stage of the microscope 7.50

Micro-Projection Drawing Equipment, on wooden base, for holding standard microscope, including 6-volt, 24-watt gas-filled Mazda projection lamp fitted with condensing lens and transformer for 110 volts, A. C..... 45.00

Micrometer Discs, of glass, 21.3 mm diam., ruled. Designed to fit the standard eyepieces:

a Ruled 5 mm by 0.1 mm..... 2.25

b Ruled 5 mm by 0.05 mm..... 2.50

c Ruled 10 mm in 0.1 mm..... 3.25

d Ruled 0.5 mm squares..... 3.25

e Ruled 1.0 mm squares..... 3.00

Micrometer Eyepiece, 7.5x, with scale divided into tenths of a millimeter:

a With movable scale 13.25

b With fixed scale 8.00

Filar Micrometer, reading to 0.01 mm, and by estimation will read to 0.001 mm..... 42.00

Stage Micrometers, size 25x75 mm, in case:

a Glass, ruled 0.1 and 0.01 mm..... 5.00

b Glass, ruled 0.01 and 0.001 inches..... 3.50

c Metal, ruled 0.1 and 0.01 mm..... 14.50

Photomicrographic Camera, Model H, B. & L., heavy metal base and optical bed, graduated to 60 cm, including bellows and ground glass screen. For photographic plates 4x5 inches 75.00

a **Automatic Shutter,** for use with above..... 17.50

Barnes' Dissecting Microscopes, wooden base with metal drawer for holding accessories:

T1 With doublet lens of 25 mm focus..... 5.50

T2 With two doublet lenses of 38 mm and 19 mm focus 7.25

T3 With Coddington lens of 25 mm focus 6.75

T4 With two Coddington lenses of 38 mm and 19 mm focus..... 9.75

Dissecting Microscopes, B. & L., metal base, with lens equipment, in wooden case:

U1 With doublet lens of 25 mm focus..... 14.50

U2 With two doublet lenses of 38 mm and 19 mm focus 16.25

U3 With Coddington lens of 25 mm focus 15.75

U4 With two Coddington lenses of 38 mm and 19 mm focus..... 18.75

Metal Hand Rests, pair 1.25

Dissecting Microscopes, metal base, with rack and pinion focusing adjustment, side hand rests and wooden case:

W1 With doublet lens of 25 mm focus..... 16.25

W2 With two doublet lenses of 38 mm and 19 mm focus 18.00

W3 With Coddington lens of 25 mm focus 17.50

W4 With two Coddington lenses of 38 mm and 19 mm focus..... 20.50

Binocular Dissecting Microscope, B. & L., with track for lateral movement:

RKT1 With one set of paired objectives of 40 mm focus, and 10x eyepieces..... 133.00

Binocular Magnifier, giving stereoscopic view of objects, with head-band and eye-shields. When ordering specify the pupillary distance of the eyes desired, also the magnifying power:

a 33.3 cm focus, 0.75x magnification..... 28.00

b 25 cm focus, 1x magnification..... 28.00

c 12.5 cm focus, 2x magnification..... 28.00

d 10 cm focus, 2.5x magnification..... 28.00

e 8.3 cm focus, 3x magnification..... 28.00

Doublet Magnifying Lenses, composed of two plano-convex lenses, in folding metal case:

a 14x power, ¾-inch focus..... 2.00

b 12x power, ⅞-inch focus..... 2.00

Coddington Magnifiers, consisting of a glass cylinder with convex ends, grooved at center to serve as diaphragm. There are no cemented parts, hence there is good definition. In folding metal mount:

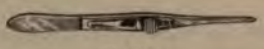
a 7x power, 1½-inch focus..... 3.25

b 10x power, 1 -inch focus..... 3.25

c 14x power, ¾-inch focus..... 3.25

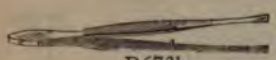
d 20x power, ½-inch focus..... 3.25

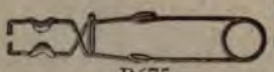

R651


R652


R653


R672

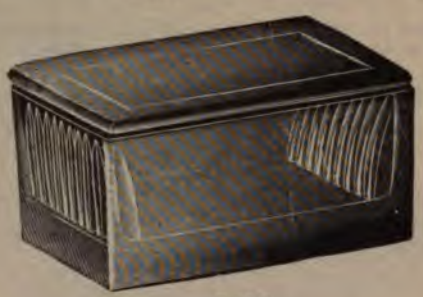

R673b


R675


R676


R671


R687a


R687b


R695


R692


R705


R690


R700


R715


R725


R710

Triple Aplanats, consisting of two meniscus lenses and one double convex lens, of flint and crown glasses, giving chromatic correction, flat sharp field, free from astigmatism or distortion:

a 7.5x power, 1⅓-inch focus 6.50
b 10x power, 1 -inch focus 6.50
c 15x power, ⅔-inch focus 6.50
d 20x power, ½-inch focus 6.50

Hastings Aplanatic Triplet Magnifier, of excellent quality, corrected for chromatic aberration, astigmatism and distortion, and possessing an unusual wide angle and long working distance:

a 7x power, 1½-inch focus 9.00
b 10x power, 1 -inch focus 9.00
c 14x power, ¾-inch focus 9.00
d 20x power, ½-inch focus 9.00

Turn Table, B. & L., for "ringing" microscopic mounts and making cells. Smooth bearings 7.00

Paraffin Imbedding Box, dissectible, including two right angle metal plates with base. Objects of different size may be imbedded by adjusting the position of the two plates:

Height mm	10	20	30
Each	1.00	1.10	1.25

Paraffin Bath, copper, 7 in. long by 3¾ in. wide, and 3½ in. deep, with extra sheet iron bottom and base 5 inches high. Includes two nickel-plated cups 2⅛ in. diam..... 14.00

Paraffin Bath, Miller's, copper, 8x4 inches, by 4 inches deep, with extra sheet iron bottom and iron base 5 in. high. Includes two nickel-plated cups 2⅛ in. diam., and two drawers for holding slides 23.00

Arnold Steam Sterilizers, simple form for general use in laboratories. Maintains an unvarying temperature of 100° C. in all parts of the sterilizing chamber. Made of heavy tin with copper bottom:

Height inches	7⅛	10⅛	11¾	12½
Diam. inches	8½	9	10⅛	10⅞
a Tin with Copper Botton	7.00	8.00	10.00	11.50
b Copper	16.00	22.00	25.00	27.00

Arnold Steam Sterilizers, Side Door Pattern. The same general design as **R640,** except as to the side door:

Height inches	7⅛	10⅛	11¾	12½
Diam. inches	8½	9	10⅛	10⅞
a Tin with Copper Botton	9.00	10.00	11.00	12 50
b Copper	18.00	23.50	27.50	29 50

Warming Tables, copper for mounting and drying objects:

a Rectangular, 14x4 inches 2.25
b Triangular, 16½ in. long, tapering from 8 in. 4.75

Forceps, Cover-Glass, with flattened tips, bent at angle, nickel-plated steel 1.25
Forceps, Cover-Glass, Novy's, with Locking Device 1.50
Forceps, Cover-Glass, Novy's, with thin flat lower blade for picking up the cover-glasses, and curved upper blade drawn to point making small contact. Made of nickel-plated steel ..... .90

Cover-Glasses, Square, packed one-half ounce in a box:

Size mm	18	22	25
No. 1 (0.13-0.17 mm thick)	1.25	1.25	1.25
No. 2 (0.17-0.25 mm thick)	1.10	1.10	1.10
No. 3 (0.25-0.50 mm thick)	1.00	1.00	1.00

Cover-Glasses, Round, packed one-half ounce in a box:

Diam. mm	18	22	25
No. 1 (0.13-0.17 mm thick)	1.25	1.25	1.25
No. 2 (0.17-0.25 mm thick)	1.10	1.10	1.10
No. 3 (0.25-0.50 mm thick)	1.00	1.00	1.00

Forceps, Cover-Glass, Stewart's, nickel-plated steel wire, self-closing ..... .25
Forceps, Cover-Glass, Cornet's, made of one-piece spring brass, nickel-plated, self-closing .60
Forceps, Cover-Glass, Kaltyer's, nickeled brass wire, designed so that cover-glass is immersed in staining solution while the forceps rest upon table top ..... .75
Forceps, Cover-Glass, nickel-plated steel, corrugated handle:

a With bent tips 1.25
b With straight tips 1.00

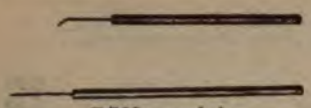
Forceps, Cover-Glass, Self-Closing, with spring; the ends of blades being slightly bent.. 1.25
Forceps, Combined, for Cover-Glasses or Slides, nickel-plated brass 1.00
Forceps, for Microscopic Mounts or Slides, Kirkbride's, nickel-plated brass wire, for use in staining or drying microscopic slides ..... .15

Object Slides, ground edges:

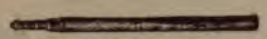
Size mm	25x75	26x45	38x75	50x75
Dozen	.20	.25	.30	.35

bject Slide, for Moulds, with glass ring and ground-in side tubes, on slide 1x3 inches. Cell 17 mm diam., 12 mm deep, each 1.50
bject Slides, Concave Center, 1x3 inches, doz. 1.00
Object Slide, with Cavity 16 mm diam., for culture work, 1x3 inches, doz 1.50
Staining Jars, with Cover, accommodating 10 standard microscope slides 3x1 inches:

a Coplin's, Tall Form ..... .50
b Flat or Horizontal Form ..... .50



R730a and b



R731

R750

R755

R772

R770

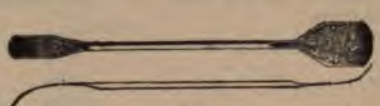
R780

R761b

R788a

R780

R820



R827

R788b

R789

R822

R792a

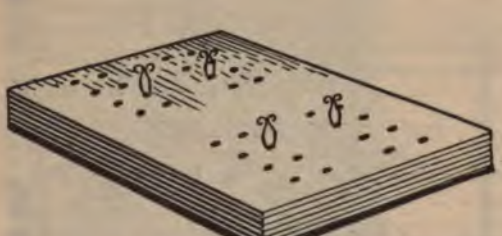
R790

R870

R880

R920

R860



R885

R1000

R588 **Labels, Microscopic Slide,** 100 in a box:
- a **Square,** 22 mm ..... .10
- b **Rectangular,** 15x22 mm ..... .10
- c **Oval,** 14x20 mm ..... .10
- d **Round,** 16 mm diam ..... .10

R590 **Slide Boxes,** wooden, with cover:

Capacity, Slides	12	25	25	25
Size of Slides mm	25x75	25x44	50x75	25x75
Each	.15	.25	.35	.20

R592 **Slide Box, Double Row,** with hinged cover, for 100 slides 1x3 inches 1.00

R594 **Slide Case for Mailing,** for one slide 1x3 in., doz. 1.50

R595 **Slide Cabinet, Dr. Minot's,** of metal, contains 30 metal trays each holding 24 microscopic slides 1x3 in., provided with lock and key. Capacity 720 slides 50.00

R700 **Dissecting Instruments, Student's Set,** in folding leatherette case, containing: Scalpel, scissors, forceps and 2 needle holders 1.75

R705 **Dissecting Instruments, Student's Set,** in folding leatherette case, better quality than R700. Includes: Scalpel, scissors, forceps and 2 needle holders 2.75

R710 **Dissecting Instruments, in Folding Case,** including: 3 scalpels, 1 hooked needle, 1 scissors, 1 forceps, and hooks:
- a **Ebony handles as illustrated** 5.00
- b **Metal handles** 6.00

R715 **Dissecting Instruments, in Folding Case,** including: 3 scalpels, 2 forceps, hook needle, chain, blowpipe, 2 needle holders, 2 scissors 8.00

R725 **Dissecting Needles,** high grade steel, with ebony handle, polished, sharp:
- a **Curved** ..... .50
- b **Pear Shape End** ..... .50
- c **Spear Shape,** double cutting edges ..... .55
- d **With Hook End** ..... .60

R730 **Dissecting Needles,** wooden handle, for elementary work:
- a **Straight,** each ..... .06
- b **Bent,** each ..... .07

R731 **Needle Holder, Bone Handle,** adjustable clamp for holding needles of different size and length:
- a **Length 85 mm,** each ..... .20
- b **Length 110 mm,** each ..... .25
- c **Needles, Steel,** for use with above, from 1½ to 2 inches long, per doz ..... .25

R735 **Hooks and Chains, Triple,** nickel-plated ..... .50

Scalpels, Ebony Handle, steel blades, usual form:

	Cutting edge mm	18	24	32	38	45	50
R750	**Regular Quality**	.45	.50	.55	.60	.65	.75
R751	**Extra Quality**	1.00	1.05	1.10	1.15	1.20	1.25

Scalpels, Steel Blades and Handles, easily cleaned and sterilized:

	Cutting edge mm	25	32	38	45
R755	**Regular Quality**	.75	.80	.85	.90
R756	**Extra Quality**	1.00	1.05	1.10	1.20

R760 **Knife, Brain** 5.00

R761 **Knife, Cartilage, Steel Blade:**
- a **Steel Handle,** nickel-plated 1.00
- b **Ebony Handle,** extra thick and heavy 3.00

R762 **Knife, Dissecting,** with long sharp blade 4.00

R770 **Forceps, Steel,** sharp points, about 5 in. long ..... .15

R772 **Forceps, Dissecting,** fine points, about 95 mm long, ordinary quality ..... .30

R780 **Forceps, Dissecting,** steel, nickel-plated, corrugated at tips and on handle:
- a **Fine, Straight,** 115 mm long ..... .60
- b **Fine, Curved,** 110 mm long ..... .60
- c **Medium, Straight,** 115 mm long ..... .70
- d **Medium, Curved,** 110 mm long ..... .70
- e **Heavy, Straight,** 115 mm long ..... .75
- f **Heavy, Straight,** 130 mm long ..... .75
- g **Heavy, Straight,** 145 mm long ..... .90

R785 **Forceps, Dissecting, Curved,** fine points, corrugated ..... .60

R788 **Forceps, Bone-Cutting:**
- a **With Short Handle** 1.50
- b **With Long Handle,** 200 mm 5.00
- c **With Long Handle,** 225 mm 6.00

R789 **Bone Saw,** steel, nickel-plated 4.00

790 **Scissors, Dissecting,** steel, ordinary quality ..... .50

R792 **Scissors, Dissecting,** steel, plain:
- a **Fine, Straight** 1.25
- b **Fine, Curved** 1.25
- c **Fine, Bent** 1.50
- d **Medium, Straight** 1.40
- e **Heavy, Straight** 1.50

R795 **Scissors, Dissecting, Steel, with Lock Joint,** for quickly cleaning or sterilizing the blades:
- a **Fine, Straight** 1.75
- b **Fine, Curved** 1.75
- c **Fine, Bent** 1.75
- d **Heavy, Blunt Ends** 1.50

R810 **Blowpipes, for Inflation,** nickel-plated:
- a **Straight** ..... .30
- b **Curved** ..... .40

R812 **Bristles,** as used for "seekers," pkg ..... .10

R820 **Seekers, Steel,** one end curved, the other being straight and blunt ..... .50

R822 **Tenaculum, Steel,** with sharp hook and ebony handle ..... .50

R825 **Section Lifters,** thin spring blade, with ebony handle:

Width of blade mm	6	10	20	35
Each	.60	.70	.75	.80

R827 **Section Lifters, All Metal,** easily sterilized:
- a **Double,** 11 and 22 mm blades ..... .60
- b **Double,** 5 and 22 mm blades ..... .50
- c **Single,** 18 mm blade ..... .50

R835 **Razors, Section Cutting,** folding with flat and concave sides:
- a **Best quality** 3.00
- b **Second quality** 2.50

R837 **Pith,** sticks, for use in cutting sections, pkg ..... .10

R838 **Microtome, Physician's, B. & L.,** simple construction, cutting in steps of 5 microns. Holds objects 30x22 mm 27.50
- a **Knife,** for use with above 8.00

R839 **Microtome, Student's Laboratory, B. & L.,** cutting to 5 microns, taking objects 30x22 mm, in wooden case 35.00
- a **Knife,** for use with above 9.50

R841 **Microtome, Automatic Rotary, Minot's, B. & L.,** cutting to 2.5 microns, in wooden case. A high grade accurate instrument 82.50
- a **Knife** for above 9.00
- b **Object Clamp** 6.00

R845 **Hones,** fine grain, for razors, scalpels, etc., in wooden block:

Size mm	65x125	30x150	40x180	45x210	50x260
Each	1.25	1.50	1.75	2.00	2.50

R847 **Strop, Leather,** mounted on block:
- a **Fine grain** 3.00
- b **Coarse grain** 3.00

R848 **Strop,** leather and canvas 3.00

Insect Pins, long sharp steel points, with round head, either black or white:

R850 **White head,** per 100 ..... .50

R851 **Black head,** per 100 ..... .50

R860 **Vasculum, or Collecting Case,** enameled metal, with hinged cover and shoulder strap 3.75

R862 **Paper, Spore,** black, per quire 1.50

R865 **Specie Covers.** Manila:
- a Size 11x17 in., quire ..... .60
- b Size 16⅝x24 in., quire ..... .80

R866 **Gummed Paper,** 17x22 inches:
- a **Regular quality,** quire 1.50
- b **Best quality,** quire 3.00

R867 **Gummed Transparent Paper:**
- a **In sheets,** quire ..... .75
- b **On spools,** each ..... .15

R868 **Paraffined Paper,** 12x18 in., quire ..... .60

R870 **Plant Press,** portable form, with six driers and tightening straps 5.25

R871 **Plant Press, Swedish Form,** metal, for corrugated sheets 12x18 in., with carrying handle 5.00

R872 **Plant Press,** heavy construction, with quick-set adjusting screws 6.00

R875 **Portfolio,** 12x18 in., heavy board with canvas back 2.25

R876 **Drying Paper,** 12x18 in.:
- a **Soft felt texture, medium weight,** quire ..... .75
- b **Soft absorbent felt, heavy weight,** quire 1.00
- c **Blotting,** white, quire ..... .60
- d **Newspaper stock,** quire ..... .25
- e **Corrugated,** for air circulation, quire 1.50

R878 **Genus Covers,** heavy substantial stock:
- a **Manila,** 12x18 in. folded, quire ..... .80
- b **Oak tag,** best quality, 16⅝x24 in., unfolded, quire 1.00

R879 **Mounting Paper:**
- a **White, heavy linen lerged quality,** 11½x16⅜ in., quire ..... .60
- b **White, extra heavy linen ledger quality,** 11½x16½ in., quire ..... .75
- c **White, light weight,** of good quality, 11x16⅜ in., quire ..... .40

Dissecting Pans, metal, japanned, with loops at corners for fastening:

R880 **Plain** ..... .80
R882 **Wax lined** ..... .95
R883 **Dissecting Pan or Tray, White Enamel** 1.25
R885 **Frog Board,** with movable peg-clamps for holding frogs of different size 1.50
R900 **Watch Glasses, Syracuse Form** (see **No. 15140,** etc.).
R910 **Glue, Fish,** for use on either paper or wood, per bottle ..... .30
R912 **Brush,** for glue ..... .35
R914 **Paste, White,** photo ..... .25
R920 **Spreading Board,** cork-lined, 16 inches long, for insects:

Width inches	2	3	4	5
Each	.75	1.00	1.25	1.50

R925 **Egg Drills,** with pointed burrs:

Size No.	1	2	3	4	5	6
Burr	3	5	6	8	12	16
Each	.50	.60	.75	.90	1.25	1.50

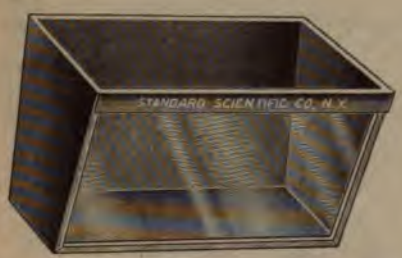
R950 **Haemacytometer, with Thoma Counting Chamber,** including pipettes for both red and white corpuscles, in case 12.00
R960 **Blood Lancet, Adjustable,** for puncturing skin to obtain drop of blood 2.00
R1000 **Pick, Steel,** 10 in., with point and edge for field use in digging and cutting 4.00
R1005 **Trowel,** with long and narrow blade, wood handle, for light work ..... .75
R1007 **Trowel,** wood handle, with 6-in. steel blade, usual size and form, strong and durable ..... .50
R1100 **Germinating Box, Ganong Pattern,** wooden frame with inclined glass front for observing sprouting and plant growth ..... .80
R1105 **Germinating Box,** metal frame with glass on two sides, designed to show the proper depth for planting seeds 5.75
R1115 **Germinating Tray,** 25x25x2¼ in. deep, for testing the fertility of grains. The frame fitting into the tray is divided into 144 squares, which may be numbered if desired 8.00
R1118 **Grain Container,** galvanized iron, with handles and cover, capacity one-half bushel 3.00
R1120 **Sprouting Apparatus,** for determining the sprouting value of grains, complete with directions 15.00
R1122 **Germinating Cloth,** open mesh, per yard ..... .20
R1123 **Cork Sheet,** 12x4x¼ in., as used for holding seeds while floating in germinating experiments ..... .30
R1125 **Germinating Tray,** galvanized iron, 18x10x2 inches, for use with sand 4.00
R1129 **Germination Material:**
a **Cotton,** lb. ..... .75
b **Moss,** fine, lb. ..... .75
c **Paper,** 12x18 in., quire ..... .60
d **Sand,** fine, lb. ..... .15
e **Sawdust,** lb. ..... .15
R1130 **Sprinkler, Rubber Bulb:**
a **Straight neck** 2.00
b **Bent neck** 2.50
R1135 **Space Marker,** rubber stamp, for marking leaves into equal sections:
a **Parallel Lines** 1.00
b **Squares** 1.50
R1138 **Color Solutions,** standard, red, green, blue, white and black 3.50
R1140 **Warming Stage, copper,** for attaching to stage of microscope 6.50
R1150 **Breeding Cages,** zinc, with glass front, the top, bottom and sides made of wire gauze for ventilation:
a **Size 5½x5½x10 in. high.** The top and bottom are removable 6.00
b **Size 12x12x16 inches high** 7.00
c **Size 16x12x18 inches high** 9.00
R1152 **Water Tray,** galvanized iron, for use with Breeding Cage **R1150,** adapting it for aquatic insects 3.00
R1170 **Worm Cage,** glass front, metal frame, with glass partition. Invaluable for studying the effect of worms on soil 7.50
R1175 **Insect Nets,** with handle:
a **Collapsible** 2.50
b **Bamboo handle** 6.00
R1200 **Riker's Specimen Mount,** for mounting insects, butterflies, fungi, shells, etc., or thick bulbs and plants. The specimen is held in position by white cotton under a glass cover, where it is safely preserved. Regularly supplied in the following sizes:

Inches	2½x3	3½x4½	4x5	5x6½	6½x6½	6½x8¼	8x12	12x16
Each	.25	.30	.30	.35	.45	.50	.70	1.50

R1201 **Riker's Botanical Mounts,** with sterilized cotton and clear glass cover. Excellent for mounting and preserving botanical specimens:

Size inches	5x6	6½x8½	8x12	12x16
Each	.35	.50	.75	1.50

R1300 **Auxanometer, Indicating,** for measuring plant growth. A silk thread, with one end attached to the plant, and the other provided with a counterpoise weight, passes over a pulley to which a lever-indicator is attached. Growth is measured on the scale, each division representing 0.01 inch 15.00
R1305 **Auxanometer, Self-Recording,** with 8-day clock movement, mounted on base with leveling screws 25.00



R1100

R1105

R1170

R1115

R1175

R1300

R1150

R1200

R1310 **Auxanometer, Simple Form,** adjustable for different speeds, on stand 15.00
R1315 **Ink,** for use with Recording Instruments, per bottle ..... .75
R1320 **Carbon Dioxide Apparatus, Detmer's,** for showing that green plants produce oxygen only when carbon dioxide is present 1.50
R1345 **Clinostat, 8-Day Movement, Improved,** of exceptional efficiency and quality. Adjustable for different positions 40.00
R1350 **Clinostat, 8-Day Movement,** for vertical or horizontal use 20.00
R1360 **Frame for Geotropism,** to be attached to Clinostat 4.00
R1365 **Cork Disc,** 3-in. diam., for use with Clinostat ..... .50
R1368 **Pot,** 3-in. diam., for use with Clinostat ..... .30
R1372 **Chamber, Geotropic,** reversible, for suspension 3.00
R1390 **Wardian Case,** glass sides and cover, with metal tray for soil or water 40.00
R1500 **Flower Pots,** clay:

Diam. inches	4	6	8
Each	.15	.25	.40

R1520 **Paper Flower Pot,** waterproof, for seed germination and plant growth:

Diam. inches	3	4	5	6
Each	.05	.06	.07	.08

R2110 **First Aid Case, Household,** in cardboard carton, containing the materials applicable to ordinary accidents 4.00
R2115 **First Aid Set, Automobile,** in metal case 3.50
R2120 **First Aid Cabinet,** in metal case 19⅝x13x3½ in.:
a **Set No. 1,** with manual 15.00
b **Set No. 2,** complies with New York State law, also approved by Industrial Commission 16.00
R2125 **Manual for First Aid:**
a **Paper cover** ..... .40
b **Cloth cover** ..... .75
R2130 **First Aid Chart,** 27x44 inches, in colors, on heavy board, which folds for carrying 4.00
R2135 **First Aid Kit, No. 1,** small, compact and inexpensive, including: Cotton, iodine, gauze, adhesive plaster, scissors, tweezers, bandages, etc., complete in enameled metal case .. 7.50
R2136 **First Aid Cabinet, No. 2,** larger and more complete than **R2135.** In metal case, enameled inside and out. Complies with requirements of New York State, as well as many accident and insurance companies 15.00
R2140 **First Aid Packet.** The contents are in individual containers, keeping everything clean, sanitary and free from confusion. The iodine and spirits of ammonia are in glass ampoules, holding sufficient quantity for one treatment. Instructions on each container. Size 9⅜x3⅞x4½ in 15.00
R2225 **Stretcher, U. S. Army Model,** brown duck, with four iron legs and two straps. Size 7 ft. 6 in. x 22 in. Weight 22 lbs 20.00
R2275 **Signs, Metal,** in colors which compel attention:

a **Safety First**	.75	e **Exit**	.75
b **Warning**	1.00	f **This Way Out**	.75
c **Danger**	1.00	g **To the Fire Escape**	.75
d **No Admittance**	.75	h **No Smoking**	.75

R2300 **Gas Mask, Industrial,** useful when working in presence of gas, dust, smoke, poisonous or noxious fumes, such as: Ammonia, chlorine, sulphur dioxide, hydrogen sulphide, etc. Light weight, can be put on in few seconds and worn conveniently for hours 25.00
R2325 **Goggles,** for protecting the eyes:
a **Air Tight** 1.50
b **Non-Air Tight** 1.00
e **Eye-Protectors,** wire gauze ..... .50
f **Goggles,** heavy glass lens, plain or colored, with wire gauze shield 1.50
R2350 **Aprons, Asbestos,** with strap for neck and body, 24 inches wide:

Length inches	30	36	42	48
Each	6.00	6.50	7.50	8.00

R2375 **Asbestos Gloves, Lined,** with 5 fingers:

Length inches	11	14	23
Each	3.75	4.50	7.00

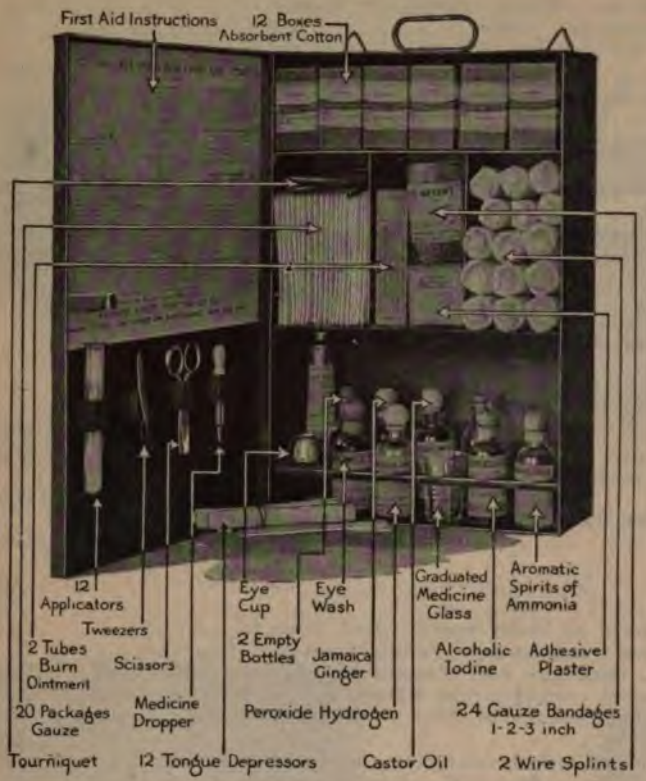
R2400 **Asbestos Mittens,** lined, with thumb:

Length inches	11	14	23
Each	3.50	4.50	6.00

R2425 **Fire Siren,** a powerful alarm, more penetrating than the sound of a gong or bell. The motor operates on 110 volts, A. C. or D. C. 48.00
R2430 **Fire Bell, Pull,** easily mounted on wall and operated by pull of cord. Size 11 inch 35.00

Anatomical and Physiological Charts: American Frohse Life-Size Series, seven plates, each size 42x66 inches. These New American Frohse Charts consist of seven large plates, comprising seventeen charts. They are lithographed in oil colors, natural colors being slightly accentuated to improve contrast. Durably backed with muslin. The charts have been carefully edited, revised and augmented by Max Brodel, Prof. of Medical Drawing, Johns-Hopkins Medical School. His extensive work represents a noteworthy achievement in anatomical illustration and enables us to present a set of anatomical charts that will fit the needs of the modern school. The charts are char-

(Continued)



R2136

Frohse Life Size Charts, Plate 2, Muscles (page 151-2)

No. 1428
(see page 32)

R2135

Arnold's Physiology Chart No. 5, Showing Organs of Digestion and Assimilation (page 152)

(Continued)

acterized by scientific accuracy, completeness of detail, and unusual artistic merit. Owing to the skillful use of colors and the large size of the figures, details stand out with exceptional clearness and can easily be seen by all pupils in the ordinary school-room or hall.

No educator who plans to try equipment for a course in physiology, or needs additional visual material, can afford to overlook this splendid set of charts.

List of Charts:

Plate No.	Chart No.	Subject
1	1a	Human Skeleton, with ligaments. Front View.
	1b	Human Skeleton, with ligaments. Back View.
2	2a	The Muscles. Front View.
	2b	The Muscles. Back View.
3	3a	The Nervous System.
	3b	The Circulatory System.
4	4a	Schematic Diagram of Circulation.
	4b	The Heart and Principal Blood Vessels, Four Views, greatly magnified.
	4c	The Skin. Two views, hairy and hairless skin, greatly magnified.
5	5a	The Ear, greatly magnified.
	5b	The Eye, greatly magnified.
6	6a	Viscera of the Chest and Abdomen, First Layer.
	6b	Viscera of the Chest and Abdomen, Second Layer.
	6c	Viscera of the Chest and Abdomen, Third Layer.
	6d	Viscera of the Chest and Abdomen, Fourth Layer.
7	7a	Median Section through Head, greatly magnified.
	7b	The Teeth, greatly magnified.

A key or index to all numbered parts accompanies the complete set or the separate plates, giving the terminology in Latin and English.

Single Plates:

With Mouldings at top and bottom 11.00
On Spring Roller and Board, Dust-Proof 13.00
In Steel Spring Roller Case 14.50

Single Charts from any Plate:

With Mouldings at top and bottom 7.00
On Spring Roller and Board, Dust-Proof 9.00
In Steel Spring Roller Case 10.00

Plates Mounted in Sets:

(Only in Utility Dust-Proof Case)

Complete set of seven plates 87.50
Any six plates 76.00
Any five plates 64.50
Any four plates 53.00

PHYSIOLOGICAL AND ANATOMICAL MODELS

Enlarged sizes, painted in colors, and made dissectible. The standard models for class instruction.

R2500 **Heart,** 14½x8¼x6 inches 15.00
R2503 **Eye,** 7x7½x7 inches 12.00
R2505 **Ear,** 7x4x9½ inches 9.00
R2508 **Skin,** transverse section, magnified 200 times, 1½x12x14 inches 7.50
R2510 **Teeth,** section of lower jaw, 3x13x7¾ inches 7.50
R2515 **Torso,** not dissectible, but showing vertebral column, ribs and pelvic bones; also relative positions of lungs, heart, stomach, liver, kidneys, etc. 16.00
R2518 **Torso,** dissectible, in four parts, the visceral, pulmonary and abdominal cavities being laid open to view. 26x12x10 inches 36.00
R2520 **Skull with Brain,** dissectible into four parts, with parts of cranium removed. 6½x16x8¼ inches 15.00
R2523 **Skull and Brain,** similar to above, except the brain is dissectible into eight parts 20.00
R2525 **Muscles of Arm,** not dissectible 18.00
R2528 **Knee,** vertical section 5.00
R2530 **Knee-Joint,** movable 12.00
R2533 **Elbow-Joint,** movable 9.00
R2540 **Shoulder-Joint,** ball and socket 4.50
R2545 **Elbow-Joint,** anterior 3.00
Elbow-Joint, lateral 3.00
R2548 **Wrist-Joint and Hand** 5.00
R2550 **Hip-Joint, Ball and Socket** 5.00
R2553 **Ankle Joints and Foot** 6.00
R2555 **Larynx Phantom,** with posterior dissection, showing throat, larynx, etc., 13½x8½x7 inches 12.00
R2558 **Larynx,** anterior view 4.00
R2560 **Larynx,** posterior view 4.00
R2563 **Larynx, Tongue and Pharynx,** 3¾x4¾x8¼ inches 4.00
R2565 **Tongue,** enlarged 10 times, vertical section, showing muscles, arteries and nerves 30.00
R2568 **Brain,** upper portion, 4x9¾ inches 6.00
R2570 **Brain,** lower portion, showing base of cerebral nerves, 3¾x9¾ inches 6.00

Arnold's Hygiene Chart, Teeth

Balfour's Botany Chart No. 4 (page 153)

R2573 **Brain,** vertical section along the median line, 3¾x9¾ inches .....
R2575 **Brain,** transverse section of head, showing cavities, 3½x9¾ inches .....
R2578 **Head,** with neck, left half, showing muscles, blood vessels, nerves, etc., 5x10x13½ inches
R2580 **Head,** with neck, left half, the skull and orbicular cavities, 5x10x13½ inches .....
R2582 **Head,** right half, showing the anatomy of the brain, including cavities of mouth and nose. Dissected along the median line, 2½x9½x12 inches .....
R2585 **Organs of Respiration,** dissectible, showing air-passages, lungs, hearts, etc., 5½x12x14½ inches .....
R2590 **Lungs, Heart and Larynx,** natural size.....
R2595 **Heart,** natural size .....
R2650 **Skeleton,** best grade .....
R2660 **Case** for holding Skeleton .....
R2600 **Manikin,** Male, Female, Sexless, colored.....
R2700 **Complete Set of 30 Selected Models,** with explanatory keys .....
a Complete with Cabinet .....

PHYSIOLOGY CHARTS
ARNOLD'S
Size 30x40 inches

A standard series of charts accurately drawn and printed in colors to represent the origi specimens. The name of each organ or part is printed:

1. **Skeleton, Entire Figure, with 10 Enlarged Details.**
2. **Muscles, Entire Figure, with 6 Enlarged Details.**
3. **Brain and Nervous System, Entire Figure, with 10 Enlarged Details.**
4. **Circulation of the Blood, Entire Figure, with 12 Enlarged Details.**
5. **Organs of Digestion and Assimilation, in Situ, with 11 Enlarged Details.**
6. **Structure of the Eye, with 5 Enlarged Details.**
7. **Structure of the Ear, with 8 Enlarged Details.**
8. **Skin and Excretory Organs, with 9 Enlarged Details.**

Price list of above charts separately:

a **On cloth with brass eyelets**.....
b **On cloth with roller at top and bottom**.....
c **On spring roller and board, dust-proof**.....
d **In steel spring roller case**.....

HYGIENE CHARTS
ARNOLD'S
Size 33x42 inches

Teeth. By means of typical heads, outlined in black, the relative position of the teeth in the jaws a child and an adult, is shown. The difference between the teeth—temporary, permanent, a sixth-year molar, is indicated by different colors. The structure of a tooth is given in secti the enamel, dentine, and pulp cavity being shown in colors.

ir and Food Passages. By means of a coloring scheme, the functions of the nose as the organ of respiration, and the mouth as the commencement of the food passage, are emphasized. Connection between nose and ear is also indicated.

igestive Organs. Shows the position of the digestive organs by diagrammatic representation, avoiding too much anatomical detail.

ar. Indicates the connection of the ear with nose, showing the relationship between breathing and hearing. The auditory ossicle and semicircular canals are diagrammatically shown in bold outline.

ye. Vertical section through the left orbit, showing its contents in the orbital axis, also with muscles in position in the head. Illustrations of common defects of eyesight, with the method of correcting them by means of lenses are also shown.

ervous System. Shows the nervous system by a novel method of representation. The brain is mapped out into its sensory and motor areas, so far as these have been localized, and the connection of the cerebro-spinal and sympathetic nervous system with the muscles and organs, is illustrated with a diagrammatic simplicity which has received the full approval of one of the leading authorities on the nervous system and its functions. Conventional illustrations of the convolutions of the brain, and of the extreme intricacy of the human nervous system, are also given for purposes of comparison.

Price list of above charts separately:

a On cloth with brass eyelets..... 2.50
b On cloth with roller at top and bottom..... 3.00
c On spring roller and board, dust-proof..... 5.00
d In steel spring roller case..... 7.00

PHYSIOLOGY CHARTS
JOHNSTON'S
Size 23x32 inches

1. Skeleton and Structure of Bone.
2. Joints and Ligaments, and Structure of Ligaments and Cartilage.
3. Muscular System and Structure of Muscles.
4. Heart, Arterial Blood Vessels, Capillary Blood Vessels, etc.
5. Veins, Organs of Respiration, Circulatory System.
6. Lymphatics and Organs of Digestion.
7. Brain, Nervous System and Structure of Skin.
8. Organs of Sense and Voice.

Set of 8 charts, mounted on cloth in solid head, complete, with tripod and manual.... 15.00

BOTANY CHARTS
BALFOUR'S
Size 44x52 inches

A series of charts illustrating the elements of botanical science. A manual is furnished with each chart.

1. Organ of Plants, Tissues, Root System; 36 Illustrations.
2. Leaves and Their Modifications; 36 Illustrations.
3. Inflorescence. Whorls of the Flower; 38 Illustrations.
4. Pistil, Ovule, Fruit, Seed; Organs of Flowerless Plants; 44 Illustrations.

a On cloth, with roller at top and bottom, each 6.00
b With spring roller board, dust-proof..... 8.00

ELEMENTARY ANATOMICAL BOTANICAL CHARTS
Size 35x28 inches

Complete description given at bottom of each chart.

1. Root.
2. Stem.
3. Leaf.
4. Flower.
5. Flower.
6. Seed and Fruit.

a On cloth, with rollers at top and bottom, each 3.00
b With spring roller and board, dust-proof..... 5.00

NATURAL HISTORY AND MINERALOGY CHARTS
Size 44x52 inches

True to life, printed in colors, representing the principal lines in the chain of nature. A manual is furnished with each chart.

1. Mammalia; 135 Illustrations.
2. Birds; 145 Illustrations.
3. Reptiles, Amphibians and Fishes; 50 Illustrations.
4. Invertebrate Animals; 169 Illustrations.
5. Mineralogy and Paleontology; 244 Illustrations.

a On cloth with roller at top and bottom..... 7.00
b With spring roller and board, dust-proof..... 9.00

STANDARD CHEMICALS AND REAGENTS

The following list of standard chemicals are made by well-known American manufacturers, including Merck and Baker, and can therefore be relied upon for analysis and quality. Most of them are supplied in original packages with maker's own label. In the absence of other instructions we will fill orders from best available stock. If any particular kind or make is desired, such as "Baker's Analyzed," "Merck's Blue Label," etc., please so state in the order.

Prices are subject to change, but those given below indicate present current rates and include proper containers.

Acacia (See Gum Arabic).	
Acetaldehyde, 95%, lb.	
Acetamide, cryst., oz.	1.00
Acetanilide, Cryst. Powd. or U. S. P., oz. .25; lb.	1.65
Acetic Anhydride, C. P. (Anhydrous Acetic Acid), oz. .36; lb.	3.00
Tech., lb.	1.80
Acetone—	
C. P. or U. S. P., lb.	1.00
Pure, lb.	.75
Sulphite, lb.	
Acetphenetidin, U. S. P., oz. .50; lb.	5.75
Acetyl Chloride, oz.	.50
Acid—	
Acetic (Glacial), C. P. lb.	.90
Acetic (Glacial), 99% U. S. P. oz., .20; lb.	.60
Acetic, C. P. 99 7/9%, lb.	1.00
Acetic, 36% U. S. P., lb.	.45
Acetic, 80% U. S. P., lb.	.60
Acetic (Pure), 56%, lb.	.45
Acetic (Pure), 99.5%, lb.	.75
Arsenic (Pure), oz. .30; lb.	2.40
Arsenic, C. P., lb.	1.25
Arsenous, C. P. (Arsenic Trioxide), lb.	.85
Arsenous, U. S. P. Powd., oz. .22; lb.	.60
Arsenous, U. S. P. Sol., oz. .20; lb.	.45
Benzoic, lb.	2.70
Benzoic (True), U. S. P., oz	1.00
Benzoic (from Toluene), U. S. P., oz. .25; lb.	2.10
Boric, C. P., lb.	.75
Boric, Pure, Cryst., lb.	.50
Boric (Boracic), U. S. P. Cryst., lb.	.45
Boric, U. S. P. Gran. or Powd., lb.	.45
Boric, C. P. (Impalpable Powder), lb.	.72
Boric, Tech. or Coml., lb.	.50
Butyric, C. P., oz.	
Butyric, Tech. (Absolute), oz. .45; lb.	4.00
Butyric, 80%, oz. .45; lb.	3.25
Butyric, 60%, oz. .40; lb.	3.00
Camphoric, U. S. P., oz. 1.00; lb.	13.00
Carbolic, C. P. Cryst., lb.	.90
Carbolic, Pure, lb.	.65
Carbolic (Phenol), Fused Cryst., lb.	.60
Carbolic, U. S. P. Cryst. oz., .25; lb.	1.20
Carbolic, Liquid, U. S. P., 87%, lb.	.60
Chromic, C. P. (Chromium Trioxide), lb.	3.75
Chromic, Tech., lb.	2.40
Chromic (85%), oz. 45; lb.	3.00
Chromic, U. S. P., oz. .48; lb.	4.50
Cinnamic, Pure, oz.	1.90
Citric, C. P., Cryst., oz. .35; lb.	3.00
Citric, Pure, Cryst., lb.	2.40
Citric, U. S. P., Cryst., Gran. or Powd., lb.	1.80
Fluorsilicic, lb.	1.25
Formic, C. P., 85-90%, oz. 35; lb.	2.00
Formic, Tech., lb.	1.20
Formic, 25%, oz. .30; lb.	1.20
Gallic, U. S. P., oz. .35; lb.	3.00
Glycerophosphoric, 25%, oz. .45; lb.	3.75
Hydriodic, Sp. Gr. 1.50, oz.	.60
Hydriodic, U. S. P. Dil. 10%, oz. .30; lb.	1.80
Hydrobromic, 34%, oz. .30; lb.	1.90
Hydrobromic, U. S. P., Dil. 10%, oz. .25; lb.	.90
Hydrochloric, C. P. (Muriatic), lb.	.60
6-lb. bottle	2.40
Hydrochloric, Coml., 6-lb. bottle	1.25
Hydrocyanic, Dil. U. S. P., oz. .20; lb.	.72
Hydrofluoric, C. P., oz. 75; lb.	2.00
Hydrofluoric, Tech., lb.	1.00
Hydrofluosilicic, C. P., lb.	2.25
Hypophosphorous (50%), oz. .55; lb.	4.75
Hypophosphorous, U. S. P. (30-32%), oz. .45; lb.	3.25
Hyphophosphorous, U. S. P. Dil. (10%), oz. .30; lb.	1.50
Iodic, C .P., Cryst., oz.	2.00
Iodic, C. P. Anhyd. (See Iodine Pentoxide).	
Lactic, Dil. (10%), oz. .20; lb.	1.00
Lactic, C. P., lb.	3.75
Lactic, U. S .P., oz. .45; lb.	4.20
Molybdic, C. P., 85%; lb.	4.20
Monochloracetic, pure, oz. .45; lb.	3.25
Nitric, C. P., lb. .75; 7-lbs.	3.75
Nitric, Coml., lb.	.60
Nitric (Fuming), lb.	1.15
Nitro-Hydrochloric, U. S. P., lb.	.75
Oleic, U. S. P., lb.	.75
Oleic, Tech., lb.	.65
Osmic, ½ gram.	4.50
Oxalic, C. P., lb.	1.75
Oxalic, Tech., Cryst., lb.	1.25
Oxalic, Tech., Powd., lb.	1.50
Oxalic, Tech. Anhyd., lb.	2.00
Perchloric, C. P. (60%), lb.	9.00
Perchloric, C. P. (20%), lb.	3.75
Perosmic, 1 gram	8.00
Phenolsulphonic, C. P. (Para), lb.	3.50
Phosphoric, C. P., lb.	1.15
Phosphoric, U. S. P. (Syrupy), lb.	1.20
Phosphoric, Meta (Glacial), Sticks, oz. .40; lb.	3.75
Phosphorus, 30-50%, lb.	2.20
Phthalic, Anhydride Sublimed, oz. .36; lb.	3.00
Phthalic, Anhydride, C. P., lb.	2.40
Phospho-Molybdic, C. P., Cryst., oz.	1.50
Phospho-Molybdic, C. P., 10% Sol., lb.	2.70
Phospho-Tungstic, C. P., Cryst., oz.	1.50
Phospho-Tungstic, C. P., 10% Sol., lb.	2.70
Picramic, for blood test, oz.	3.50
Picric, C. P. Cryst., lb.	1.90
Picric, Tech. Cryst., lb.	1.00
Picric (with 10% water added), oz. .30; lb.	2.10
Propionic, C. P., oz	
Pyrogallic, U. S. P. Cryst., oz. .60; lb.	4.50
Pyrogallic, U. S. P. Resublimed, oz. .60; lb.	5.00
Pyroligneous, Purified, lb.	.45
Pyroligneous, Tech., lb.	.36
Salicylic, Cryst., lb.	1.35
Salicylic, U. S. P., oz. .20; lb.	1.25
Salicylic, Synthetic, U. S. P., oz. 20; lb.	1.25
Silicic, C. P., oz. .40; lb.	2.10

Acid—Con inued
- Silicic (Wet Process), oz. .22; lb. 1.20
- Silicic, Pure, oz. .22; lb. 1.20
- Silico-Tungstic, C. P., oz. 1.30
- Stearic, Purified, lb. 1.20
- Stearic, Pure, lb. .75
- Stearic, U. S. P. Lumps, lb. .90
- Stearic, U. S. P. Powd., lb. 1.05
- Stearic, Tech. (Lumps or Powd.), lb. .75
- Succinic, C. P., oz 2.10
- Succinic, Cryst., oz. 1.50
- Sulphanilic, Purified, Cryst., oz. .35; lb. 2.25
- Sulpho-Carbolic, oz. .40
- Sulphuric, C. P., lb. .65; 9-lbs. 3.00
- Sulphuric, C. P., Absolute, lb. .75
- Sulphuric, Tech or Coml., lb. .45; 9-lbs. 2.00
- Sulphuric, C. P. (Fuming), lb. .90; 9-lbs. 4.80
- Sulphuric, Coml. (Fuming), lb. .60
- Sulphuric, C. P. Spec. (Low in Nitrogen), 9-lbs. 2.25
- Sulphuric, 66° Be, Coml., 9-lbs 1.50
- Sulphurous, C. P. Sol., lb. .65; 5-lbs. 1.75
- Tannic (Tannin), U. S. P., oz. .35; lb. 3.50
- Tannic, U. S .P. Powd., oz. .35; lb. 3.50
- Tannic, Highest Purity (Light, Clearly Soluble), oz. .45; lb. 3.75
- Tartaric, C. P. Cryst., lb. 2.40
- Tartaric, U. S. P. (Pure), Powd., Cryst., or Gran., lb. 1.75
- Tartaric, Highest Purity (Cryst. or Powd.), oz. .40; lb. 3.25
- Thymic (See Thymol).
- Trichloracetic, U. S. P., oz. .65; lb. 7.00
- Valeric, oz. 1.10; lb. 15.00

Agar Agar, U. S. P. Shredded, lb. 1.90
- U. S. P., Powd., lb. 2.75

Agaricin, 15 grams, .45; oz. 5.50
Albumen, Egg (Scales), lb. 3.00
- Egg (Powd. Soluble), lb. 3.00
- (From Blood), lb.

Albutannin (Albumin Tannate), oz. .75; lb. 9.00
Alcohol—
- Amylic, C. P. (Iso), lb. 3.00
- Amylic (Fusel Oil), lb. 1.90
- Amylic (For Milk Analysis), lb. 2.10
- Ethyl, 95%, U. S. P.
- Ethyl (Absolute)
- Ethyl (Denatured), lb. .65; gal. 2.50
- Methyl, C. P. (Acetone Free), lb. 1.90; gal. 9.50
- Methyl (Wood), 95%, lb .1.50; gal. 6.00
- Methyl (Refined), lb. 1.40; gal. 6.75
- Methyl (Absolute), lb. 1.50; gal. 7.50

Aldehyde (Acet. Aldehyde), lb. 3.00
Alum, Ammonium, U. S. P., lb. .36; (Aluminum and Ammonium Sulphate), lb. .30
- Ammonio - Ferric (Ammoniated Iron Alum, Ammono-Ferric Sulphate, Iron and Ammonium Sulphate Ferric), oz. .20; lb. .60
- Chrome (Chromium and Ammonium Sulphate), Powd., lb. .60
- Chrome (Chromium and Potass. Sulphate), Cryst., lb .75
- Lump, Tech., lb .25
- Powd., Tech., lb .30
- Burnt, Tech., lb .35

Alizarine Paste, oz. .75; lb. 9.00
Aluminum—
- Metal (Powd. Dust), oz. .30; lb. 2.25
- Metal (Sheet), lb. 1.50
- Metal (Foil), lb. 1.80
- Metal (Turnings), lb. 1.35
- Metal (Wire), lb. 1.80
- Metal (Sticks), lb.
- Metal (Granular), lb.
- Acetate, C. P. (Basic), oz. .25; lb.
- Acetate (Sol. N. F.), lb.
- Aceto-Tartrate, oz. .30; lb.
- Ammon. Sulphate, C. P., lb.
- Ammon. Sulphate (Tech.), lb.
- Borate, C. P., lb.
- Bromide, C. P., oz.
- Chloride, C. P. Cryst. lb.
- Chloride (Sublimed Anhydrous), oz. .45; lb.
- Chloride (Tech.), Cryst., lb.
- Citrate, oz. .32; lb.
- Fluoride, C. P., lb.
- Hydrate, C. P., lb.
- Hydroxide, U. S. P., oz. .25; lb.
- Nitrate, C. P., oz. .30; lb.
- Nitrate, Tech, lb.
- Oxalate, C. P., lb.
- Oxide, C. P. (Ignited), lb.
- Oxide, Tech., lb.
- Phosphate, C. P., lb., 2.00; oz.
- Potass. Sulphate, C. P., lb.
- Potass. Sulphate, C. P. (Anhyd.), lb.
- Potass. Sulphate, Tech. (Anhyd.), lb.
- Potass. Sulphate, Tech. (Cryst.), lb.
- Sodium Chloride, C. P. Cryst., lb.
- Sodium Fluoride, C. P., lb.
- Sodium Sulphate, C. P. Cryst., lb.
- Sodium Chloride Sulphate, C. P. Anhyd. lb.
- Sulphate, C .P. Cryst., lb.
- Sulphate, C. P. Anhyd., lb.
- Sulphate, Tech., lb.
- Sulphate, U. S. P., Gran. or Powd., lb.
- Sulphide, lb.
- Sulphite, C. P., lb.
- Tartrate, C. P. lb.

Aluminum and Potass. Sulphate (Potassic Alum.), Highest Purity, Cryst. lb.
Ammonia Water (See Ammonium Hydroxide).
Ammonium—
- Acetate, Cryst., oz. .20; lb.
- Acetate, C. P. Cryst., oz. .25; lb.
- Acetate, Sol. U. S. P., lb.
- Arsenate, oz.
- Arsenate, C. P., lb.
- Benzoate, U. S. P., oz. .35; lb.
- Bicarbonate, C. P., oz. .20; lb.
- Bichromate, C. P., lb.
- Bichromate, Pure, lb.
- Bifluoride, C. P. (Ammonium Fluoride), lb.
- Binoxalate, C. P., lb.
- Biphosphate (Monobasic), oz. .25; lb.
- Bisulphate, C. P., oz. .25; lb.
- Bisulphite, C. P. Con. Sol., lb.
- Bitartrate, C. P., lb.
- Bitartrate, oz. .30; lb.
- Borate, C. P., lb.
- Borate, C. P., oz. .30; lb.
- Bromide, C. P. or U. S. P., lb.
- Bromide, U. S. P., oz. .30; lb.
- Carbonate, C. P. or U. S. P. (Lumps or Powd.), lb.
- Carbonate, C. P. or U. S. P. (Cubes), lb.
- Carbonate, C. P. or U. S. P., Pure, lb.
- Carbonate, U. S. P. Resublimed, Lumps, lb.
- Chloride, C. P. or U. S. P. (Gran. or Powd.), lb.
- Chloride, C. P. Spec., lb.

Ammonium (Continued)—
Chloride (Sal Ammoniac), Tech. Gran., lb. .72
Chromate, C. P., lb. 3.00
Chromate (Neutral), oz. .30; lb. 2.70
Citrate, C. P., oz. .30; lb. 2.75
Dichromate (See Ammon. Bichromate).
Fluoride, C. P., 8 oz. 2.75
Fluoride, Purified, lb. 1.35
Fluoride, Dry, Tech., lb. .80
Formate, C. P., lb. 1.50
Hypophosphite, N. F., oz. .40; lb. 4.00
Hydroxide, C. P., lb. .75; 4-lbs. 2.25
Hydroxide, 16°, lb. .45; 5-lbs. 1.50
Hydroxide, 18°, lb. .48
Hydroxide, 20°, lb. .50
Hydroxide, 26°, lb. .60
Hydroxide, 26°, U. S. P., lb. .70
Hydrosulphide (See Ammon. Sulphide).
Iodate, C. P., oz.
Iodide, C. P., lb. 7.50
Iodide, U. S. P., oz. .75; lb. 8.50
Meta Vanadate, oz.
Molybdate, C. P., oz. .65; lb. 3.50
Molybdate, HNO_3 Sol., lb. 1.50
Muriate (See Ammon. Chloride).
Nitrate, C. P., lb. .90
Nitrate, Highest Purity, lb. 1.20
Nitrate, C. P. (Fused Sticks), lb. 1.10
Nitrate, Tech., lb. .65
Nitrate (Cryst., Fused, or Gran.), lb. .65
Nitrite, Sol., lb. 1.00
Oxalate, C. P., lb. 1.80
Oxalate, Tech., lb. 1.15
Oxalate, Pure, lb. 2.25
Oxalate, Highest Purity, oz. 30; lb. 2.75
Persulphate, C. P., oz. .25; lb. 1.95
Phenolsulphonate, oz. .30
Phosphate, C. P. (Primary), lb. 1.50
Phosphate, C. P. (Secondary), lb. 1.30
Phosphate, Tech. Powd. 98%, lb. .80
Phosphate, Dibasic, Pure, Gran., lb. 1.20
Phosphate, Dibasic, C. P. Gran., oz. .30; lb. 1.95
Phosphate, Monobasic (Biphosphate), oz. 30; lb. 2.20
Phospho-Molybdate, C. P., oz. 1.05
Picrate, C. P., lb. 4.00
Potass. Tartrate, C. P., lb. 2.75
Salicylate, U. S. P., oz. .30; lb. 2.40
Silico-Fluoride, C. P., lb. 2.20
Sulphate, C. P. or Highest Purity, lb. .60
Sulphate, C. P. Spec., lb. 1.20
Sulphate, Tech., lb. .45
Sulphate, Pure, lb. .48
Sulphide, Hydro, lb. .85; 5-lbs. 2.00
Sulphocarbolate (Phenol - Sulphonate), oz. .30
Sulphocyanate (Thiocyanate), oz. .40; lb. 3.75
Sulphocyanide, Tech., oz. .30; lb. 2.10
Sulphocyanide, Pure, oz. .35; lb. 3.00
Sulphite, C. P., Cryst., lb. 1.30
Tartrate, C. P., lb. 2.10
Sulphite, Neutral, oz. .30; lb. 2.50
Valerate, U. S. P., oz. .90; lb. 10.00
And Magnesium Phosphate, oz. .30; lb. 1.50
And Magnesium Sulphate, lb. 1.05
And Potassium Tartrate, oz. .40
Tetroxalate, C. P., lb. 1.95
Thiocyanate, C. P., lb. 2.50
Thiocyanate, Tech., lb. 2.25

Amyl—
Acetate, Pure, lb. 1.80
Acetate (Pear Oil), Tech., lb. 1.20
Butyrate, Tech., lb. 4.50
Nitrate, oz.
Nitrite, U. S. P., oz. .65
Valerate, lb. 11.00
Amylene Hydrate, oz. 1.00
Aniline—
lb. 1.05
Oil, C. P. 1.10
Oil, Tech., lb. .75
Acetate, C. P., lb. 2.25
Black (Nigrosine), Sol. in Alcohol, oz.
Black Sol. in Water, oz.
Blue, Sol. in Alcohol, oz. 1.75
Blue (Methyl), Sol. in Water, oz. 3.00
Blue (Methylene), oz. 1.50
Brown (Bismarck), oz. .95
Green (Malachite), Powd. or Cryst. oz. 1.90
Orange, Methyl. (Helianthine), oz. 1.90
Orange (T), oz. 1.50
Red (Aurin), oz. 1.50
Red (Congo), oz. .95
Red (Corallin), oz.
Red (Eosine), Bluish, oz. 1.50
Red (Eosine), Yellowish, oz. 1.50
Red (Fuchsine), oz.
Red (Iodeosine), oz. 3.50
Red (Ruby S), oz.
Red (Scarlet), oz.
Violet (Gentian B), oz. 1.50
Violet (Methyl 2B), oz. 1.50
Yellow (Chrysaniline), oz.
Yellow (Martius), oz. 1.50
Hydrochloride, C. P., lb. 1.20
Nitrate, C. P. lb. 2.10
Oxalate, C. P., oz. .40
Sulphate, C. P., lb. 1.30

Antimony—
(Metal), Lump, lb. .65
(Metal) Gran., lb. .60
(Metal), Powd., lb. .60
Arsenate, oz. .48
Arsenite, oz. .45
Butter (Antimony Chloride Sol.), lb. .70
Chloride, Cryst., oz. .45; lb. 3.30
Chloride, Penta, C. P. (Fuming), lb. 1.80
Chloride, Tri, C. P., lb. 1.60
Fluoride, C. P., lb. 2.50
Hydrate, C. P., lb. 2.25
Oxide, C. P., lb. 2.10
Oxide (Antimonous), Pure, lb. .75
Oxide, Tech. White, lb. .75
Oxychloride, C. P., lb. 1.90
Pentasulphide, C. P., lb. 2.40
Pentoxide, C. P., lb. 1.75
Potassium Tartrate, C. P. (Tartar Emetic), lb. 2.45
Potassium Tartrate, Tech., lb. 1.95
Sulphate, C. P., lb. 1.55
Sulphide, C. P. Red, lb. 2.90
Sulphide, C. P. Black, lb. 2.70
Sulphide, Black, Purified, lb. .60
Sulphide, Golden, lb. 1.20
Sulphurated (Kermes Mineral), lb.
Tartrate, C. P., lb. 2.40
Trisulphide (Antimonious Sulphide), lb. .75
Antipyrine, U. S. P., oz. .90; lb. 11.00
Apiol, Fluid Green, U. S. P., oz. .40; lb. 6.00
Aqua Fortis (See Nitric Acid).
Argentum (See Silver).
Aristol (See Thymol Iodide).
Argols, Powd., lb. 1.50

Arsenic—
(Metal), lb. 3.00
Bromide, oz. .65

Arsenic (Contintued)—	
Bromide 1% Sol., oz. .25; lb.	.90
Chloride, oz. .60; lb.	4.50
Iodide (Arsenous), U. S. P., oz. .90; lb.	10.00
Pentasulphide, C. P., lb.	2.10
Pentoxide (See Acid Arsenic).	
Arsenic Sulphide, Red, Powd., lb.	
Sulphide, Yellow, Tech. Powd., lb.	
Trisulphide, C. P., lb.	2.10
And Mercury Iodides Sol., U. S. P., lb.	.60
Trioxide (See Acid Arsenous).	
Asbestos—	
Long Fibre, lb.	7.50
Long Fibre Washed in Acid, lb.	8.00
Long Fibre, Washed and Ignited, lb.	9.50
Medium Fibre, lb.	4.75
Medium Fibre, Washed in Acid, lb.	5.25
Medium Fibre, Washed and Ignited, lb.	5.75
Platinized, 5%, oz.	11.00
Platinized, 10%, oz.	20.00
Asphaltum, lb.	.60
Baking Powder, lb.	.20
Baking Soda (See Sodium Bicarbonate).	
Balsam—	
Canada, oz. .30; lb.	2.00
Fir, lb.	
Peru, B. P., oz. .75; lb.	10.00
Barium—	
Acetate, C. P., oz. .25; lb.	1.20
Borate, C. P., lb.	1.30
Bromate, C. P., oz.	.75
Bromide, C. P., oz.	.50
Carbonate, C. P., lb.	1.10
Carbonate, Tech., lb.	.40
Chlorate, Cryst. or Powd., lb.	
Chloride, C. P., Cryst., lb.	.60
Chloride, C. P. Anhyd., lb.	1.10
Chloride, Tech. Cryst., lb.	.48
Chloride, Tech. Anhyd, lb.	.65
Chromate, C. P., oz. .37; lb.	1.20
Citrate, C. P., lb.	7.75
Dioxide (Peroxide), Anhyd. Tech., lb.	.90
Dioxide Anhyd., C. P., lb.	1.20
Dioxide, Tech., lb.	.75
Fluoride, C. P., lb.	1.45
Hydroxide, C. P., Cryst., lb.	.80
Hydroxide, C. P. Anhyd., lb.	1.25
Hydroxide, Tech. Cryst., lb.	.60
Hydroxide, Tech. Anhyd., lb.	1.00
Iodate, C. P., oz.	
Iodide, oz.	.75
Molybdate, C. P., oz.	.80
Nitrate, C. P., lb.	1.00
Nitrate, Highest Purity, lb.	1.05
Nitrate, Tech. Powd., lb.	.60
Oxalate, C. P., lb.	2.20
Oxide, C. P. Hydrated, lb.	1.25
Oxide, Tech., lb.	.95
Oxide (Mono), Pure Anhydrous, lb.	
Peroxide (See Barium Dioxide).	
Phosphate, C. P., lb.	2.40
Silicate, C. P., lb.	1.85
Sulphate, Tech., lb.	.55
Sulphate, Tech. C. P., lb.	.75
Sulphide, Pure, lb.	1.20
Sulphide, Tech., lb.	.55
Sulphide, Gray, 60%, oz. .20; lb.	.90
Sulphide, Yellow, Pure, 30%, oz. .20; lb.	.90
Sulphite, C. P., oz. .25; lb.	1.50
Tartrate, C. P., lb.	3.75
Thiosulphate, C. P. (For Standardizing), lb.	1.90
Baryta, Carbonate, Tech., lb.	.40
Chlorate, Powd. Tech., lb.	
Sulphate, Tech., lb.	.40
Beef Extract, oz. .50; lb.	3.25
Bees Wax (See Wax).	
Benzaldehyde, U. S. P., oz. .40; lb.	3.50
Benzaldehyde, Highest Purity, oz. .45; lb.	4.75
Benzene, C. P., lb.	.75
Benzene, Pure, lb.	.40
Benzidine, Base, lb.	
Benzidine, Highest Purity, lb.	
Benzol, Pure, lb.	.60
Benzyl Benzoate, oz. .60; lb.	7.75
Benzoyl Chloride, lb.	
Betol (See Betanaphthol).	
Betanaphthol—	
U. S. P., lb.	
Benzoate (Benzo Naphthol), oz. .60; lb.	7.25
Bismuth, U. S. P., oz. .60; lb.	7.25
Biebrich Scarlet, R., oz.	
Bismuth—	
(Metal), lb.	5.50
Acetate, C. P., oz. .70; lb.	7.50
Betanaphthol, U. S. P., oz. .60; lb.	7.50
Carbonate, C. P., lb.	6.00
Chloride, C. P., oz. .60; lb.	6.50
Chloride (Trichloride), lb.	
Citrate, U. S. P., oz. .60; lb.	6.00
Hydrate, C. P., lb.	5.75
Iodide, C. P., oz.	.90
Lactate, oz. .75; lb.	8.50
Nitrate, Cryst., oz. .45; lb.	4.00
Nitrate, C. P., lb.	4.50
Oxalate, oz. .60; lb.	7.25
Oxide, C. P., lb.	5.75
Oxide, Hydrated, oz. .60; lb.	7.50
Oxide Anhydrous (Trioxide), oz. .60; lb.	7.50
Oxychloride, C. P., oz. .60; lb.	5.75
Oxyiodide (Subiodide), oz. .75; lb.	8.50
Phenolate, oz.	.90
Phenolsulphonate (See Sulphocarbolate).	
Phosphate, C. P., oz.	.90
Phosphate, oz. .60; lb.	7.50
Phosphate Soluble, oz.	
Salicylate Acid, 40%, oz. .45; lb.	4.75
Subcarbonate, U. S. P., oz. .50; lb.	6.00
Subbenzoate, oz. .60; lb.	7.50
Subcarbolate, oz. .65; lb.	9.00
Subgallate, U. S. P. or C. P., oz. .45; lb.	4.75
Subnitrate, U. S. P. or C. P., lb.	5.40
Subiodide (See Bismuth Oxyiodide).	
Subsalicylate, U. S. P., oz. .60; lb.	6.00
Sulphate, C. P., lb.	6.00
Sulphide, C. P., oz.	.80
Tannate, oz. .50; lb.	6.00
Valerate, oz. 1.20; lb.	15.00
And Ammonium Citrate, U. S. P., oz. .75; lb.	10.00
Bleaching Powder (See Calcium Hypochlorite).	
Blue Mass—	
(Mass of Mercury), U. S. P., lb.	1.60
Powd., lb.	1.70
Bleaching Powder (See Calcium Hypochlorite).	
Blue Vitriol (See Copper Sulphate, Tech.).	
Bone Ash, lb.	.45
Bone Black (See under Charcoal).	
Borax—	
(Sodium Borate, or Sod. Biborate), U. S. P. Cryst., lb.	.35
Highest Purity or C. P. Cryst., lb.	.45
Calcined, (Glass Powd.), lb.	.90
Bromine—	
C. P., lb.	2.25
Tech., lb.	

Cadmium—
(Metallic), Sticks, Mossy or Powd., lb. 3.00
Acetate, C. P., lb. 3.75
Bromide, oz. .36; lb. 3.75
Bromide, C. P., lb. 4.00
Carbonate, C. P., lb. 3.75
Carbonate, C. P., oz. .40; lb. 3.50
Chloride, C. P., Cryst., oz. .40; lb. 3.75
Chloride, C. P., Anhyd., oz. .40; lb. 4.25
Fluoride, C P., lb. 5.75
Hydrate, C. P., lb. 5.40
Iodide, C. P., oz. .65; lb. 7.25
Nitrate, C. P. Cryst., oz. .40; lb. 3.80
Nitrate, oz. .30; lb. 2.40
Oxalate, C. P., lb. 5.75
Oxide, C. P. 5.75
Phosphate, C. P., lb 6.50
Salicylate, oz., .90; lb. 10.00
Sulphate, C. P., oz. .40; lb. 3.00
Sulphate, C. P., oz. .30; lb. 2.60
Sulphate, C. P. Anhyd., lb. 3.25
Caffeine, U. S. P., oz. 1.20
Caffeine Benzoate, oz. 1.00
Calcite (Calc Spar), lb 35
Calamine, Prepared., lb. .65
Calcium—
(Metal), 2 oz. 5.75
Acetate, C. P., lb. 1.10
Acetate, Tech., lb. .55
Acetate, Dried, oz. .25; lb. 1.50
Arsenate, C. P., lb. 2.40
Arsenite, C. P., lb. 2.40
Benzoate, oz. .40; lb. 3.75
Biphosphate (Monobasic), lb.
Bisulphite Sol. (See Lime).
Bromate, oz. .90
Bromide, C. P., lb. 2.30
Bromide, U. S. P., oz. .30; lb. 3.00
Carbide, lb. .50
Carbonate, C. P., lb. 1.10
Calcium Carbonate (See Marble Chips).
Carbonate (Precip. Chalk), lb. .50
Carbonate, Tech. Precip., lb. .30
Chloride C. P. Cryst., lb. .75
Chloride, C. P., Anhyd., lb. 1.00
Chloride, C. P., Anhyd. Sticks, lb. 1.25
Chloride, Purified Anhyd. (Granulated for Drying Tubes), lb. .90
Chloride, Tech. Anhyd. (Lumps or Gran. for Dessicators), lb. .60
Chloride, Tech. Anhyd. Sticks, lb. 1.00
Chloride, Coml., lb. .40
Chromate, C. P., lb. 1.95
Citrate, C. P., lb. 2.50
Ferrocyanide (See Cal. Pot. Ferrocyanide).
Fluoride, C. P., lb. 1.65
Fluoride (Fluor Spar), Native Powder, lb. .50
Formate, C. P., lb. 2.50
Formate, oz. .30; lb. 2.15
Hydrate, Pure, lb. .60
Hydroxide (See Lime Water).
Hypochlorite, C. P., lb. .95
Hypochlorite (Bleaching Powder), lb. .60
Hypophosphite, U. S. P., oz. .30; lb 2.00
Iodide, C. P., oz. .90
Iodide, oz. .60; lb. 7.20
Lactate, U. S. P., oz. .35; lb. 2.75
Molybdate, C. P., lb. 4.25
Nitrate, C. P., oz. .25; lb 1.40
Nitrate Tech., lb. .90
Oxide (Lime), lb. .60
Oxide, U. S. P., lb. .60
Oxide (From Marble), lb. .35
Oxalate, C. P., lb. 2.00
Permanganate, oz.
Peroxide, oz. .60; lb. 4.30
Phenolsulphonate (Sulphocarbolate), oz. .30; lb. 1.85
Phosphate, C. P. (Primary), oz. .25; lb. 1.50
Phosphate, C. P. (Secondary), lb. 1.10
Phosphate, C. P. (Tertiary), lb. 1.40
Phosphate, Tech. (Tribasic), lb.
Phosphide, oz. .75; lb. 3.75
Potassium Ferrocyanide, C. P., lb. 1.85
Saccharate, oz. .30; lb. 2.75
Salicylate, oz. .30; lb. 2.85
Sulphate, C. P., lb. .75
Sulphate, C. P., Anhyd., lb. 1.30
Sulphate (Plaster of Paris), lb. .35
Sulphate (Precip.), lb. .75
Sulphate (Selenite), lb. .20
Sulphide, Pure (U. S. P.), lb. .90
Sulphite, C. P., lb. 1.00
Sulphite, lb. .45
Sulpho-Carbolate (Phenol Sulphonate), oz. .30; lb. 1.80
And Sodium Hypophosphite, oz. .40; lb. 3.25
Tartrate, C. P., lb. 2.50
Calico Cloth, Pink, for Bleaching, yd. .30
Calomel (Mercury Chloride, Mercurous Chloride), U. S. P., lb. 3.00
Camphor, Gum, lb.
Camphor, Monobromated, U. S. P. Cryst. or Powd. oz. .65; lb. 7.50
Canada Balsam (See Balsam).
Carbon—
Bisulphide (Di), C. P., lb. .75
Bisulphide, Tech., lb. .60
Tetrachloride, C. P., lb. .85
Tetrachloride, Pure, lb. .75
Tetrachloride (Fire Extinguisher), quart 1.50
Tetrachloride, Tech., lb. .60
Tetrachloride (Highest Purity), oz. .25; lb. 1.60
Card Teeth (See Iron Wire.)
Carborundum, Cryst. or Powd., lb.
Carmine, No. 40, N. F., oz. .90
Casein, lb. 1.25
Casein, Tech., oz. .20; lb. .75
Castile Soap, Bar, lb. .75
Castile Soap, Powd., lb. 1.20
Castor Oil, lb. .90
Caustic Potash (See Potassium Hydroxide).
Caustic Soda (See Sodium Hydroxide).
Cerium—
Chloride, Dry, oz.
Nitrate, Dry, oz. .45; lb. 3.30
Oxalate, U. S. P., oz. .25; lb. 1.60
Oxide, C. P., oz.
Chalk, Lump, lb. .20
Chalk, Precip. (See Calcium Carbonate).
Charcoal—
Blocks, for Blowpiping, doz. 1.50
Blood, C. P., lb. 3.00
Bone, Gran., lb. .60
Bone Powd., lb. .75
Bone (Treated with Acid Moist), lb. 1.00
Wood (Sticks), doz. 1.75
Wood (Powd.), lb. .30
Cheese Cloth, yd. .20
Chloralhydrate, Cryst., oz. .30; lb. 2.50
Chloride of Lime (See Calcium Hypochlorite, Bleaching Powder).
Chlorine Cubes (For Generating Cl). lb. .80
Chloroform, C. P., lb. 1.25
Chloroform, U. S. P., lb. .95
Chrome Yellow (See Lead Chromate).

Chromium—
(Metal), lb. .....
Acetate, C. P. (Basic), lb..... 3.30
Ammonium Sulphate, C. P., lb..... 1.60
Borate, C. P., oz..... .50
Bromide, C. P., oz..... .90
Carbonate, C. P. (Basic), lb..... 3.00
Chloride, C. P. Sol. 50%, lb..... 2.00
Chloride, C. P., Dry, lb..... 3.00
Fluoride, C. P., lb..... 3.00
Hydroxide, C. P., lb..... 1.75
Hydroxide, Dry, oz. .25; lb..... 1.50
Nitrate, C. P., Sol. 40%, oz. .35; lb..... 1.80
Nitrate, C. P. Dry (Basic), oz. .40; lb.... 3.00
Oxalate, C. P., lb..... 2.10
Oxide, C. P., lb..... 3.00
Oxide, Anhyd., oz. .30; lb..... 2.00
Phosphate, C. P., lb..... 2.25
Potassium Sulphate, C. P., lb..... 1.25
Potassium Sulphate Tech., lb..... .80
Sulphate, C. P., Dry, lb..... 3.00
Sulphate, C. P. Sol. 30%, lb..... 1.60
Sulphate, C. P. oz., .25; lb..... 1.50
Trioxide (Acid Chromic), oz. .45; lb.... 3.25
Cinnabar (Mercury Sulphide, Red).
Coal, Cannel, lb..... .25
Cobalt—
(Metal), oz..... .75
Acetate, C. P., lb..... 5.00
Ammonium Chloride, C. P., lb..... 3.75
Ammonium Sulphate, C. P., lb..... 3.00
Bromide, C. P., oz.....
Carbonate, C. P., oz. .65; lb..... 4.25
Chloride, C. P., lb..... 2.75
Chloride (Pure), oz. ..... .45
Chloride 5% Sol., oz. .25; lb..... .90
Chromate, C. P., lb..... 5.75
Hydrate, C. P., lb..... 4.50
Nitrate, C. P., oz. .40; lb..... 2.75
Nitrate Sol. 5%, oz. .25; lb..... .90
Nitrate, C. P. Anhyd., lb..... 3.25
Oxalate, C. P., lb..... 4.00
Oxide, C. P., lb..... 3.75
Oxide, Black, oz. .45; lb..... 4.50
Phosphate, C. P., oz..... 1.10
Sulphate, C. P., lb..... 2.50
Sulphate, C. P. Anhyd., lb..... 3.00
Sulphate, oz. .25; lb..... 1.80
Cochineal—
Bugs, lb. 1.60
Powd., lb. 1.85
Collodion, U. S. P., oz. .25; lb..... .80
Flexible, oz. .25; lb..... .80
Cotton, oz. ..... .60
Congo Red (See under Aniline).
Copper—
(Metal), Gran., lb..... .80
(Metal), Shot, lb..... 1.20
(Metal) Precip. Powd., lb..... 1.60
(Metal) Shavings, lb..... .95
(Metal), Sheet, lb..... .90
(Metal), Wire, lb..... .90
(Metal), Elec. Sheet, 0.008 in., lb..... 1.25
(Metal) Elec. Foil, 0.002 in., lb..... 1.95
(Metal), Rivets, lb..... 1.20
Acetate, C. P., lb..... 1.60
Acetate (Normal), Cryst., oz. .30; lb... 2.50
Acetate (Basic), Refined Powder, lb.....
Aceto Arsenite, C. P., lb..... 3.75
Aluminated (Plates), oz. .25; lb..... 1.25
Aluminated (Powd.), oz. .25; lb..... 1.30
Ammonium Chloride, C. P., lb..... .80
Ammonium Sulphate, C. P., lb..... .80
Arsenate, C. P., lb..... 2.50
Arsenate, oz. ..... .30
Arsenite, C. P., oz. .30; lb..... 2.00
Borate, C. P., lb..... 3.00
Bromide, C. P., oz..... .70
Bromide, oz. ..... .45
Carbonate, C. P., lb..... 1.40
Carbonate Tech., lb..... .75
Chloride, Cupric (Bichloride), C. P., oz. 30; lb. 1.35
Chloride, Cuprous (Monochloride), oz. .30; lb. 2.25
Chloride, Pure, lb..... .90
Chloride, C. P., Anhyd., lb..... 1.40
Citrate, oz. ..... .30
Cyanide, oz. ..... .35
Fluoride, C. P., lb..... 2.00
Formate, C. P., lb..... 3.00
Formate, oz. .....
Hydrate, C. P., lb..... 3.00
Iodide (ous), oz..... .65
Iodide (ous), C. P., oz..... 1.00
Nitrate, C. P., lb..... 1.00
Nitrate Tech., lb..... .75
Nitrate, Pure, Cryst., lb..... 1.30
Nitrate (Ammoniated), oz..... .30
Oxalate, C. P., lb..... 3.75
Oxalate, oz. .45; lb..... 3.25
Oxide (ic), C. P. Black, Powd., oz. .25; lb. 1.35
Oxide (ic), C. P. Black, Coarse, lb..... 1.50
Oxide (ic), Pure, Gran. lb..... 2.40
Oxide (ic), C. P. Wire Form, lb..... 1.85
Oxide, Red (ous), oz. .40; lb..... 3.75
Oxide, Red, Pure, lb..... 1.25
Oxychloride, oz. ..... .40
Phosphate, C. P., lb..... 3.00
Potassium Chloride, C. P., lb..... 1.20
Copper—
Potassium Sulphate, C. P., lb. 1.25
Sulphate, C. P., Large Cryst., lb. ..... .80
Sulphate, C. P., Fine Cryst., lb..... .80
Sulphate, C. P., Anhyd, lb..... 1.25
Sulphate Tech. Cryst. (Blue Vitriol), lb. ..... .35
Sulphate, U. S. P., Gran. or Cryst., lb... .50
Sulphate, U. S. P., Powd., lb..... .60
Sulphate, C. P. (Iron Free), lb..... .90
Sulphate, Ammoniated, lb..... 1.50
and Ammonium Chloride, lb..... 1.45
and Ammonium Sulphate (See Copper Sulphate, Ammoniated).
and Potassium Chloride (Ammoniated Copper), lb. 1.50
and Potassium Cyanide, lb..... 2.50
Sulphide, C. P. (Prec.), lb..... 2.00
Sulphide, Pure (Fused), lb..... 1.95
Sulphide (ic), lb..... 1.75
Sulphide (ous), lb..... 1.90
Sulpho-Carbolate, oz..... .35
Tartrate, C. P., lb..... 2.40
Corraline—
(Rosolic Acid), oz. ..... .65
Corrosive Sublimate—
U. S. P. (Mercuric Chloride), Powd.... 3.00
U. S. P. (Mercuric Chloride), Gran., lb. 3.00
C. P., Powd., lb..... 4.25
U. S. P., Cryst., lb..... 3.00
(Powd.), Highest Purity, lb..... 4.25
Cotton, Absorbent, Filtering, lb..... .85
Negative, oz. ..... .50
Photo, oz. ..... .45
Soluble, with 33⅓ Water, lb..... 3.00
Cotton Seed Oil, lb..... .60

Cream of Tartar—
(Potassium Bitartrate), U. S. P., Powd., lb. 1.20
Creosote—
U. S. P., oz., .25; lb. 1.75
Carbonate, U. S. P., oz., .60; lb..... 7.00
Dextrin—
White or Yellow (From Corn), lb..... .48
White (From Potatoes), lb..... .60
Dextrose—
C. P., lb..... 3.00
Tech., lb. ..... .50
(Grape Sugar, Glucose), Pure, oz., .30; lb. 2.10
Highest Purity, Anhyd. oz., .75; lb..... 8.00
Diamond Ink (For Etching Glass), oz..... 1.00
Dichloride (Insecticide), lb..... 1.50
Dimethyl—
Aniline, oz. .....
Gloxime, oz. 3.25
Sulphate, lb. 2.25
Earth, Infusorial, lb..... .40
Egg Saver (Water Glass), quart..... .60
Egg, Albumen, lb..... 2.75
Eosine, oz. 1.50
Epsom Salt—
(Magnesium Sulphate), U. S. P., Cryst., lb. ..... .36
(Dried), lb. ..... .36
U. S. P., Highest Purity, Cryst., lb..... .50
U. S. P., Highest Purity, Cryst., (Dried), lb. ..... .60
Erythrosine, oz. .....
Ether—
U. S. P., lb..... .60
(For Anesthesia), 4 oz., .25; lb..... .80
Washed, lb. 1.25
U. S. P. (Sulphuric), 4 oz., .25; lb..... .85
C. P. Anhydrous, (Distilled Over Sodium), lb. 1.50
U. S. P., 1880, lb..... 1.20
Acetic, C. P., Absolute, lb..... 2.75
Acetic, U. S. P., lb..... 1.85
Acetic, Pure, 90% (Ethyl Acetate), lb.... 1.35
Benzoate, oz., .40; lb..... 3.75
Bromide (Ether Hydrobromic), Highest Purity, oz., .48; lb..... 4.75
Butyric, Concentrated (Ethyl Butyrate), lb. 4.00
Chloride, U. S. P., 10 grams.....
Formic (Ethyl Formate), oz., .40; lb.... 3.75
Hydriodic (Ethyl Iodide), oz..... .85
Hydrobromic (Ethyl Bromide), oz., .60; lb. 4.75
Nitrous, Con., lb..... 2.00
Petroleum, lb. ..... .65
Petroleum (Low Boiling Point), lb..... 1.00
Salicylate, lb. .....
Valerate, oz. 1.00
Ethyl Acetate, gal. 3.00
Chloride, U. S. P., lb..... 1.50
Ethylene Bromide, oz., .45; lb..... 4.50
Eucalyptol, U. S. P., oz., .36; lb..... 3.00
Fehling's Solution, Tablets, oz..... .50
Fehling's Solution, lb..... .90
Feldspar, Powd., lb.....
Fire Extinguisher, (See Carbon Tetrachloride).
Flaxseed, lb. ..... .50
Fluor Spar, Powd. (Cal. Fluoride, Tech.), lb. ..... .30
Formaldehyde, U. S. P., oz., .20; lb..... 1.20
Formin, U. S. P., oz., .48; lb..... 5.75
Fuchsine (See Aniline).
Fusel Oil—
(Amyl Alcohol), Tech., lb..... 1.75
Purified, lb. 2.10
Galena (See Lead Sulphide Native).
Gelatine—
(Powd.), lb. 2.10
(Shredded), lb. 1.25
Glass Wool (Free from Lead), Fine, oz., .75; medium, oz., .70; lb..... 6.00
Glauber's Salt (See Sodium Sulphate).
Glucose, lb. ..... .45
Glue, oz. .10; lb..... 1.50
Glycerine—
C. P., lb. ..... .45
U. S. P., lb..... .75
Gold—
Chloride Cryst., gram, .90; oz..... 19.00
Leaf, book 1.25
Mono-Bromide, 5 grains..... .75
Mono-Cyanide, 5 grains..... .90
Mono-Iodide, 5 grains..... 1.50
Oxide, 15 grains 1.75
Tri-Bromide, 5 grains..... .75
Tri-Cyanide, 15 grains.....
and Sodium Chloride (Photographic), oz. 8.50
and Sodium Chloride, U. S. P., oz..... 11.00
and Sodium Chloride, C. P., oz..... 18.50
and Potassium Cyanide, 15 grains..... 2.20
and Sodium Bromide, 15 grains..... 1.00
Grape Sugar (See Dextrose).
Graphite, Flake or Powd., lb..... .90
Gum Arabic, lb. 1.60
Gutta Percha, oz. .40; lb..... 3.50
Gypsum (Calcium Sulphate), Lump or Powd., lb. ..... .50
Hematite (Red Ferric Oxide), lb..... .20
Hemoglobin—
Powd., oz., .45; lb..... 3.75
Scales, oz., .45; lb..... 4.50
Hydrochinone, oz. ..... .40
Hydrogen Peroxide—
U. S. P. or C. P., lb..... .60
Merchands, C. P., lb..... 1.25
Hydrogen Sulphide, Sol., lb..... .75
Hydrone, for Making Hyrogen, 2 lbs..... 2.75
Iceland Spar, oz..... .50
Indigo Carmine—
Paste, oz. .....
U. S. P., Dry, oz..... .60
Infusorial Earth, lb..... .40
Iodine—
Crude, lb. 7.50
U. S. P., Resubl., oz., .60; lb..... 8.00
Resublimed, lb. 6.75
Tincture, U. S. P., oz., .40; lb..... 2.25
Iodoform—
U. S. P., Cryst., oz., .80; lb..... 10.00
U. S. P., Powd., Light or Heavy, oz., .75; lb. 9.50
Iron—
Metallic, Fine Powd. (Alcoholized), lb.
Filings, lb. ..... .15
Metal, Steel Wool, oz. .25; lb..... 1.90
Filings (Degreased), lb. ..... .45
By Hydrogen (Gray), 90%, oz., .30; lb. 2.60
By Hydrogen (Black), oz., .30; lb..... 2.00
Powder, lb. ..... .60
Acetate (ic), C. P., Sol., lb..... 1.35
Acetate (Basic), oz., .40; lb..... 3.50
Acetate (Scales), oz., .35; lb..... 3.00
Albuminate (Scales), oz., .60; lb..... 7.00
Ammoniated, lb. 1.00
Ammonium Chloride, C. P., lb..... .80

Iron (Continued)—
Ammonium Citrate (Green or Brown (Scales), lb. 3.35
Ammonium Oxalate, C. P., lb..... 2.00
Ammonium Sulphate (ous), C. P., lb... 1.00
Arsenate, oz., .30; lb..... 1.90
Arsenite, oz., .30; lb..... 1.90
Benzoate (ic), oz., .45; lb..... 5.50
Bromide, (ous), oz., .40; lb..... 2.75
Bromide (ous), C. P., oz..... .60
Carbonate, Precip. (See Iron Oxide).
Carbonate (Proto), U. S. P., Powd., lb 1.00
Carbonate, C. P., Dry, lb..... 1.00
Chloride (ic), C. P., lb..... .70
Chloride (ic), U. S. P., oz., .20; lb..... .60
Chloride (ic), Sublimed, Anhyd., lb.....
Chloride (ic), Sol., U. S. P., pint..... .60
Chloride (ous), oz., .25; lb..... 1.35
Chloride, C. P., Anhyd., lb..... 1.50
Chloride, C. P., Spec. (Phos. Free), lb... 1.60
Chloride, Tech., lb..... .60
Citrate (ic), U. S. P., oz., .30; lb..... 2.70
Ferroso Oxide (Magnetic Oxide of Iron), lb. 1.40
Ferrocyanide, Soluble or Insoluble, oz., .30; lb. 2.50
Formate, oz., .45; lb..... 4.00
Hydrate, C. P. (Moist), lb..... 1.00
Hydroxide, Pure, Dried, oz., .25; lb..... 1.50
Hypophosphite, oz., .45; lb..... 3.75
Iodide, oz., .60; lb..... 7.00
Nitrate (ic), C. P., Cryst., lb..... 1.50
Nitrate Sol., lb..... .75
Oxalate, C. P., Cryst., lb..... 2.00
Oxalate (ic), Scales, oz., .40; lb..... 3.50
Oxalate (ous), oz., .30; lb..... 2.40
Oxide, C. P., lb..... 1.10
Oxide, C. P., Spec., lb..... 2.10
Oxide, Tech. (Iron Subcarbonate), lb... .40
Oxide, Black (Magnetic), lb.....
Oxide, Red (Ignited), lb..... .36
Phosphate, C. P., lb..... 1.35
Phosphate, U. S. P., Soluble, oz., .30; lb. 2.00
Pyrites, lb. ..... .40
Sulphate, C. P. (Mn Free), lb..... 1.00
Sulphate, C. P., lb..... .60
Sulphate (ous), U. S. P., Cryst., lb..... .36
Sulphate (ous), U. S. P., Dried, lb..... .45
Sulphate, U. S. P., Gran., lb..... .36
Sulphate, U. S. P., Gran. (Precip. by Alcohol), lb. ..... .75
Sulphate, Tech., lb..... .50
Sulphate (Basic), Monsel's Salt, oz., .20; lb. ..... .75
Sulphate (Ferric), lb..... .75
Sulphide, Gran., lb..... .36
Sulphide, Sticks, lb..... .50
Sulphide, Lumps, lb..... .25
Tannate, oz., .40; lb..... 3.00
Valerate (ic), oz., .75; lb..... 8.75
Watch Springs, doz..... .25
Wire (Card Teeth), oz., .25; lb..... .75
Wire (Picture), roll..... .15
and Ammonium Citrate (Brown Scales), U. S. P., oz., .30; lb..... 2.10
and Ammonium Citrate (Green Scales), U. S. P., lb..... 2.75
and Ammonium Oxalate, Cryst., oz., .30; lb. 2.70
and Ammonium Sulphate (ic), oz., .20; lb. .75
and Manganese Citrate, oz..... .40
and Potassium Oxalate, oz., .30; lb..... 2.70
and Potassium Tartrate (ic), Brown Scales, oz., .35; lb..... 3.00
and Sodium Oxalate (ic), oz., .30; lb... 2.40
Javelle Water, lb..... .25
Kaolin—
lb. ..... .25
(Washed and Ignited), lb..... .95
Lacmoid, oz. .....
Lactose—
(Milk Sugar), Powd., lb..... 1.00
C. P. Cryst., lb. 1.60
Lamp Black, lb. ..... .75
Lead—
Coml. Mossy, lb. ..... .65
Coml. Sheet, lb. ..... .30
Coml. Sticks, lb. ..... .60
Coml. Shot, lb. ..... .35
(Metal), Tea Lead, Gran., Free from Ag. lb. ..... .65
(Metal) Foil, lb..... .50
(Metal), (Sheet), Free from Ag., lb... .80
(Metal), (Sticks), Free from Ag., lb.... .80
(Metal), Wire, lb..... .50
Acetate, C. P., Cryst., lb..... .65
Acetate, C. P., Basic (Primary), lb.... 1.20
Acetate, C. P., Basic (Secondary), lb.... 1.20
Acetate, C. P., Basic (Tertiary), lb..... 1.40
Acetate, C. P., Dry (Basic), lb..... 1.10
Acetate, C. P., Sol., lb..... .75
Acetate, Tech., Cryst., lb..... .65
Acetate, U. S. P., Gran. or Powd., lb... .60
Acetate, Tech., Cryst., lb..... .36
Acetate, Tech., Powd., lb. ..... .40
Arsenate, Pure, oz., .25; lb..... 1.50
Arsenate, C. P., lb..... 2.25
Arsenite, oz. ..... .25
Arsenite, C. P., oz..... .60
Borate, C. P., oz..... .60
Borate, Tech., lb. 1.00
Bromide, C. P., oz..... .65
Carbonate, C. P., Basic, lb..... 1.10
Carbonate (White Lead), lb..... .90
Carbonate, Pure, lb..... .90
Chloride, C. P., lb..... 1.00
Chloride, Pure, oz., .25; lb..... 1.75
Chromate, C. P., Fused or Powd, lb.... 1.60
Fluoride, C. P., lb..... 1.60
Formate, oz. ..... .50
Hydrate, C. P., lb..... 1.35
Iodide, C. P., oz..... .80
Iodide, oz., .60; lb..... 6.00
Lactate, oz., .50; lb..... 4.75
Nitrate, C. P., lb..... .90
Nitrate, Pure, U. S. P., Cryst., lb..... .75
Nitrate, Tech., lb..... .55
Nitrate, oz. ..... .40
Oxalate, C. P., lb..... 1.85
Oxalate, oz. ..... .40
Oxide, C. P. (Litharge), lb..... .65
Oxide, C. P. (Red), lb..... .65
Oxide, Brown (Peroxide), lb.....
Oxide, Pure, oz., .35; lb..... 2.50
Oxide (Hydrated), oz., .25; lb..... 1.50
Peroxide, C. P., lb..... 1.00
Peroxide, C. P. (Spec., Sulphur Free), lb. 1.65
Peroxide, Tech., lb. ..... .75
Peroxide (Manganese Free), Reagent, lb. 2.75
Phosphate, C. P., lb..... 2.10
Sulphate, C. P., lb..... 1.25
Sulphate, Tech., lb..... .85
Sulphide, C. P., lb..... .95
Sulphide (Native Galena), lb..... .80
Sulphocarbolate (Phenol-Sulphonate), oz. .35
Tannate, oz. ..... .45
Tartrate, C. P., lb..... 2.60

Litharge, lb.	.45
Lime—	
(Calcium Oxide), U. S. P., lb	.60
Chloride of, lb	.25
Sulphurated, U. S. P. (Calcium Sulphide), oz., .20; lb.	.90
Lime Water, lb	.50
Lithium—	
Acetate, oz., .40; lb	4.25
Benzoate, oz., .40; lb	3.75
Bitartrate, oz., .55; lb	4.75
Bromide, oz., .55; lb	4.75
Carbonate, C. P., lb	3.75
Carbonate, U. S. P., oz., .30; lb	3.00
Carbonate, oz.	.40
Chloride, C. P., lb	3.75
Chloride, oz., .45; lb	3.75
Citrate, U. S. P., oz. .40; lb	4.75
Fluoride, C. P., lb	4.80
Hypophosphite, oz., 1.05; lb	11.75
Iodide, oz., .75; lb	8.00
Lactate, oz., .65; lb	8.00
Nitrate, C. P., lb	3.15
Phosphate, oz., .55; lb	4.75
Sulphate, C. P., oz., .40; lb	3.75
Tartrate, oz., .50; lb	5.25
Litmus—	
Cubes, lb.	2.75
Powd., lb.	2.90
Purified, lb.	
Logwood, lb.	1.30
Magnesite—	
(Dead Burnt), lb.	.40
(Lump), lb.	.45
Magnesium—	
Metal, Powd., oz., .60; lb	6.00
Metal (Sticks), oz.	
Metal (Ribbon), oz.	2.75
Metal (Wire), oz.	
Acetate, C. P., lb	1.45
Ammonium Chloride, C. P., lb	1.00
Benzoate, oz.	.50
Biphosphate, lb.	
Borate, C. P., oz	.85
Bromide, C. P., oz	.85
Bromide, oz.	.75
Carbonate, U. S. P., Powd., lb	.85
Carbonate, C. P. (Basic), lb	1.25
Carbonate, Tech., lb.	.65
Chloride, C. P., Cryst., lb.	.65
Chloride, C. P., (Spec. Cryst.), lb.	1.25
Chloride, Tech., lb.	.60
Chloride, Cryst., lb.	.65
Chloride, Fused, lb.	.90
Chromate, C. P., lb	3.75
Citrate, C. P., lb	3.00
Citrate, Soluble, oz., .30; lb	2.85
Fluoride, C. P., lb	3.00
Formate, oz., .35; lb	3.75
Iodide, C. P., oz	1.00
Iodide, oz.,	.85
Lactate, oz.	.60
Nitrate, C. P., lb	1.00
Nitrate, oz., .20; lb	.85
Nitrate, C. P. (Fused Sticks), lb	1.20
Nitrate, Tech., lb.	.75
Oxalate, C. P., lb	2.50
Oxide, C. P., lb	2.50
Oxide, Tech. (Magnesite), lb	1.50
Oxide, U. S. P. (Light), lb	1.60
[illegible]roxide, oz., .55; lb	4.25
[illegible]te, oz., .45; lb	4.25
[illegible], C. P. (Primary), lb	2.30
[illegible], C. P. (Secondary), lb.	1.60
Phosphate C. P. (Tertiary), lb.	
Phosphate, oz., .20; lb	
Silicate, C. P., lb	
Silicate, oz.	
Sulphate, C. P., Cryst., lb.	
Sulphate, C. P., Anhyd., lb.	
Sulphate, Tech., lb.	
Sulphate, U. S. P. (Epsom Salt), Cryst., lb.	
Sulphite, lb.	
Tartrate, C. P., lb	
and Ammonium Phosphate, oz., .25; lb	
Magnetite (Lode Stone), lb	
Manganese—	
(Metal), oz.	
Acetate, C. P., lb	
Borate, C. P., lb.	
Borate, lb.	
Bromide, C. P., oz.	
Bromide, oz.	
Carbonate, C. P., oz., .25; lb	
Chloride, C. P., lb	
Chloride, Tech., lb.	
Citrate, C. P., oz.	
Citrate, Insoluble, oz.	
Citrate, Soluble (Manganese and Sodium Citrate), oz.	
Dioxide, C. P., Powd., lb	
Dioxide, C. P. (Coarse), lb	
Dioxide, Gran. or Powd., lb	
Iodide, C. P., oz	
Iodide, oz.	
Nitrate, C. P., oz., .35; lb	
Oxalate, C. P., lb	
Phosphate, C. P., lb.	
Phosphate, oz.	
Sulphate, C. P., Cryst., lb	
Sulphate, C. P., Dry, lb	
Sulphate, Tech., lb.	
Sulphate, Cryst., oz., .24; lb	
Sulphate, Dried, lb.	
Sulphide, C. P., lb	
Tartrate, C. P., lb.	
Mannit, oz.	
Marble, Gran. or Chips, lb	
Menthol, U. S. P., oz.	
Mercury—	
lb.	
Purified, lb.	
Tech., lb.	
Redistilled, lb.	
Acetate (ic), C. P., lb	
Acetate (ous), C. P., oz., .55; lb	
Ammoniated (Mercuric and Ammonium Chloride), Lumps or Powd., lb	
Benzoate (ic), oz.	
Bichloride (ic), U. S. P. (Corrosive Sublimate), Cryst. or Gran., lb	
Bichloride, Highest Purity, lb	
Bisulphate (Mercuric Sulphate), lb	
Bisulphate, Pure (Mercuric Sulphate), lb	
Bromide, C. P., oz	
Bromide (ous), oz	
Chloride (ic), C. P., lb	
Chloride (ous), C. P., lb	
Chloride (Calomel), U. S. P., lb	
Chromate (ic), oz.	
Chromate, C. P., oz.	
Cyanide (ic), oz., .60; lb	
Cyanide, C. P., oz.	
Iodide (ic), C. P., oz	
Iodide (ous), C. P., oz	
Iodide (Green), (ous), oz., .60; lb	
Iodide (Red), (ic), U. S. P., oz., .60; lb	

Mercury (Continued)—
Iodide (Yellow), (ous), U. S. P., lb.....
Nitrate (ic), C. P., oz., .45; lb..... 3.60
Nitrate (ous), C. P., oz., .45; lb..... 3.60
Oxide (ic), C. P., or U. S. P., Red, lb... 3.75
Oxide, (ous), C. P., lb..... 4.50
Oxide, C. P., Yellow (Hydrate), lb..... 4.40
Subsulphate, oz., .45; lb..... 4.25
Sulphate (ic), C. P., lb..... 3.60
Sulphate (ous), C. P., lb..... 3.50
Sulphate (ic), (Mercury Bisulphate), lb.. 2.40
Sulphide, C. P. (Black), lb..... 3.50
Sulphide (Black), lb. 2.75
Sulphide, C. P. (Red), lb..... 4.25
Sulphide (Red), (Cinnabar), Powd., lb.. 5.00
Sulphocyanide (Sulphocyanate), lb.....
Tannate (ous), oz. .55; lb..... 6.00
Thiocyanate, C. P., oz.....
and Ammonium Chloride, Lumps or Powd., lb. 3.75
and Potassium Cyanide (ic), oz..... .65
Metal—
Devarda's Alloy, for Reductions, lb..... 1.65
Wood's Alloy, Fusible, lb..... 4.25
Rose's Alloy, Fusible, lb..... 4.25
Methylene Blue, oz. 1.00
Methyl—
Acetate, C. P., oz..... .60
Iodide, C. P., oz.....
Orange, oz. 1.05
Red Indicator, oz. 4.25
Salicylate, oz. ..... .40
Metol (Photographic Developer), oz..... 1.30
Milk Sugar, Powd., lb..... .75
Minium (Lead Sesquioxide), lb..... .50
Molybdenum Sulphide (Molybdenite), lb.. 3.00
Monsel's Salt (Iron Sulphate, Basic), lb... .75
Naphthalene—
(Brom-), (Mono), oz.....
C. P. (By Alcohol), lb..... 1.25
Tech., lb ..... .60
(Alpha), oz. ..... .65
(Beta), lb. 4.75
Chloride (Alpha), oz. .....
Hydro Chloride (Beta), lb.....
Resublimed, lb. ..... .65
U. S. P., lb..... .75
Naphthol—
(Alpha), Tech., oz..... .48
(Alpha), Recryst. for Sugar Anal., oz... .65
(Beta), lb. 3.20
Nessler's Solution for Ammonium Salts, lb. 1.20
Nickel—
(Metal), Shot, lb..... 1.50
(Metal), (Gran.), lb..... 1.60
Acetate, C. P., lb..... 1.85
Acetate, oz. ..... .30
Ammonium Sulphate, C. P., lb..... .95
Bromide, C. P., oz..... .60
Bromide, oz. ..... .50
Carbonate, C. P., lb..... 2.75
Carbonate, lb. 2.50
Carbonate, Tech., lb. 1.85
Chloride, C. P., lb..... 2.25
Chloride, C. P., Anhyd., lb..... 3.20
Chloride, oz. .25; lb..... 1.25
Hydrate, C. P., lb..... 3.00
Nitrate, C. P., lb..... 1.60
Nitrate, oz. ..... .30
Oxalate, C. P., lb..... 2.65
Oxalate, oz. ..... .45
Oxide, C. P. (Green), lb..... 2.40
Oxide, C. P. (Black), lb..... 3.25
Oxide, Tech. (Green), lb..... 1.60
Oxide (Black), oz..... .40
Phosphate, C. P., lb..... 2.40
Sulphate, C. P., lb..... 1.60
Sulphate, oz. .20; lb..... .60
Sulphate, C. P., Anhyd., lb..... 2.70
Sulphide, C. P., lb..... 3.10
Tartrate, C. P., lb..... 2.40
and Ammonium Sulphate, lb..... .60
Nigrosine (Water Soluble), lb..... 2.10
Nitro Benzene—
Pure, oz. .20; lb..... .75
(Mono), lb. ..... .80
(Di), lb. 1.10
Nitroso Beta Naphthol, oz..... .90
Nutgalls, Powd., lb..... 1.00
Nutgalls, Whole, lb..... .80
Oil—
Bitter Almond, True, U. S. P., oz..... 1.30
Cloves, U. S. P., lb..... 5.30
Eucalyptus, U. S. P., lb..... 2.00
Mineral, lb. ..... .35
Mustard, Artificial, U. S. P., oz..... .90
Olive (Sweet), lb..... 1.00
Oxgall, oz. .30; lb..... 2.75
Oxone, for Generating Oxygen, 2 lbs... 2.00
Turpentine, Rectified, U. S. P., lb.....
Wintergreen, Synthetic, U. S. P., lb.... 1.75
Pancreatin, U. S. P., oz. .55; lb..... 5.75
Palm Oil, lb..... .65
Paraffine—
Wax, Hard, lb..... .35
Wax, Soft, lb..... .25
Wax (See under Wax).
Paraffine Oil—
(White), lb. 1.00
(Yellow), lb. ..... .50
Pepsin, U. S. P., Gran. or Powd., oz. .55; lb. 6.00
Peptone—
Bacteriological, lb. 7.25
(From Meat), Dry, oz. .65; lb..... 4.50
Petrolatum—
(White), lb. ..... .80
(Yellow), lb. ..... .48
Phenol (Acid, Carbolic), lb..... .50
Phenolphthalein—
(Indicator), oz. ..... .48
U. S. P., oz. .35; lb..... 3.50
Phenylhydrazine, oz. .....
Phosphoric Anhydride (Pentoxide), lb.... 2.00
Phosphorus—
U. S. P., Sticks, oz. .35; lb..... 1.85
Amorphous (Red), lb..... 2.20
Oxychloride, oz ..55; lb..... 2.40
Pentachloride, oz. .70; lb..... 1.80
Pentasulphide, oz. ..... .70
Trichloride, lb. 1.85
Plaster of Paris (See Calcium Sulphate).
Platinum—
Chloride, Cryst., 15 grains, 4.00; oz..... 55.00
Chloride, 10% Sol., oz..... 6.00
Chloride, 5% Sol., oz..... 4.00
Potassium—
(Metal), oz. .....
Acetate, C. P., lb..... 2.10
Acetate, U. S. P., lb..... 1.60
Acetate, U. S. P., Highest Purity, lb... 1.80
Alum (See Aluminum Potassium Sulphate).
Ammonium Sulphate, C. P., lb..... 1.00
Antimonate, C. P., lb..... 4.25
Arsenate, C. P. (Secondary), oz. .35; lb... 2.10
Arsenate, C. P. (Tertiary), lb..... 2.20
Arsenite, C. P., oz. .30; lb..... 2.40
Arsenite, U. S. P., Solution (Fowler's Sol.), lb. ..... .60

Potassium (Continued)—
Benzoate, oz. .55
Bicarbonate, C. P., lb. 1.60
Bicarbonate, U. S. P., Cryst., lb.
Bicarbonate, U. S., Gran. or Powd., lb. 1.20
Bichromate, C. P., Cryst., lb. 1.35
Bichromate, Pure (Gran.), lb. 1.50
Bichromate, C. P. (Fused), lb. 1.60
Bichromate, C. P. (Gran.), lb. 1.60
Bichromate, Tech., Powd. or Cryst., lb. 1.00
Binoxalate, Cryst., lb. 2.50
Biphosphate (Monobasic), oz. .30; lb. 2.40
Bisulphate, C. P. (Pyro), oz. .30; lb. 1.40
Bisulphate, C. P., Cryst., lb. 1.10
Bisulphate, Tech. (Fused), lb. 1.10
Bisulphite, C. P., lb. 2.00
Bisulphite (Meta), Cryst., oz. .25; lb. 1.20
Bitartrate (Cream of Tartar), C. P., lb. 2.00
Bitartrate, U. S. P., lb. 1.20
Boro-Tartrate (Soluble Cream of Tartar), lb. 2.20
Borate, C. P., lb. 2.10
Bromate, C. P., oz. .30; lb. 2.75
Bromide, C. P., lb. 2.20
Bromide, U. S. P., Cryst., Powd., or Gran., lb. 1.50
Carbonate, C. P., Cryst. (Salts Tartar), lb. 1.90
Carbonate, C. P., Anhyd., lb. 2.25
Carbonate, Pure, Anhyd., lb. 1.65
Carbonate, U. S. P., lb. 1.10
Chlorate, C. P., lb. 1.10
Chlorate, Tech., Cryst. or Powd., lb. .75
Chlorate, U. S. P., Cryst., Gran. or Powd., lb. .75
Chlorate, Pure, Gran., lb. .80
Chloride, C. P., lb. 1.00
Chloride, C. P. (Spec.), lb. 1.35
Chloride, Tech., lb. .70
Chromate, C. P., lb. 2.00
Chromate, Tech., lb. 1.85
Chromate, Pure, Yellow, lb. 1.50
Citrate, C. P., lb. 3.00
Cyanide, C. P., lb. 3.60
Cyanide, Tech., lb. .95
Ferricyanide, C. P. (Red Prussiate), lb. 2.80
Ferricyanide, Tech., Cryst., lb. 1.95
Ferricyanide, Pure, Gran., oz. .35; lb. 3.25
Ferrocyanide (Yellow Prussiate), C. P., lb. 1.75
Ferrocyanide, Tech., Cryst., lb. 1.25
Ferrocyanide, Tech., Anhyd., lb. 1.80
Ferrocyanide, U. S. P., oz. .25; lb. 1.65
Fluoride, C. P., lb. 3.00
Fluoride, Purified (Arsenic Free), lb.
Bifluoride, C. P., lb. 3.00
Fluoride, Tech., lb. 2.80
Formate, C. P., oz. .30; lb. 2.75
Hydroxide (Potassa Caustic), U. S. P., Sticks, lb. 1.90
Hydroxide, Tech. (Lumps), lb. 1.05
Hydroxide, Tech. (Flakes), lb. 1.20
Hydroxide, Purified (Sticks), lb. 1.90
Hydroxide, Pure or C. P. (Sticks), lb. 3.00
Hydroxide, Pure (by Alcohol), Sticks, lb 2.75
Hydroxide, U. S. P., Solution, lb. .75
Hydroxide (Electrolytic), lb. 2.10
Hydroxide (Sulphurated), Tech., lb. 1.20
Hydroxide (Sulphurated), U. S. P., oz. .25; lb. 1.50
Hypophosphite, U. S. P., oz. .40; lb. 3.35
Iodate, C. P., oz. 1.25
Iodate, oz. .75
Iodide, C. P., lb. 5.00
Iodide, C. P. (Spec.), lb. 5.25
Iodide, U. S. P., Gran. or Cryst., oz. .48; lb. 5.25
Mercuric Iodide, C. P., oz. 1.20
Meta-Bisulphite, Cryst. (Pyro-sulphite), lb. 1.20
Molybdate, C. P., oz. 1.20
Molybdate, oz. 1.00
Nitrate, C. P., Cryst., lb. 1.10
Nitrate, C. P. (Fused Stick), lb. 1.60
Nitrate, Tech., lb. .80
Nitrate, U. S. P., Cryst., Gran. or Powd., lb. .50
Nitrate, Pure, Cryst., Gran. or Powd., U. S. P., lb. .90
Nitrate, Purified, Cryst., lb. 2.40
Nitrate, Purified, Sticks, lb. 2.70
Nitrite (Sticks), Highest Purity, oz. .40; lb. 2.80
Nitro-Prusside, oz.
Oxalate, C. P., lb. 2.40
Oxalate, C. P., Anhyd., lb. 2.70
Oxalate, Tech., lb. 2.10
Perchlorate, C. P., lb. 1.50
Permanganate, C. P., Cryst., lb. 2.40
Permanganate, Tech., Cryst., lb. 1.60
Permanganate, U. S. P., Cryst., lb. 1.80
Persulphate, C. P., lb. 3.75
Phenolsulphonate, oz. .40; lb. 3.25
Phosphate, C. P. (Primary), lb. 2.40
Phosphate, C. P. (Secondary), lb. 2.40
Phosphate, C. P. (Tertiary), lb. 2.70
Pyrophosphate, C. P., lb. 2.85
Pyrophosphate, Cryst., oz. .25; lb. 1.20
Salicylate, lb.
Sesquicarbonate, lb. 2.85
Silico-Fluoride, C. P., lb. 3.00
Sulphate, C. P., Cryst., lb. 1.10
Sulphate, C. P. (Spec.), lb. 1.35
Sulphate, Tech., lb. .80
Sulphuret (Liver of Sulphur), lb. 1.24
Sulphite, Tech., lb.
Sulphite, Pure, lb. 1.50
Sulphite, C. P., lb. 2.20
Sulphocyanide, Pure, lb.
Tartrate, C. P., Cryst. lb. 2.50
Tartrate, lb. 2.20
Tetroxalate, C. P., lb. 2.65
Thiocyanate, C. P., lb. 3.60
and Mercury Iodide, oz. .75
and Sodium Tartrate (Rochelle Salt), U. S. P., Powd., lb. .90
and Sodium (Highest Purity), Cryst. or Powd., lb. 1.60
Primuline (Polychromic), oz. .75
Pumice Stone, Lump or Powd., lb. .45
Pyridine—
C. P., lb. 3.00
Tech., lb. 2.25
Pyroxylin, Purified, oz. 1.75
Red Precipitate (See Mercury Oxide Red).
Resin, lb. .25
Resorcin, U. S. P., lb.
Rhodol (Photo Developer), oz. 1.00
Rochelle Salt (See Potassium and Sodium Tartrate), Cryst. or Powd., lb. .90
Rubidium Iodide, oz.
Saccharin, Refined or Soluble, U. S. P., oz. .60; lb. 6.00
Saccharose—
U. S. P., oz. .24; lb. 1.05
Highest Purity, oz. .30; lb. 1.60
Sand, lb. .25
Sal Ammoniac (See Ammonium Chloride).

Saltpeter (See Potassium Nitrate).
Saponin, Purified, Powd., oz. .60; lb..... 5.75
Sawdust, Purified, lb. ..... .70
Sealing Wax, lb..... 1.20
Selenium, oz. .....
Shellac, Gum, lb..... 2.40
Siderite (Iron Carbonate, ous), lb..... .25
Silica, Sand (Fine), lb..... .30
Silver—
(Metallic), Precip., oz..... 3.00
Acetate, oz. 2.25
Acetate, C. P., oz.....
Bromide, oz. 2.10
Carbonate, oz. 2.50
Chloride, oz. 1.80
Chloride, C. P., oz..... 2.25
Chromate, oz. 1.85
Citrate, oz. 2.50
Cyanide, oz. 2.40
Iodide, oz. 1.85
Lactate, oz. .....
Nitrate, C. P., oz..... 1.80
Nitrate, U. S. P., Cryst., oz..... 1.35
Nitrate, U. S. P. (C. P.), Gran., oz..... 1.50
Nitrate, oz. 2.50
Oxide, U. S. P., oz..... 2.95
Phosphate, oz. 3.00
Sulphate, C. P., oz..... 3.90
Sulphate, oz. 2.10
and Potassium Cyanide, oz..... 2.25
Soap, Castile, Bar, lb..... .75
Soap, Castile, Powd., lb..... 1.15
Soap, Soft, lb..... .70
Soda Ash (See Sodium Carbonate, Tech. Anhyd.).
Soda Lime (Sodium Hydrate, with Lime), lb. ..... .70
Sodium—
(Metal), oz. .50; lb..... 1.90
Acetate, C. P., Cryst., lb..... .80
Acetate, U. S. P., Pure, Cryst., lb..... .60
Acetate, C. P. (Fused), Cryst., lb..... 1.10
Acetate, C. P., Anhyd., lb..... 1.25
Acetate, Tech., Anhyd., lb..... 1.00
Acetate, Tech. (Fused), Cryst., lb..... .65
Acetate, Tech., Cryst., lb..... .48
Acid Phosphate (Monobasic), lb..... 1.20
Alum (See Alum. Sodium Sulphate).
Amalgam, oz. ..... .50
Ammonium Phosphate, C. P., lb..... 1.10
Ammonium Phosphate, Tech., lb..... .95
Arsenate, C. P., lb..... 1.00
Arsenate, Pure, U. S. P., Cryst., oz. .22; lb. 1.00
Arsenate, U. S. P. (Dried), oz. .24; lb..... 1.60
Arsenate, Tech., Lumps, lb.....
Arsenite, C. P., lb..... 1.20
Arsenite, Tech., lb..... .65
Benzoate, U. S. P., Gran. or Powd., oz. .30; lb. 1.75
Biborate (See Sodium Borate).
Bicarbonate, C. P., lb..... .65
Bicarbonate, U. S. P., Powd., lb..... .20
Bicarbonate, U. S. P., Highest Purity, Powd., lb. .....
Bicarbonate, Tech., lb..... .45
Bicarbonate (Baking Soda), lb..... .20
Bichromate, C. P., Cryst., lb..... 1.10
Bichromate, C. P. (Fused), Anhyd., lb.. 1.85
Bichromate, Tech., lb..... .90
Binoxalate, C. P., lb..... 1.35
Biphosphate, oz. .24; lb..... 1.20
Bisulphate, C. P., Cryst., lb..... .75
Bisulphate, C. P. (Fused), Pyro, lb..... .95
Bisulphate, Tech., lb..... .60
Bisulphide, C. P., Solution, lb..... .95
Bisulphite, Purified, lb..... .65
Bisulphite, U. S. P., Dry, lb..... .65
Bitartrate, C. P., lb..... 2.20
Bitartrate, Cryst., oz. .25; lb..... 2.00
Borate (Borax), C. P., lb..... .80
Borate, C. P., Anhyd, lb..... 1.30
Borate, Tech., lb..... .48
Borate, U. S. P., Highest Purity, lb..... .50
Borate, U. S. P., Refined, Cryst. or Powd., lb. ..... .30
Bromate, C. P., lb..... 3.00
Bromate, lb. 2.60
Bromide, C. P., lb..... 1.85
Bromide, U. S. P., oz. 25; lb..... 1.50
Calcium Hydrate, Dry, lb..... .75
Calcium Hydrate, Moist, lb..... .90
Calcium Hydrate (Special), Dry, lb..... 1.10
Calcium Hydrate (Special), Moist, lb..... 1.35
Carbonate, C. P., Cryst. lb..... .60
Carbonate, C. P., Anhyd., lb..... .75
Carbonate, C. P., Anhyd. (Spec.), lb... 1.10
Carbonate, Tech., Anhyd. (Soda Ash), lb. .45
Carbonate, Pure, Cryst, lb..... .30
Carbonate, Pure, Gran., lb..... .30
Carbonate, Pure, Dried, Powd., lb..... .35
Carbonate (Monohydrated), U. S. P., lb.. .35
Chlorate, C. P., lb..... .95
Chlorate, Tech., oz. .20; lb..... .65
Chlorate, U. S. P., Cryst., oz. .20; lb..... .75
Chloride, U. S. P., lb..... .40
Chloride, C. P., Cryst., lb..... 1.10
Chloride, Tech., Cryst., lb..... .20
Chromate, C. P., lb..... 1.30
Chromate, C. P. (Fused), lb..... 1.85
Chromate, lb. 1.20
Citrate, C. P., lb..... 2.50
Citrate, Pure, lb..... 2.25
Citrate, U. S. P., lb..... 2.40
Cobaltic Nitrite, C. P., oz..... .95
Cyanide, C. P., lb..... 1.25
Cyanide, Tech., lb..... 1.00
Cyanide, U. S. P. (Fused), lb..... .75
Cyanide, U. S. P., Gran., lb..... .90
Cyanide, Lumps, lb..... 1.50
Dichromate (See Bichromate).
Ferrocyanide, C. P., lb..... 1.20
Ferrocyanide, Tech., lb..... .90
Fluoride, C. P., lb..... 1.20
Fluoride, lb. ..... .65
Fluoride, Purified, lb..... .75
Fluoride, Tech., lb..... .75
Formate, C. P., lb..... 2.40
Formate, Anhyd. Cryst., oz. .25; lb..... 1.75
Hydroxide, C. P. (By Alcohol), Sticks, lb. 1.10
Hydroxide, Elect. (Sticks), lb..... .80
Hydroxide, Pure, Gran. (For Nitrogen Determination), lb. ..... .50
Hydroxide, Tech., Gran., lb..... .45
Hydroxide, U. S. P., Sticks, lb..... .75
Hydroxide, C. P. (Sticks), lb..... 1.50
Hydroxide, Purified (Sticks), lb..... .60
Hydroxide, Pure (Sticks), lb..... 1.30
Hydroxide, C. P. (From Sodium), lb..... 3.50
Hydrosulphite, lb. .....
Hypophosphite, U. S. P. or C. P., oz. .30; lb. 2.25
Hyposulphite (Thiosulphate), C. P. or U. S. P., Cryst. or Gran., lb..... .50
Hyposulphite, C. P., Anhyd., lb..... .85
Hyposulphite, Highest Purity, lb..... .60
Hyposulphite, Tech., Cryst., lb..... .25

Sodium (Continued)—
Hyposulphite, Tech., Anhyd., lb..... .65
Hyposulphite, Tech., Pea Crystals, lb... .30
Iodate, C. P., oz..... .95
Iodate, oz..... .75
Iodide, C. P. or Highest Purity, oz..... .80
Iodide, U. S. P., oz. .60; lb..... 7.15
Meta-Bisulphite (Pyrosulphite), oz. .24; lb..... .90
Nitrate, C. P. or Highest Purity, lb..... .80
Nitrate, C. P., Sticks, lb..... 1.50
Nitrate, Tech., lb..... .45
Nitrate, Purified, Powd., Cryst. or Gran., lb..... .45
Nitrate, U. S. P., Powd. or Gran., lb..... .45
Nitrite, C. P., Cryst., lb..... 1.10
Nitrite, C. P., Sticks, lb..... 1.35
Nitrite, Tech., lb..... .75
Nitrite, U. S. P., Gran., lb..... 1.20
Nitrite, U. S. P., Sticks, oz. .25; lb..... 1.90
Nitro Prusside, C. P., oz..... 1.80
Oleate, lb..... 1.35
Oleate (Acid), lb.....
Oleate (Neutral Powder), oz. .20; lb..... 1.20
Oxalate, C. P., lb..... 1.50
Oxalate, C. P. (Spec.), lb..... 3.25
Oxalate (Neutral), lb..... 2.25
Perborate, C. P., lb..... 1.40
Perborate, U. S. P., oz. .20; lb..... .90
Perborate, Highest Purity, oz. .30; lb... 1.85
Peroxide, C. P. (Spec. Low in Sulphur), lb..... 1.60
Peroxide, C. P., lb..... 1.10
Peroxide (Fused), lb..... 1.40
Peroxide, oz. .40; lb..... 2.00
Phenolsulphonate, U. S. P., oz. .22; lb.. .90
Phosphate, C. P. (Primary), lb..... 1.10
Phosphate, C. P., Cryst. (Secondary), lb. .75
Phosphate, C. P. (Tertiary), lb..... 1.10
Phosphate, C. P., Anhyd. (Secondary), lb..... 1.10
Phosphate, Tech. (Secondary), lb..... .60
Phosphate, C. P. (Meta), lb..... 2.10
Phosphate, Pure, Gran., lb..... .45
Phosphate (Dibasic), lb..... .40
Phosphate (Twice Purified), Cryst. or Dried, lb..... .60
Phosphate (Monobasic), oz. .20; lb..... 1.20
Phosphite, C. P., oz..... .60
Picrate, lb..... 1.80
Potassium Carbonate, C. P., lb..... 1.35
Nitrate, C. P., lb..... 1.35
Potassium Sulphate, C. P., lb..... 1.10
Potassium Tartrate (Rochelle Salt), C. P., Cryst., lb..... 1.50
Potassium Tartrate, Tech., Powd., lb... 1.25
Pyrophosphate, C. P., Cryst., lb..... 1.10
Pyrophosphate, C. P., Anhyd., lb..... 1.85
Pyrophosphite (Meta-bisulphite), Powd., oz. .25; lb..... .90
Salicylate, C. P. or Highest Purity, Cryst., oz. .25; lb..... 1.80
Salicylate, U. S. P., oz. .24; lb..... 1.35
Silicate, C. P., Cryst., lb..... 1.50
Silicate, 40% Sol., lb..... .40
Silicate, Tech., Dry, lb..... .80
Silicate, Sol. (Egg Saver), lb..... .70
Silico-Fluoride, C. P., lb..... 1.60
Stannate, C. P., lb..... 2.10
Stearate, lb..... 1.35
Succinate, Gran., oz. .95; lb..... 10.00
Sulphanilate, lb..... 2.20
Sulphate, C. P., Cryst., lb..... .60
Sulphate, C. P., Anhyd., lb..... .80
Sulphate, Tech., Cryst., lb..... .40
Sulphate, Tech., Anhyd., lb..... .55
Sulphate (Glauber's Salt), Pure, Dried, Powd., lb..... .30
Sulphate, U. S. P., Gran. or Cryst., lb... .30
Sulphide, C. P., Cryst., lb..... 1.00
Sulphide (Fused), Gran., lb..... .60
Sulphide, Cryst., lb..... .75
Sulphide, Tech. (Fused), lb..... .60
Sulphite, C. P., Cryst., lb..... .60
Sulphite, C. P., Anhyd., lb..... .75
Sulphide (Photographic), Anhyd., lb..... .40
Sulphite, Cryst., lb..... .45
Sulphite, Pure, Cryst., lb..... .50
Sulphite, Pure, Dried, U. S. P., lb..... .40
Sulphocyanate (Thiocyanate), Pure, oz.
Sulphocyanate, Tech., oz.....
Tannate, oz..... .45
Tartrate, C. P., lb..... 2.40
Tartrate, Pure, Cryst., lb..... 1.80
Tetroxalate, C. P., lb..... 2.45
Thio Antimoniate, lb..... 1.60
Thiocyanate, C. P., lb..... 2.10
Thiosulphate (See Hyposulphite).
Tungstate, C. P., lb..... 4.90
Tungstate, Tech. (Wolframate), lb..... 3.15
Tungstate, Pure, oz. .40; lb..... 3.75
Uranate (Uranium Oxide, Yellow), oz... .55
Valerate, oz.....
Wolframate (See Sodium Tungstate).
and Ammonium Phosphate (Microcosmic Salt), Highest Purity, lb..... 1.50

Starch—
Arrow-Root, lb..... 1.10
Corn, lb..... .40
Iodized, oz. .45; lb..... 3.75
Potato, lb..... .60
Wheat, lb..... .65
C. P., Soluble, lb..... 1.50
Tech., Soluble, lb..... .60

Strontium—
Acetate, C. P., lb..... 2.45
Acetate, oz. .25; lb..... 1.80
Arsenite, oz. .40; lb..... 3.75
Borate, C. P., lb..... 2.40
Bromide, C. P., lb..... 2.10
Bromide, U. S. P., Cryst., oz. .30; lb.... 1.80
Bromide, Pure, Anhyd., Powd., oz. .35; lb..... 2.70
Carbonate, C. P., lb..... 1.20
Carbonate, C. P. (Spec. Bar. Free), lb.. 1.80
Carbonate, lb..... 1.00
Chloride, C. P. or Highest Purity, lb... 1.20
Chloride, lb..... .75
Chloride, Pure, Cryst., lb..... .85
Chromate, C. P., lb..... 2.85
Fluoride, C. P., lb..... 1.80
Formate, oz. .45; lb..... 4.75
Hydroxide, C. P., lb..... 1.85
Hydroxide, lb..... 1.75
Hypophosphite, oz..... .60
Iodide, C. P., oz..... .75
Iodide, U. S. P. (Fused), oz. .60; lb..... 7.00
Lactate, U. S. P., oz. .40; lb..... 3.75
Nitrate, C. P., oz. .25; lb..... 1.20
Nitrate, C. P. (Spec. Bar. Free), lb..... 1.50
Nitrate, Tech., Dry, lb..... .90
Oxalate, C. P., lb..... 2.25
Oxide, C. P. (Hydrate), lb..... 3.90
Peroxide, oz. .45; lb..... 4.25
Phosphate, C. P., lb..... 2.10
Phosphate, lb..... 1.90
Salicylate, U. S. P., oz. .26; lb..... 1.55
Sulphate, C. P., lb..... 1.20

Strontium (Continued)—
Sulphate, lb. 1.00
Sulphide, lb. 2.00
Tartrate, C. P., lb. 3.00
Sucrose, C. P., lb. 1.35
Sugar, Cane, lb. ..... .35
Sugar of Milk, Powd., U. S. P., lb. ..... .75
Sugar of Lead (See Lead Acetate).
Sulphide Cubes (For Generating H_2S), lb. .95
Sulphite Cubes (For Generating SO_2), lb. .95
Sulphur—
(Lumps), lb. ..... .20
(Flowers), lb. ..... .25
(Washed), U. S. P., lb. ..... .30
Chloride, oz. .30; lb. ..... .90
Sulphur—
(Precip.), U. S. P., lb. ..... .75
Iodide, oz. .60; lb. 6.50
Talc (Talcum), U. S. P., Purified, lb. ..... .30
Tannin (See Acid Tannic).
Tartar Emetic (See Antimony and Potassium Tartrate).
Thermit, Black, lb. 1.40
Thorium Nitrate, C. P., oz. 1.20
Thymol—
C. P. or U. S. P. (Acid Thymic), oz. ... 1.50
Iodide, U. S. P., oz. 1.75
Tin—
(Metal), Mossy, Stick or Shot, lb. 1.85
(Metal), Powd., lb. 1.75
(Metal), (Foil), lb. 2.75
(Stannic), Ammonium Chloride, C. P., lb. 2.10
(Stannic), Chloride, C. P., Cryst., lb. ... 1.60
(Stannic), Chloride, C. P., Fuming, lb. ... 2.40
(Stannous), Chloride, C. P., Cryst., lb. .. 1.65
(Stannous), Chloride, Tech., lb. 1.20
(Stannous), Oxalate, C. P., lb. 2.10
(Stannic), Oxide, C. P., lb. 2.10
(Stannic), Oxide, Tech., lb. 1.80
Stannous), Oxide, C. P., lb. 3.15
(Stannous), Phosphate, C. P., lb. 3.15
(Stannous), Sulphate, C. P., lb. 1.95
(Stannous), Sulphide, C. P., lb. 2.60
Oxide, Gray (Polishing Powd.), lb. 1.80
Oxide, White (Per-oxide, Di-oxide, Flowers of Tin), lb. 1.65
Titanium—
Potassium, Fluoride, C. P., lb. .....
Potassium, Oxalate, C. P., lb. .....
Potassium, Tetrachloride, lb. 1.65
Toluene—
C. P., lb. ..... .80
Pure, lb. ..... .50
Purified (Toluol: Methyl-Benzene; Phenyl-Methane), lb. ..... .75
Tripoli, lb. ..... .25
Turkey Red Oil, lb. ..... .75
Tumeric Powder, lb. 1.10
Turpentine, Spirits of, lb. ..... .80
Uranium—
Acetate, C. P., oz. 1.30
Acetate (Free from Sodium), U. S. P., oz. .60; lb. 5.75
Acetate (Uranium and Sodium Acetate), oz. ..... .75
Chloride, oz. .....
Nitrate, C. P., oz. ..... .90
Nitrate (Soda Free), oz. ..... .60
Oxide, Red (Sodium Uranate), oz. .....
Oxychloride (Uranium and Ammonium Chloride), oz. .....
Sulphate, oz. 2.10
and Sodium Acetate, oz. ..... .75

Urea—
C. P., oz. ..... .65
Pure, Cryst., oz. .45; lb. 3.75
Nitrate, C. P., oz. ..... .90
Sulphate, C. P., oz. 1.20
Vanadium Chloride, C. P., oz. .....
Vanilin, U. S. P., Refined, oz. 1.95
Vaseline (See Petrolatum).
Vinegar, Cider, lb. ..... .40
Water, Distilled, gal. 1.50
Wax—
Bees', lb. 1.30
Carnauba, lb. 1.20
Ceresin, White, lb. ..... .90
Paraffin, Solid (48-50, 52-54, 56-58, 60-62), lb. ..... .70
Wood Alcohol (See Alcohol, Methyl).
Xylene—
C. P. (Xylol), lb. ..... .80
Pure, lb. ..... .60
Zinc—
(Metal), Mossy, Tech. or Coml., lb. ..... .60
(Metal), Mossy (Gran.), C. P., lb. ..... .90
(Metal), C. P. (Sticks), lb. 1.45
(Metal), C. P. (Shot), lb. 1.50
(Metal), C. P., Powd., lb. 1.50
(Metal), (Dust), Powd., lb. ..... .60
(Metal), (Dust), C. P., lb. ..... .70
(Metal), (Amalgamated), lb. 1.50
(Metal), (Turnings), lb. ..... .90
(Metal), (Platinized), Gran., lb. 2.10
(Metal), Sheet, lb. ..... .50
Acetate, C. P., lb. 1.20
Acetate, U. S. P., Highest Purity, lb. 1.10
Arsenate, oz. ..... .40
Arsenite, oz. ..... .40
Benzoate, oz. ..... .90
Borate, C. P., lb. 3.15
Borate, oz. ..... .40
Bromide, oz. .45; lb. 4.25
Bromide, C. P., oz. ..... .70
Carbolate, oz. ..... .40
Carbonate, C. P., lb. 1.35
Carbonate, U. S. P. (Precip.), lb. 1.20
Carbonate, Tech. (Precip.), lb. ..... .65
Chloride, C. P. (Gran.), lb. ..... .85
Chloride, C. P. (Stick), lb. 1.10
Chloride, Tech., lb. ..... .75
Chloride, Gran., oz. .24; lb. ..... .60
Chloride, C. P. or U. S. P. (Fused), Sticks, oz. .30; lb. 1.40
Chloride, C. P. or U. S. P., Gran., oz. .25; lb. 1.10
Chloride, Solution, U. S. P., lb. ..... .75
Chloride, Solution, Tech., lb. ..... .60
Chromate, C. P., lb. 2.10
Chromate, Tech., lb. 1.55
Cyanide, oz. .30; lb. 2.70
Cyanide, Pure, oz. ..... .55
Ferrocyanide, oz. ..... .45
Hydrate, C. P., lb. 1.50
Hypophosphite, oz. ..... .60
Iodide, C. P., oz. ..... .90
Iodide, oz. .60; lb. 7.25
Lactate, oz. .40; lb. 3.90
Nitrate, C. P., lb. ..... .90
Nitrate, Tech., lb. ..... .75
Nitrate, Pure, Cryst., oz. .24; lb. 1.20
Oxalate, C. P., lb. 2.00
Oxide, C. P. (Dry Process), lb. ..... .75
Oxide, C. P. (Wet Process), lb. 1.10
Oxide, White, Tech., lb. ..... .45
Oxide, Pure, lb. ..... .60
Oxide, U. S. P., lb. ..... .65

Zinc (Continued)—

Perborate, oz. .45; lb	4.75
Permanganate, oz. .75; lb	7.25
Peroxide, oz. .50; lb	6.00
Phenolsulphonate, U. S. P., oz. .20; lb	.85
Phosphate, C. P. (Secondary), lb	1.85
Phosphate, oz. .25; lb	1.75
Phosphide, Powd., oz. .48; lb	4.25
Salicylate, oz. .30; lb	3.00
Stearate, lb.	1.50
Stearate, U. S. P., oz. .20; lb	1.10
Subgallate, oz. .40; lb	3.50
Sulphate, C. P., Cryst., lb	.95
Sulphate, C. P., Anhyd., lb	1.50
Sulphate, Tech., Cryst., lb	.30
Sulphate, U. S. P., Gran., lb	.45
Sulphate, Highest Purity, Dried, lb	.60
Sulphate, Tech., Dried, Powd., lb	.40
Sulphide, oz. .30; lb	1.55
Sulphite, C. P., lb	2.20
Sulphite, oz. .30; lb	1.60
Tannate, oz. .40; lb	3.50
Valerate, U. S. P., Cryst. or Powd., oz. .90; lb.	9.50
and Mercury Cyanide (ic), oz	.60
and Potassium Cyanide, lb	3.75

A Set of Blank Order Lists for Chemicals, Chemical Apparatus and Biology, Will Be Mailed on Request. They Include the Essential Material for Elementary Work. Sending Us Your Orders Made Out on These Lists Will Save Your Time As Well As Ours

One label, giving name and locality and usually the chemical formula and crystal system, accompanies each lot.

	lb.
Actinolite—see Amphibole.	
Aerolites—see Iron.	
Agate—see Quartz and Opal.	
Alabaster—see Gypsum.	
Albertite	$ .30
Albite, xline	.25
Algodonite: nearly pure	3.00
rocky	1.50
Allanite	.20
Almandite—see Garnet.	
Alunite: white, Nevada	.20
pale pinkish, Italy	.20
pink or yellow, Utah	.25
Amazonstone—see Microcline.	
Amblygonite, cleavable	.25
Amethyst—see Quartz.	
Amphibole: Actinolite	.25
Asbestos, short-fibre masses	.25
" long- " "	3.60
Fasciculite (in Schist)	.60
Hornblende	.20
Jade, New Zealand	1.20
Nephrite—same as Jade.	
Smaragdite	.30
Tremolite: gray, bladed in Calcite	.15
" white, fibrous, in Calcite	.15
" greenish, bladed	.30
" Hexagonite	.30
Analcite, xled on rock	1.80
Andalusite, nearly pure	.60
Andradite—see Garnet.	
Anhydrite: massive, white	.15
massive, gray	.15
xline, choice	.35
Anorthite, xls, per ounce	.35
Anthracite—see Coal.	
Antimony: nearly pure, per oz	.35
and Cervantite	2.40
Apatite: brown	.15
blue-green	.15
grayish-blue, S. Dak	.35
Pebble Phosphate, Fla	.15
Phosphorite or phosphatic Nodules, S. C.	.15
Phosphorite, oolitic, Wy	.15
Apophyllite, xled	1.20
Aquacreptite, small pieces	.60
Aquamarine—see Beryl.	
Aragonite: fibrous, Mo	.20
fibrous, choice, Calif	.35
fibrous, sky-blue, Ariz	.60
Arsenopyrite: pure	.25
rocky	.15
Asbestos—see Amphibole and Serpentine.	
Asphaltum, Calif. or Trinidad	.15
lustrous, Venezuela	.20
Astrophyllite, xls in rock	.60
Augite—see Pyroxene.	
Aurichalcite on Calcite	1.20
Axinite, xled	2.40
Azurite: low-grade	.60
" & Malachite	1.50
Baddeleyite	.35
Barite: commercial, S. C	.15
fetid	.15
good xls	1.20
siliceous concretions	.60
Basanite—see Quartz.	
Bauxite: pisolitic, pinkish, Tenn	.15
pisolitic, red and black, Ark	.20
amorphous, brown and pinkish, Ark	.15
earthy, Ga.	.15
Beaverite	1.20
Bentonite	.15
Beryl: Aquamarine, massive	.20
" gemmy fragments	1.80
white, massive	.20
Beryllonite, gemmy xl fragments, per gram	.30
Betafite (uranium niobate) per oz	2.40
Bindheimite & Massicot	4.80
Biotite	.25
Bituminous Coal—see Coal.	
Black Lead—see Graphite.	
Blende—see Sphalerite.	
Bog Ore—see Limonite.	
Borax, Salt and Gypsum, Chili	.15
Borickite—see Delvauxite.	
Bornite: in quartz, Va	.25
rocky, Md.	.30
nearly pure, Md. or Ariz	1.20
and Chalcopyrite, Ariz	.60
Bournonite, some rock, per oz	.25
Breithauptite, nearly pure, per oz	1.20
Bronzite—see Enstatite.	
Brown Hematite—see Limonite.	
Brucite: best xline, Pa	1.80
amorphous, Wash.	.60
Bytownite: choice	.60
in Gabbro	.25
Calamine	.30
xled in rock	.90
Calcite: rhombic cleavages	.25
cleavable	.15
golden, cleavable	.25
lilac, cleavable	.60
salmon	.25
bluish-gray	.20
sky-blue	.35
Calc Tufa	.15
Chalk	.15
Coquina	.25
Iceland Spar, good (not optical)	3.60
Iceland Spar, optical at market price.	
Limestone:	
arenaceous	.20
argillaceous	.15
cherty	.15
compact	.15
dolomitic	.15
fossiliferous	.15
granular	.15
hydraulic	.15
lithographic	.15
gray "marble," Mo	.15
siliceous, banded	.20
grayish-pink "Tenn. Marble"	.15
chocolate "Tenn. Marble"	.15
black Vt. "marble"	.15
fetid	.20
Marble:	
white, Vermont, fine	.15
white, Georgia, coarse	.15
white, Colorado, fine	.20
gray ("blue"), N. Y	.15
gray, N. C	.15
pink and gray, banded, N. C	.15
pink, Ga.	.15
yellow, Italy	.20
assorted, polished, unlabeled	.20
Marl	.15

	lb.
Mexican Onyx	.25
Oolite: black, Pa.	.15
cream color, England	.15
" " Indiana	.15
Satin Spar	.60
Stalactitic	.20
Travertine	.20
Calc Tufa—see Calcite.	
Cancrinite in rock	.25
Cannel Coal—see Coal.	
Carnotite: in Sandstone (low grade)	.90
in Petrified Wood	.90
on Ilmenite	.90
Cassiterite: in Greisen	.25
Stream Tin	1.20
high grade	2.40
Caswellite	.45
Celestite, choice xled	.25
Cerargyrite, about 80%, per oz	2.40
Cerussite: rocky	.60
selected	.90
xled, choice	1.80
Cervantite—see Antimony.	
Chalcedony—see Quartz.	
Chalcocite: rocky	.60
and Bornite	.90
nearly pure	1.80
Chalcopyrite: nearly pure	.60
tarnished (iridescent)	.60
rocky	.20
with Pyrrhotite, Alaska	.35
Chalk—see Calcite.	
Chert—see Quartz.	
Chlorite—see Prochlorite, Jefferisite, Clinochlore.	
Chloritoid, Masonite	.45
Chondrodite, impure	.35
Chromite: superfine	.25
ordinary	.15
Chrysocolla: good rocky	.60
nearly pure	1.20
Chrysolite	.20
Peridot in Basalt	.35
Chrysotile—see Serpentine.	
Cinnabar: nearly pure	4.75
high-grade	3.00
rocky (lean)	.90
Clinochlore, xl plates, Pa	1.20
Coal: Anthracite, Pa	.15
" Colo.	.15
" Graphitic, R. I.	.15
Bituminous, Pa.	.15
" Coking, Va.	.15
Cannel	.15
Lignite, Wyo.	.15
" Texas	.15
Native Coke	.15
Semi-Bituminous	.15
Sub-Bituminous	.15
Coke, Native—see Coal.	
Colemanite: cleavable	.50
columnar (Neocolemanite)	.50
Columbite: nearly pure	1.50
rocky	.60
Cookeite in rock	.15
Copalite: best Zanzibar, per oz	.25
bold Congo	1.50
bold Batavia	1.50
Copper: nearly pure	.90
second grade	.35
in Conglomerate	.20
in Amygdaloid	.20
Copper Ores, assorted, unlabeled	
Copper Glance—see Chalcocite.	
Copper, Gray—see Tetrahedrite.	
Copper, Indigo—see Covellite.	
Copper Pyrites—see Chalcopyrite.	
Coquina—see Calcite.	
Corundum: xls	
best cleavable	
rocky, or partly altered	
Ruby, xl fragments, per oz	
Emery, Turkey in Asia	
Emery, Greece	
Covellite with pyrite	
nearly pure, superfine	
Creedite (about 50%)	
Crestmoreite in Blue Calcite, choice	
Crocoite: xls in rock	
pure xls	
Cryolite, pure	
Cuprite: high grade	
second-grade	
low-grade	
Cuproscheelite (Cuprotungstite) nearly pure, per oz.	
Cyanite	
Datolite: xled	
massive, Lake Superior, per oz	
Delvauxite and Borickite, per oz	
Descloizite: xled on rock	
Cuprodescloizite, Arizona, per oz	
Deweylite	
Diamond, Bortz, per carat	$7.50-$
Carbonado, per carat	$50.00-1
gem xls, per carat	$50.00-1
Diatomaceous Earth—see Opal.	
Diopside—see Pyroxene.	
Dolomite: coarse xline, N. Y.	
fine xline, Mass.	
variegated "marble"	
Domeykite: Mohawkite, nearly pure	
" rocky	
Stibiodomeykite, rocky	
Dumortierite, in rock, choice	
Dysanalyte, xls in rock	
Elaeolite—see Nephelite.	
Emery—see Corundum.	
Enargite: rocky, Montana	
best cleavable, Colo.	
Enstatite	
Bronzite	
Epidote	
Essonite—see Garnet.	
Eudialyte, per oz	
Feldspar—see Albite, Anorthite, Bytownite, Labradorite, Microcline, Microperthite, Oligoclase, Orthoclase, Perthite.	
Ferberite, nearly pure, per oz	
with Tungstite, per oz	
Ferruginous Quartz—see Quartz.	
Fibrolite—see Sillimanite.	
Flexible Sandstone—see Quartz.	
Flint—see Quartz.	
Fluorite: green, N. M.	
yellow, cleavable, small, Tenn.	
blue, cleavable, Ill., superfine	
Fowlerite—see Rhodonite.	
Franklinite: high-grade	
medium-grade	
Fuchsite—see Muscovite.	
Fuller's Earth	
Galena: low-grade	
best cleavable	
fine-granular, argentiferous	

	lb.
Garnet: Almandite, cleavable	.20
" partly altered xls	.25
" xls in micaschist	.15
" same, superfine xls	.60
Andradite, pure, Nevada	.30
" Polyadelphite	.30
Grossularite, Essonite	.25
" Rosolite, in rock	.60
Pyrope, pebbles, per oz.	1.20
Spessartite	.25
Gilsonite—see Uintahite.	
Glauconite: "Green Sand"	.15
granular masses	.15
Glaucophane	.35
Gold Quartz, rich (gold visible), per oz.	$1.20-5.00
Gold Quartz, Rock, Homestake Mine Ore	.30
Gold-bearing Conglomerate, Rand	.30
Gold-bearing Magnetite Sand (gold visible)	.60
Göthite	.30
Grahamite (Impsonite)	.20
Graphite: in schist, N. Y.	.25
xld in rock, choice	.35
best, Ceylon	1.50
Gray Copper—see Tetrahedrite.	
Greasy Quartz—see Quartz.	
Green Sand—see Glauconite.	
Griphite	.50
Grossularite—see Garnet.	
Gummite with Uranophane, etc., per oz.	1.20
Gypsum: pink, massive, Mich.	.15
gray, massive, Mich.	.15
gray, banded, Va.	.15
with Salt and Borax, Chili	.15
Alabaster, Italy	.20
Satin Spar, best white, England	.25
Selenite, choice cleavages	.35
Selenite, optical, per oz.	.35
Halite: Rock Salt, N. Y.	.15
transparent cleavages	.50
optical, per oz.	.35
Halloysite	.30
Hardystonite, with Franklinite	.20
Hematite: banded with Jasper	.15
banded with Quartz	.15
compact	.15
crystallized	1.20
fossiliferous	.15
Kidney Ore	1.80
micaceous	.15
oolitic	.15
Pencil Ore	$1.20-$1.80
Hexagonite—see Amphibole.	
Hiddenite—see Spodumene.	
Hornblende—see Amphibole.	
Horn Silver—see Cerargyrite.	
Hornstone—see Quartz.	
Hübnerite, xline, per oz.	.35
xline, in rock (rich)	3.50
Hydromagnesite	1.80
Hypersthene	.60
in Gabbro	.25
Iceland Spar—see Calcite.	
Idocrase—see Vesuvianite.	
Ilmenite: nearly pure	.25
Steam Pebbles, Australia	.50
Impsonite—see Grahamite.	
Infusorial Earth—see Opal.	
Iridosmine, per gram	6.00
Iron: Native, Greenland, per oz.	1.20
Meteoric, shavings	.60
" Siderites (iron), per oz.	.60
" Siderolites (iron and stone), per oz.	1.20
" Aerolites (stone), per oz.	1.80
Josephinite, per oz.	1.20

	lb.
Iron Pyrites—see Pyrite.	
Itacolumyte—see Quartz.	
Jade—see Amphibole.	
Jasper—see Quartz.	
Jasperized Wood—see Quartz.	
Jefferisite, crystal sections	.60
Josephinite—see Iron.	
Kaolin	.15
Kidney Ore—see Hematite.	
Kunzite—see Spodumene.	
Labradorite: common, N. Y.	.15
chatoyant, Labrador	.35
best, selected	1.20
xls in Dolerite, Mass.	.20
Lapis Lazuli—see Lazurite.	
Lazulite with Quartz, Calif., choice, per oz.	.30
Lazurite, choice, rocky	1.20
Lennilite—see Orthoclase.	
Lepidolite: pale yellow, S. D.	.20
dark lavender, S. Dak.	.20
dark lavender, Maine	.20
pale lavender, Calif.	.15
Leucophoenicite, with Willemite, etc.	1.20
Limestone—see Calcite.	
Limonite: amorphous	.15
Bog Ore	.15
fibrous	.20
pseudo, wood, choice	.25
pseudo, pyrite, good ⅛-¾-inch xls	1.20
Yellow Ochre	.15
Lithographic Limestone—see Calcite.	
Lodestone ("Loadstone")—see Magnetite.	
Ludwigite, best, per oz.	.25
Magnesite: pure, California	.25
pure, amorphous, Greece	.15
xled, Nova Scotia	1.20
xline, Washington	.30
Magnetite: xline	.15
showing parting	.20
Sand, with Garnet and Olivine	.20
Sand, Auriferous (gold visible)	.60
xls in Chlorite Schist	.20
Lodestone ("Loadstone"); weak	.15
medium	.30
extra strong	.40
Malachite: precious	2.40
and Azurite	1.50
good, second-grade	1.20
rocky	.50
Malacon, small xls, per gram	.15
Manganosite with Zincite and Magnetite	1.20
Marble—see Calcite.	
Marcasite, xld, some rock	.50
Martite, xled on rock	.25
Masonite—see Chloritoid.	
Massicot & Bindheimite	5.00
Menaccanite—see Ilmenite.	
Meteoric Iron—see Iron.	
Meteorites—see Price-List of Meteorites.	
Mexican Onyx—see Calcite.	
Mica—see Biotite, Lepidolite, Muscovite, Phlogopite.	
Microline: red, choice, cleavable	.20
Soda, flesh-color	.15
white cleavages	.20
Amazonstone, broken xls	.30
Microlite, per gram	.15
Microperthite, cleavages	.20
Milky Quartz—see Quartz.	
Mineral Coal—see Coal.	
Mineral Wax—see Ozocerite.	
Mispickel—see Arsenopyrite.	

	lb.
Mohawkite—see Domeykite.	
Molybdenite, per oz.	.35
Monazite Sand:	
India, 85% (8½% thoria)	1.20
Brazil, 85% (6% thoria)	.90
S. C., 90% (5% thoria)	.75
N. C., about 75%	.50
N. C., about 25-50%	.25
Monticellite, in rock, Ark.	.30
" pure massive, Calif.	.60
Muscovite: rough sheets	.25
magnetited, sheets	.20
Fuchsite	.25
Natrolite, radiated-fibrous	.60
Neocolemanite—see Colemanite.	
Nephelite, Elaeolite: Maine	.35
Arkansas	.35
Nephrite—see Amphibole.	
Niccolite: nearly pure	1.80
with Smaltite	.90
Nigrine—see Rutile.	
Niter, Soda—see Soda Niter.	
Novaculite—see Quartz.	
Ochre, Yellow—see Limonite.	
Oligoclase	.20
Olivenite xled on rock	1.20
Olivine—see Chrysolite.	
Onyx, Mexican—see Calcite.	
Oolite—see Calcite.	
Oolite, Siliceous—see Quartz.	
Opal: Agate, Oregon	.60
Common	.30
Diatomaceous Earth, masses	.50
" " powdered	.20
Geyserite (Siliceous Sinter)	.60
Infusorial Earth—see Diatomaceous Earth, above.	
Prasopal, per oz.	.25
Precious: Nevada, per oz	$2.40-25.00
rocky, Nevada	2.40
in rock, Australia	2.40
Wood, showing grain	.30
" limbs, excellent	.60
Opalized Wood—see Opal.	
Orpiment, choice, xline	2.40
Orthoclase: cleavable, Maine	.15
Lennilite	.30
Sanidine, bombs	.30
Ottrelite, Phyllite in rock	.15
Ozocerite	3.00
Pandermite	.50
Pectolite, fibrous, radiated	.60
compact	.60
Pencil Ore—see Hematite.	
Pentlandite with Pyrrhotite	1.20
Peridot—see Chrysolite.	
Perthite	.25
See also Microperthite.	
Petrified Wood—see Quartz.	
Phlogopite: cleavages	.25
sections of xls	.50
Phosphate—see Apatite.	
Phosphatic Nodules—see Apatite.	
Phosphorite—see Apatite.	
Phyllite—see Ottrelite.	
Pickeringite	.60
Picrolite—see Serpentine.	
Pitchblende—see Uraninite.	
Plagioclase—see Albite, Anorthite, Bytownite, Labradorite, Oilgoclase.	
Plasma—see Quartz.	
Plattnerite, with some Limonite, per oz.	.60
Plumbago—see Graphite.	
Pollucite: nearly pure	
second grade	
Polyadelphite—see Garnet.	
Polydymite	
Powellite, some rock, per oz.	
Prasopal—see Opal.	
Prehnite	
Prochlorite: pale green, Pa.	
dark green, superfine, Vt.	
Psilomelane: ordinary	
superfine	
Pyrite: granular-massive	
masses of small xls	
pure, broken xls	
superfine, fragments of large xls, show conchoidal fracture, per oz.	
cubes in chlorite	
xls altered—see Limonite.	
Pyrites: Arsenical—see Arsenopyrite.	
Copper—see Chalcopyrite.	
Iron—see Pyrite.	
Tin—see Stannite.	
Pyrolusite	
Pyromorphite, on rock	
Pyrophyllite: massive, N. C.	
radiated, choice, Calif.	
Pyrozene: Augite	
Diallage, choice, Calif.	
Diopside, good xls and groups	
" large xls	
Pyrrhotite: ordinary, N. C. or Va.	
auriferous, N. C.	
niccoliferous, Canada	
" rocky, Canada	
Quartz: Agate, Oregon	
Agate, Lake Superior, small	
Amethyst, good xls	
Amethyst, coated with ferruginous quartz	
Basanite	
Chalcedony	
Chert	
Chrysoprase: California	
Calif., inferior	
Ferruginous, xled	
Flexible Sandstone (Itacolumyte)	
Flint	
Gold—see Gold.	
Greasy	
Jasper: brown, mottled	
" red, Canada	
" " Oregon	
" yellow	
" -Conglomerate	
Jasperized Wood—see Silicified Wood, low.	
Milky	
Morion	
Novaculite (Hornstone)	
Petrified Wood, Colo., etc.	
Plasma	
Quartzite	
Rock Crystal, xls under 1½ inches	
" " xls 1½ to 2½ inches	
Rose: pale pink, N. Y.	
medium, S. D.	
deep pink, S. Dak.	
pale, semi-transparent, Me.	
Sand (99.97% silica)	
Sandstone: Argillaceous	
Banded, purple	
Banded, red and yellow	

	lb.
Quartz (Sandstone) Contintued)—	
"Berea Grit"	.15
Bituminous	.15
Bluestone	.15
Calcareous	.15
Feldspathic (Arkose)	.15
Ferruginous	.15
Flagstone	.15
Fossiliferous	.15
Pure, friable ("Glass Sand")	15
Glauconitic	.20
Micaceous	.15
Siliceous Oolite	.15
Silicified (Jasperized) Wood, Ariz.	.30
Smoky: massive	.15
xls, choice	.60
Tourmalinated, xls	1.20
Realgar: powdered	.60
pure masses	3.00
Rhodochrosite: nearly pure	.40
rocky	.25
Rhodonite: Montana	.50
Fowlerite	.50
" with Franklinite, etc.	.25
Riebeckite, in rock	.25
Ripidolite—see Clinochlore.	
Rock Crystal—see Quartz.	
Rock Salt—see Halite.	
Roscoelite in Sandstone	.40
Rose Garnet—see Garnet, Grossularite (Rosolite)	
Rose Quartz—see Quartz.	
Rosolite—see Garnet, Grossularite.	
Rubellite—see Tourmaline.	
Ruby—see Carundum.	
Rutile: broken xls, choice	.60
Nigrine, xled	.20
cencentrates, Va.	.50
Salt, Rock—see Halite.	
Samarskite	2.40
Sandstone—see Quartz.	
Sanidine—see Orthoclase.	
Satin Spar—see Gypsum and Calcite.	
Scapolite—see Wernerite.	
Scheelite, Calif.	3.50
Schorlomite	.20
Selenite—see Gypsum.	
Semi-bituminous Coal—see Coal.	
Serpentine: common	.15
Chrysotile ("Asbestus") superfine, Ariz.	1.80
Chrysotile ("Asbestus") superfiine, Ariz.	1.80
Ophicalcite	.15
Picrolite	.30
Precious	.25
Verd Antique	.20
"Vert Tinos Marble," Greece	.30
Williamsite, Mass.	.20
Siderite: xline, Conn.	.15
xline, Germany	.20
Clay Iron Stone, nodules	.30
Siderites—see Iron.	
Siderolites—see Iron.	
Siliceous Oolite—see Quartz.	
Silicified Wood—see Quartz.	
Sillimanite	.30
Silver Ore, Butte, Mont., miscellaneous	.40
Skemmatite (new)	.60
Smaltite: nearly pure	1.80
and Niccolite	.90
Smaragdite—see Amphibole.	
Smithsonite: nearly pure	.50
xled on rock	.60
rocky	.25
ferruginous, Ill.	.20

	lb.
Smoky Quartz—see Quartz.	
Soapstone—see Talc.	
Sodalite, rocky	.60
Soda-Microcline—see Microcline.	
Soda Niter, native	.50
Specular Iron—see Hematite.	
Spessartite—see Garnet.	
Sphalerite: xled	.60
cleavable	.50
rock	.15
granular, riboluminescent (!)	.60
Sphene—see Titanite.	
Spodumene: cleavable, S. Dak.	.15
colorless, gemmy xls, Calif., per oz.	1.20
Hiddenite, xls, per gram	1.20
Kunzite, gem xls, per oz	14.50
" choice gemmy xls, per oz.	2.40
" xl fragments, per oz	.60
Stalacite—see Calcite.	
Stannite, averaging 60%	1.20
Staurolite: twins	1.20
choice xls in rock	.40
Steatite—see Talc.	
Stibiodomeykite—see Domeykite.	
Stibnite: nearly pure	.50
second grade	.25
Stilbite, choice xld	.60
Stinkstone—see Barite, fetid and Calcite, fetid.	
Stream Tin—see Cassiterite.	
Strontianite: best, Germany	.50
brown California (new)	.50
Sub-bituminous Coal—see Coal.	
Sulphur: massive	.40
fibrous-crystalline, Wy.	.70
Tachhydrite	1.80
Talc: fibrous, N. Y.	.15
foliated, white, N. Y.	.20
scistose	.15
Steatite, Soapstone, Va.	.15
Steatite, Soapstone, N. C.	.15
Tetrahedrite: nearly pure	1.20
and Chalcopyrite	.50
Thaumasite	.50
Thenardite	.40
Thomsonite, radiated, some rock, Colo.	1.20
Tiemannite in rock, Utah, per oz.	.50
Tincal—see Borax.	
Tin Pyrites—see Stannite.	
Tin Stone—see Cassiterite.	
Titanic Iron—see Ilmenite.	
Titanite:	.40
Sand, Calif.	.40
Topaz: choice, cleavable-massive, Conn.	1.80
xl fragments, Japan	2.50
xls, Japan, per oz.	1.25
xl fragments, Brazil, per gram	.15
xls, Schneckenstein, per gram	.30
xls, Utah, per gram	.15
Tourmaline: black xls in Quartz	.30
brown, xled	.30
xls, assorted colors, Cal.	5.00
same, fragments	1.80
Rubellite xls in Lepidolite	.20
Travertine—see Calcite	
Tremolite—see Amphibole.	
Tungstite with Ferberite, choice, per oz.	.50
Turquois, pale, nearly pure fragments	1.20
rocky fragments	.60
Uintahite (Gilsonite)	.20
Ulexite, per oz.	.30
Uraninite: nearly pure, per oz.	2.50
good, rocky, per oz.	1.25

	lb.
Uraninite (Continued)—	
second-grade, rocky, per oz.	.60
with Gummite, etc., per oz.	1.20
Uvanite (new) in Sandstone	1.20
Variscite, some rock, Utah	1.25
Verd Antique—see Serpentine.	
Vesuvianite: choice, partly xled, Calif.	1.20
massive, Calif.	.60
with Diopside, etc., Maine	.30
Californite, gemmy, Butte Co., Cal.	1.80
Californite, choice, Siskiyou Co., Cal.	2.50
Californite, average, Siskiyou Co., Cal.	1.25
Vivianite, xled, Colo., per oz.	.25
Wad, partly powdered	.15
Wavellite, rocky	.30
Wernerite: white, cleavable	.20
lilac	.20
Whitneyite: nearly pure	3.75
rocky	1.80
Willemite: pure	2.50
nearly pure	1.75
with Franklinite, etc.	.50
Williamsite—see Serpentine.	
Witherite, partly xled	.30
Wolframite, granular, S. Dak.	2.40
Wollastonite: fibrous-xline	.25
fine-granular, choice	.50
Wood, Jasperized—see Quartz.	
Wood Opal—see Opal.	
Wood, Petrified—see Quartz.	
Wood, Silicified—see Quartz.	
Wulfenite, nearly pure	3.75
Yellow Ochre—see Limonite.	
Zinc Blende—see Sphalerite.	
Zincite: nearly pure, per oz.	.50
with Willemite, Franklinite, etc.	.60
Zinnwaldite	.50
Zircon:	2.00
with Ilmenite and Quartz ("Zirconiferous Sandstone")	.30
Zoisite, xled in Prehnite	.60
gray xline, some rock	.25
Zunyite, xls in rock	1.20

MINERAL COLLECTIONS

Washington School Collections:

W. S. 1:
40 Minerals, each in pasteboard tray, 2x2½ inches, enclosed in clothboard case; printed label list on lid **6.00**

W. S. 2:
20 Minerals, 20 Rocks, in clothboard case; printed label list on lid..... **6.00**

W. S. 2S:
Same, small, unlabeled chips ..... **.60**

W. S. 3:
40 Rocks, in clothboard case; printed label list on lid..... **6.00**

Any of the above collections without trays and case 50 cents less.

We are prepared to supply a wide variety of collections of minerals, rocks, crystals, blow pipe specimens, ores, etc., and invite correspondence concerning the same.

Special collections designed to illustrate the following text books, at prices ranging from $1.00 to $500.00, are kept in stock:

"Rocks and Minerals," Prof. L. F. Bennett
"Observation Lessons on Common Minerals and Rocks," Prof. H. L. Clapp
"First Lessons on Minerals," Prof. Ellen H. Richard
"Common Minerals and Rocks," Prof. W. O. Crosby
"World of Matter," Prof. H. H. Ballard
"Mineral Science," Prof. M. H. Paddock
"Minerals, and How to Study Them," Prof. E. S. Dana
"Manual of Mineralogy," Prof. W. E. Ford
"Introduction to the Study of Minerals," Prof. A. F. Rogers
"Elements of Mineralogy, Crystallography and Blowpipe Analysis," Prof. C. L. Parson
"Text Book of Mineralogy" and "System of Mineralogy," Prof. E. S. Dana
"Determinative Mineralogy and Blowpipe Analysis," Brush-Penfield
"Pocket Handbook of Blowpipe Analysis," Prof. G. M. Butler
"New Physical Geography," Prof. R. S. Tarr
"Elements of Physical Geography," Prof. T. C. Hopkins
"Field and Laboratory Note Book in Physical Geography," Prof. F. A. Merrill
"Essentials of Physical Geography," Mildred L. L. Tate
"Simple Directions for the Determination of the Common Minerals and Rocks; A
"Laboratory Course in General Geology," Prof. W. H. Hobbs
"Minerals and Rocks," Prof. W. S. Bayley
"Rocks and Rock Minerals," Prof. L. V. Pirsson
"Soils, Their Properties and Management," Lyon, Fippin and Buckman
"Handbook of Rocks," Prof. J. F. Kemp
"Stones for Building Decoration," Prof. George P. Merrill
"Economic Geology," Prof. H. Ries
"Gems and Gem Minerals," Prof. O. C. Farrington

INDEX

B600—See Page 191

ORDER AND RECORD BLANKS

FOR the convenience of busy customers we have provided in the following pages a condensed list of the standard equipment for elementary CHEMISTRY and BIOLOGY. Extra copies for mailing will be sent on request. Emergency orders however, may be made on these pages, which can be torn from the catalog and mailed to us.

It is also suggested that customers use these blanks for keeping a record of laboratory supplies needed, from which a requisition can be quickly made at any time.

STANDARD SCIENTIFIC COMPANY
Cor. Fourth and Barrow Sts.
(Sheridan Square)
NEW YORK CITY

ORDER BLANK—CHEMICALS

To .

STANDARD SCIENTIFIC COMPANY
New York.

Please enter our order for the following chemicals:

Ship to.....

Address.....

City..... State.....

Ship via.....

Charge to.....

Send Invoice to.....

Date..... (Signed).....

Position.....

Acetamid .....
Acetone .....
Acacia (Gum Arabic).....
Acid, Acetic, tech.....
" Acetic, glacial, U.S.P.....
" Arsenious (Arsenic Trioxide) Powd.....
" Boric (Boracic) com.....
" Boric (Boracic) U.S.P.....
" Carbolic (Phenol) cryst.....
" Chloroplatinic (Platinum Chloride), 5% sol.
" Chromic (Chromium Trioxide).....
" Citric, cryst. or gran. or powd., U.S.P...
" Citric, highest purity.....
" Fluorsilicic .....
" Formic (Hydrogen Carbolic Acid).....
" Hydrochloric (Muriatic) com..1 lb..6 lbs..
" Hydrochloric, C.P. .....1 lb..6 lbs.
" Hydrofluoric (Hydrogen Fluoride).....
" Molybdic, pure .....
" Nitric, com. .....1 lb.....7 lbs.....
" Nitric, C.P. .....1 lb.....7 lbs.....
" Oxalic, com., cryst. or powd.....
" Oxalic, highest purity .....
" Phosphoric, Meta (glacial) sticks, U.S.P...
" Phosphoric, Ortho. .....
" Pyrogallic (Pyrogallol) U.S.P.....
" Salicylic, U.S.P. .....
" Stearic, U.S.P., lumps or powd.....
" Sulphuric (Oil of Vitriol) com..1 lb..9 lbs..
" Sulphuric, C.P. .....1 lb..9 lbs..
" Tannic (Tannin), powd.....
" Tannic (Tannin) highest purity.....
" Tartaric, U.S.P., cryst. or powd.....
Agar Agar, shreads, U.S.P.....
Albumin .....
Alcohol, Ethylic, U.S.P.....
Alcohol, Ethylic (95%).....
Note—On account of Government restrictions it is recommended to purchase alcohol at local stores.
Alcohol, Denatured .....
" Methylic (wood) .....

Alum, Ammonium (Aluminum and Ammonium Sulphate) .....
" Chrome (Chromium and Potassium Sulphate) .....
" Iron (Ferric-Ammonium Sulphate).....
" Potassic (Aluminum—Potassium Sulphate)
Alizarine Paste .....
Aluminum Metal, Leaf in roll.....
" lumps .....
" sheet .....
" chips or punchings.....
" Acetate, pure .....
" Chloride .....
" Sulphate, cryst., tech.....
" and Ammonium Sulphate (Alum, Ammonia) .....
" and Potassium Sulphate (Alum, Potassic) .....
Alundum, 60 mesh .....
Ammonium Bi-, or Dichromate.....
" Carbonate, U.S.P. .....
" Chloride (Sal Ammoniac).....
" Chloride, U.S.P. .....
" Hydrate or Hydroxide, com., 1 lb.....4 lbs.....
" Hydrate or Hydroxide, C.P., 1 lb.....4 lbs.....
" Molybdate .....
" Nitrate .....
" Nitrate, cryst., highest purity.....
" Oxalate, pure .....
" Oxalate, cryst., highest purity.....
" Sulphate, pure .....
" Sulphate, highest purity.....
" Sulphide or Sulphydrate.....
" Sulphocyanate (Thiocyanate), pure...
Aniline Dyes (1 oz. bottles):—
Black (Nigrosine) Sol. in Water, Sol. in Alcohol.....
Blue (Fast Blue B) Soluble in Alcohol....
(Methyl) Soluble in Water.....
Methylene B.X. .....

Extra copies of order blanks mailed on request.

Brown, Bismarck .....
Green, Malachite Cryst.....Powd.....
Orange, Methyl (Helianthine).....
" T. .....
Red, Aurin .....
" Congo .....
" Corallin .....
" Eosine Bluish .....
" Eosine Yellowish .....
" Fuchsine .....
" Iodeosine .....
" Ruby S (Acid Fuchsine).....
" Scarlet .....
Violet, Gentian B.....
" Methyl 2 B.....
Yellow, Chrysaniline .....
" Martius .....
Antimony Metallic, lump or powd.....
" Chloride (Trichloride) .....
" Trisulphide (Antimonious Sulphide)...
" and Potassium Tartrate (Tartar Emetic)
Aqua Fortis, tech.....
Arsenic, Metallic .....
" Trioxide (Acid Arsenous) powd.....
Asbestos, Platinized .....
" Shredded .....
Baking Powder .....
" Soda (Sodium Bicarbonate).....
Balsam, Canada .....
Barium Carbonate, precip.....
" Carbonate, highest purity.....
" Chloride, pure .....
" Chloride, highest purity.....
" Di-, or Peroxide.....
" Nitrate, powd. .....
" Nitrate, highest purity.....
" Oxide, Hydrated .....
" Sulphate (Barite) .....
" Sulphide, tech. .....
Beef Extract .....
Benzene (Benzol) .....
Beta Naphthol, U.S.P. .....
Bismuth, Metal .....
" Chloride (Trichloride) .....
" Nitrate .....
" Oxychloride (Bismuthyl Chloride).....
" Sub-nitrate (Basic Bismuth Nitrate)....
Black Antimony (Antimony Trisulphide).....
" Lead (Graphite) .....
Bleaching Powder (Calcium Hypochlorite).....
Bone (Ivory) Black (Animal Charcoal).....
Borax (Sodium Bi-, or Tetraborate).....
Bromine .....
Cadmium, Metal .....
" Chloride .....
" Nitrate .....
" Sulphate .....
Calcite (Calc Spar).....
Calico Cloth, pink, for bleaching, yd.....
Calcium, Metal .....
" Carbide .....
" Carbonate (Marble Chips).....
" Carbonate (Precipitated Chalk) U.S.P..
" Carbonate, tech. .....
" Chloride, gran., for drying tubes, pure..
" Chloride, tech., gran.....
" Fluoride (Fluorspar) .....
" Hypochlorite (Bleaching Powder, Chloride of Lime).....
" Nitrate, C.P. .....
" Oxide (Lime) .....

Calcium Phosphate (tribasic) (Bone Ash) tech. for cupels .....
" Sulphate (Selenite) .....
" Sulphate (Plaster of Paris).....
Calomel (Mercurous Chloride) U.S.P.....
Camphor Gum .....
Carbon Bi-, or Disulphide, tech. or highest purified
" Tetrachloride .....
Carborundum, lumps.....powder.....
Carmine .....
Casein, tech. .....
Castor Oil .....
Caustic Potash (Potassium Hydroxide, com.) sticks
" Soda (Sodium Hydroxide, com.) sticks...
Cerussite (Lead Carbonate).....
Chalk, Precipitated (Calcium Carbonate).....
Charcoal, Animal (Bone or Ivory Black) powd....
" Wood (Vegetable Charcoal) powd.....
" Wood (Vegetable Charcoal) lump.....
" Blocks, for blowpiping.....
Cheese Cloth, yd.....
Chloride of lime (Calcium Hypochlorite).....
Chloroform, U.S.P. .....
Chrome Yellow (Lead Chromate, precip.).....
Chromium Potassium Sulphate (Alum, Chrome)..
" Sulphate (Green Chromic).....
" Trioxide (Chromic Acid) U.S.P.....
Cider Vinegar .....
Cobalt Chloride (ous).....
" Metal .....
" Nitrate (ous) .....
" Oxide .....
Cochineal .....
Coal, cannel .....
Congo Red .....
Copper Metal, thin foil.....
" " granular .....
" " Gauze, 80 mesh.....
" " Rivets .....
" " Sheet .....
" " Shot, chips, or punchings.....
" " Turnings or Shavings.....
" " Wire B. & S. No. 20.....
" " Wire B. & S. No. 24.....
" Bromide (ic) .....
" Bromide (ic) C.P.....
" Chloride (ous) white (mono).....
" Chloride (ic) (Bichloride).....
" Nitrate, pure cryst.....
" Oxide (ic) tech.....
" Oxide (ic) Black Powder, pure.....
" Oxide (ic) wire form, pure.....
" Oxide, red (ous) pure.....
" Sulphate (ic) (Blue Vitriol) com.....
" Sulphate (ic) anhydrous, pure.....
" Sulphate (ic) cryst., highest purity.....
Corrosive Sublimate (Mercury Bichloride) U.S.P..
Cotton, Absorbent .....
" Cloth, bleached, yd.....
" Seed Oil .....
Cream of Tartar (Potassium Bitartrate).....
Dextrose, (Grape Sugar).....
Dextrin, yellow .....
" white .....
Diamond Ink (for etching glass).....
Diastase of Malt, U.S.P.....
Emery, powd. .....
Eosin (See Aniline Dyes).....
Epsom Salts (Magnesium Sulphate) cryst. U.S.P..
Ether, Sulphuric (Ethyl Oxide).....
Ethyl Acetate, U.S.P., 10% alcohol.....

Extra copies of order blanks mailed on request.

Fehling's Solution Tablets.....sol.....
Flaxseed .....
Fluorspar (Calcium Fluoride).....
Fire Extinguisher (Carbon Tetrachloride) qt. tins.
Formaldehyde (Formalin) sol. U.S.P.....
Fuchsine (Rosanaline) .....
Galena (Native Lead Sulphide).....
Gelatin .....
Glass Wool .....
Glauber's Salt (Sodium Sulphate).....
Glucose (Syrup) .....
Glue .....
Glycerine (Glycerol) .....
Gold Leaf .....
Grape Sugar (Dextrose).....
Graphite (Black Lead, Plumbago).....
Gum Arabic (Acacia).....
Gutta Percha .....
Gypsum (Calcium Sulphate).....
Haematoxylon (Logwood) ground.....
Hematite (Red Ferric Oxide).....
Hydrogen Di-, or Peroxide tech...or medicinal...
Hydrogen Sulphide, Sol.....
"Hydrone" for making hydrogen.....
Hydroquinone (Hydrochinone) .....
Indigo, carmine, paste, tech.....
Infusorial Earth (Kieselguhr).....
Iodine, resublimed .....
Iron metallic, powd. (alcoholized).....
" powder by Hydrogen.....
" filings, clean, fine.....
" Wire B. & S. No. 16, bare.....
" Wire B. & S. No. 25, bare.....
" and Ammonium Citrate, green or brown scales .....
" and Ammonium Sulphate (Iron Alum) (ic).
" card teeth .....
" chloride (ic) (per-, tri-, or Sesquichloride)...
" Chloride (ic) (per-, tri-, or Sesquichloride) C.P. .....
" Chloride (ous) (Di-, or Protochloride).....
" Ferrocyanide (Prussian Blue) sol, or insol..
" Nitrate (ic) .....
" Oxide (Hematite) .....
" Oxide (ic) Rouge.....
" Pyrites (Iron (ic) Sulphide).....
" Sulphate (ous) .....
" Sulphate (ous) cryst. U.S.P.....
" Sulphide (ous) sticks.....
" Sulphide (ous) lumps.....
Iron watch springs.....
Javelle Water .....
Kaolin .....
Lamp Black .....
Lead Foil (Tea Lead).....
" gran. .....
" sheet .....
" shot .....
" Wire .....
Lead Acetate (Sugar of Lead) cryst.....
" Carbonate (White Lead).....
" Chloride, pure .....
" Chromate (Chrome Yellow).....
" Nitrate, tech. .....
" Nitrate, pure .....
" Mon-, or Protoxide (ous) (Litharge).....
" Di-, or Peroxide (brown).....
" Sesquioxide (Red Lead, Minium).....
" Sulphide (Galena) .....
Lignite .....
Lime (Calcium Oxide).....
Lime Water (Calcium Hydroxide Sol.).....

Litharge (Lead Mon-, or Protoxide).....
Lithium Chloride .....
Lithium Nitrate .....
Litmus, Cubes .....
" Paper, Red, sheets.....
" " Blue " .....
" " Neutral " .....
Litmus Paper, Red, books or vials of 100 strips
" " Blue " " " " " " "
" " Neutral " " " " " " "
Litmus Pencils, red and blue (combined).....
Logwood (Haematoxylin) ground.....
Magnesium, powd. .....
" ribbon .....
" Carbonate, U.S.P. .....
" Chloride, cryst., pure.....
" Oxide (Magnesia) .....
" Sulphate (Epsom Salt).....
Magnetite (lodestone) .....
Malachite Green .....
Manganese (ous) Chloride.....
" Di-, or Peroxide (Black Oxide of Manganese) gran. .....
" Di-, or Peroxide (Black Oxide of Manganese) powd. .....
" Di-, or Peroxide (Black Oxide of Manganese) U.S.P. .....
" Sulphate (ous) .....
Marble Chips (Calcium Carbonate).....
Massicot (Lead Mon-, or Protoxide) (ous).....
Mercury tech.....or redistilled.....
Mercury (ic) Bichloride (Corrosive Sublimate)...
" Chloride (Calomel) U.S.P. (ous).....
" Sulphocyanide .....
Mercuric Oxide (Red Oxide, Red Precipitate)....
" Nitrate (Per) .....
Mercurous Nitrate (Proto).....
Mercuric Sulphide, Red (Cinnabar).....
Methyl Orange .....
Methyl Violet .....
Methylene Blue .....
Microcosmic Salt (Sodium-Ammonium Phosphate)
Milk Sugar, powd.....
Minium (Lead Sesquioxide).....
Molasses, lb. .....
Muriate of Ammonia (Ammonium Chloride).....
Naphthalene (Tar Camphor) flakes.....
Naphthol Beta .....
Nessler's Solution for Ammonium Salts.....
Nickel, Metal .....
Nickel and Ammonium Sulphate.....
" Chloride (ous) .....
" Nitrate (ous) .....
" Sulphate (ous) .....
Nigrosine .....
Niter (Potassium Nitrate).....
Nutgalls, powd. .....
Oil, Aniline (Aniline).....
" Mineral .....
" Olive (Sweet) .....
Ox gall .....
Oxone, for making oxygen.....
Pancreatin, U.S.P., powder.....
Parchment paper .....
Paraffine .....
Pepsin, powd., U.S.P.....
Peptone from meat.....
Petrolatum (Vaseline) .....
Phenol (Acid, Carbolic).....
Phenolphthalein, U.S.P. .....
Phosphorous, yellow, sticks.....
" red, amorphous .....

Extra copies of order blanks mailed on request.

Picture Wire, iron.....
Plaster of Paris (calcium sulphate).....
Platinum chloride (Chloroplatinic Acid) 5% sol...
" wire No. 27.....
" foil, .002 inch thick.....
Plumbago (Graphite) .....
Potassium, Metal .....
" Antimonyl Tartrate (Antimony Potassium Tartrate) .....
" Bi-, or Dichromate.....
Potassium, Bi-, or Disulphate.....
" Bitartrate (Cream of Tartar).....
" Bromide, gran., U.S.P.....
" Carbonate (Salts Tartar).....
" Chlorate, powd. .....
" Chlorate, cryst. .....
" Chlorate, cryst., U.S.P.....
" Chloride .....
" Chromate .....
" Chromium Sulphate (Alum, Chrome)...
" Cyanide .....
" Ferricyanide (Red Prussiate of Potash)
" Ferrocyanide (Yellow Prussiate of Potash) .....
" Hydroxide (Caustic Potash, Potassa) stick form .....
" Hydroxide, sticks, C.P.....
" Hydroxide, C.P. by alcohol.....
" Iodide, gran. or cryst.....
" Iodide, highest purity.....
" Nitrate (Saltpeter, Niter).....
" Nitrate, U.S.P. .....
" Nitrite, sticks, highest purity.....
" Oxalate .....
" Perchlorate .....
" Permanganate .....
" Sodium Tartrate (Sodium Potassium Tartrate) .....
" Sulphate, tech. .....
" Sulphate, pure .....
" Sulphocyanide (Thiocyanate or Sulphocyanate) .....
" Tartrate (Soluble Tartar).....
" Sulphite .....
Primuline (Polychromine) .....
Pumice, lumps.....powd.....
Red Lead (Lead Sesquioxide).....
Red Precipitate (Mercuric Oxide).....
Resorcin (Resorcinol) .....
Rochelle Salts (Sodium Potassium Tartrate).....
Rosaniline (Fuchsine) .....
Rosin, yellow .....
Rouge (Ferric Oxide) .....
Rubber Cement .....
Saccharose (Sucrose) Cane Sugar.....
Sal Ammoniac (Ammonium Chloride).....
Saltpeter (Potassium Nitrate).....
Shellac, Orange, powd.....
Siderite (Ferrous Carbonate).....
Silicon Dioxide (Silica).....
Silver Bromide .....
" Chloride .....
" Nitrate (Lunar Caustic).....
" Nitrate, C.P. .....
" Sulphate .....
Soap, Castile .....
Soda (Sodium Carbonate).....
Soda Lime (Sodium Hydrate with Lime).....
Sodium Metal .....
" Acetate .....
" Amalgam .....

Sodium Ammonium Phosphate (Microcosmic Salt)
" Arsenate, tech. or pure.....
" Arsenite, tech. or pure.....
" Benzoate .....
" Bi-, or Tetraborate (Borax).....
" Bicarbonate (Baking Soda).....
" Bi-, or Dichromate, tech.....
" Bisulphate .....
" Carbonate (Soda) .....
" Carbonate, pure dry.....
" Chloride, common or C.P. (Salt).....
" Hydroxide (Caustic Soda, stick form)....
" Hydroxide, C.P. .....
" Hydroxide, C.P. by alcohol.....
" Hyposulphite (Sodium Thiosulphate).....
" Nitrate (Chili Saltpeter) cryst.....
" Nitrate, purified .....
" Nitrite, sticks, U.S.P.....
" Oxalate .....
" Per-, or Dioxide, fused.....
" Phosphate (Di-, or Orthophosphate).....
" Phosphate, highest purity.....
" Potassium Tartrate (Rochelle Salt).....
" Silicate (Water or Soluble Glass).....
" Sulphate (Glauber's Salt).....
" Sulphide, cryst. .....
" Sulphite, cryst. .....
" Thiosulphate (Sodium Hyposulphite).....
Starch, Corn .....
" Potato .....
Steel Wool .....
Strontium Chloride .....
" Nitrate .....
" Nitrate, pure .....
Sulphur, Flowers .....
Sulphur, Roll (Brimstone).....
Talc .....
Tannin (Tannic Acid) powd.....
Tartar Emetic (Antimony Potassium Tartrate)....
Thermit .....
Tin, sticks .....
" com. foil .....
" gran. .....
Tin Bichloride (Stannous Chloride).....
" Oxide (Stannic Oxide) (Per, Di).....
Tripoli .....
Tumeric, powd. .....
Tumeric Paper, sheets .....
" " book .....
Turpentine .....
Vaseline (Petrolatum) .....
Water, Distilled .....
Water Glass (Sodium Silicate) (Egg-saver) liquid
Wax, Bees, yellow.....white.....
Whiting .....
White Lead (Lead Carbonate).....
Xylol (Xylene) .....
Zinc, dust .....
" gran., com., mossy.....
" gran., free from arsenic.....
" sheet .....
" Sticks, C.P. .....
" wire .....
" Acetate .....
" Carbonate .....
" Chloride .....
" Nitrate, pure .....
" Oxide, dry process, tech.....
" Oxide, wet process, highest purity.....
" Sulphate (White or Zinc Vitriol).....
" Sulphide .....

Extra copies of order blanks mailed on request.

ORDER BLANK—CHEMICAL APPARATUS

To

STANDARD SCIENTIFIC COMPANY
New York.

Please enter our order for the following chemical apparatus:

Ship to.....

Address.....

City..... State.....

Ship via.....

Charge to.....

Send Invoice to.....

Date..... (Signed).....

Position.....

10460	Agate pans, qt.
1930	Alcohol lamp, glass, 3 oz.....4 oz.
1945	" " copper, 4 oz.
95	Asbestos board, 4 x 4,..... 5 x 5.....6 x 6 in.
100	" paper, sq. ft.
260	Balance, platform, Harvard trip.
300	Balance, horn pan, 7½" beam.
265	Balance, Stansico Laboratory, 7" beam, cap. 500 g., sensibility 1 cg.
8852	Battery jars, round, 4 x 5 in.
	" " " 6 x 8 in.
721	Beakers, low form with pour-out, Griffin nest of five, 100-500 cc.
721	Beakers, Griffin, nest of seven, 60-800 cc.
	" 60 cc.
	" 90 cc.
	" 120 cc.
	" 150 cc.
	" 250 cc.
	" 350 cc.
	" 400 cc.
	" 500 cc.
	" 600 cc.
	" 800 cc.
	" 1000 cc.
855	Blowpipe, 8"..... 10".
2360	Blowpipe tube for Bunsen burner.
1155	Bottles, N. M., plain, 4 oz.
	" " " 8 oz.
	" " " 16 oz.
	" " " 32 oz.
1160	Bottles, W.M., plain, 4 oz.
	" " " 8 oz.
	" " " 16 oz.
	" " " 32 oz.
1156	Bottles, N.M., with glass stopper, 1 oz.
	" 2 oz.
	" 4 oz.
	" 8 oz.
	" 16 oz.
	" 32 oz.
1161	Bottles, W.M., with glass stopper, 1 oz.
	" 2 oz.
	" 4 oz.
	" 8 oz.
	" 16 oz.
	" 32 oz.
1286	Bottles, reagent, 4 oz., blown glass labels: HCl .....H2SO4 .....HNO3 ..... KOH.....NH4OH .....NaOH..... Plain (other labels also supplied) doz.
1602	Bottle, Woulff, 3 neck, 4 oz....8 oz.
	" 16 oz.....32 oz.
	" 32 oz.
1660	Brushes, long, for tubes, doz.
3430	Burette clamp, adjustable.
1911	Burette funnels
1770	Burette, Mohr's, with attachment, 25 cc.
	" 50 cc.
	" 100 cc.
1800	Burette, Mohr's, with Geissler stopcock
	" 25 cc.
	" 50 cc.
	" 100 cc.
1780	Burette, Fresenius, 1/10 cc....25 cc. 50 cc....100 cc.
2090	Burner, Bunsen
2415	Calcium chloride drying tubes, straight one bulb, 4".....5".....6".
2435	Calcium chloride drying tubes, U-form with side tubes, 4".....6".....8".
2900	Casseroles, with handle, porcelain: .....30 cc.....75 cc.....150cc ....210 cc....375 cc...500 cc...750 cc
3355	Chamois skins
3360	Charcoal blocks, doz.
9215	Chemical label book.
3475	Clamp, for condensers.
3495	Clamp, Universal, large.
3510	Clamp-holder or attachment.
3515	Clamp holder, universal.
3585	Cobalt plate, 2 x 2.....2 x 3 in.
3905	Combustion boats, porcelain, glazed.
7770c	Combustion tubing, glass, Pyrex, 11 to 30 mm. diam., lb.

Extra copies of order blanks mailed on request.

4070 Condensers, Liebig, 12"....
" 15"....
" 20"....
4245 Corks, flat, assorted (give diam. small end)
4235 Corks, tapering, assorted (give diam. small end) ....
4165 Cork borers, brass, 1-6....
4230 Cork screw ....
4210 Cork press, lever form....
4320 Crucibles, Gooch, porcelain, 27 mm., diam.
" 35 mm. diam....
" 40 mm. " ....
4288 Crucibles, Hessian, sand....
4262 Crucibles, porcelain, with cover glazed:
No. 00, diam. 30 mm....
No. 0, " 35 mm....
No. 1, " 41 mm....
No. 2, " 52 mm....
14860 Crucible tongs, double bend....
4740 Cylinder, glass, 2 x 12"....
" 3 x 12"....
" 3 x 15"....
" 3 x 18"....
13488a Deflagrating spoon ....
5035a Desiccator, Scheibler ....
1355 Dropping bottle, T-K, 1 oz....2 oz....
N854 Dry cells ....
5700a Electrolysis apparatus, with detachable platinum electrodes, ungraduated....
5705a Electrolysis apparatus, Hoffmann, graduated, with glass stopcocks, and platinum electrodes ....
5705d Iron support for above with binding posts.
5725 Eudiometer, 50 cc....
100 cc....
5320 Evaporating dishes, porcelain, glazed....
No. 00, 70 mm diam....
No. 0, 80 " " ....
No. 1, 85 " " ....
No. 2, 90 " " ....
No. 3, 100 " " ....
No. 4, 110 " " ....
No. 5, 120 " " ....
5865 File, round ....
5870 File, triangular ....
5965 Filter paper, white ....
sheets 19 x 19" or 20 x 20"..ream..quire
packages of 100 circles...3"...4"....5"
" " 100 " ...6"...8"...10"
6325 Flasks, Florence, flat bottom:
30 cc.... 250 cc....
60 cc.... 350 cc....
120 cc.... 500 cc....
180 cc.... 1000 cc....
6328 Flasks, with ring neck, flat bottom, 120 cc.
250 cc....500 cc....1000 cc....
6330 Flasks, round bottom, 120 cc....
250 cc.... 500 cc.... 1000 cc....
6355 Flasks, Erlenmeyer:
60 cc.... 350 cc....
120 cc.... 500 cc....
180 cc.... 1000 cc....
250 cc....
6425 Flasks, Erlenmeyer, with side tube, 250 cc
500 cc.... 1000 cc....
6375 Flasks, Kjeldahl, digestion, 200 cc....
500 cc.... 800 cc....
6385 Flasks, distillation, round bottom:
120 cc.... 500 cc....
250 cc.... 1000 cc....

5525a Distillation attachment for use with any regular flask ....
6455 Flasks, volmetric, graduated, with glass stopper: 50 cc....
100 cc.... 500 cc....
250 cc.... 1000 cc....
6550 Forceps, brass, curved....
6575 Forceps, steel ....
6610 Funnel, glass, best grade, long tapering stem:
2½" diam.... 4" diam....
3" " .... 5" " ....
3½" " .... 6" " ....
6615a Funnels, less expensive, short stem:
2½" diam.... 4¾" diam....
3¾" " .... 5¾" " ....
6730 Funnels, separatory, with glass stopper:
60 cc.... 250 cc....
125 cc.... 500 cc....
1000 cc....
6785 Funnel tubes, thistle top....
6800a Funnel tubes with safety bend, one bulb..
6800b " " " " " two bulbs.
7630 Gas measuring tubes, 25 cc x 1/5....
" 50 cc x 1/5....
" 100 cc x ½....
7685 Glass beads, lb....
7696a Glass cutter ....
7740a Glass rod, ⅛"....$\frac{3}{16}$"....¼"....
7750 Glass tubing, $\frac{1}{16}$" O.D....
" " ¼" " ....
" " ⅜" " ....
" " ½" " ....
7701 Glass tube cutter....
7725 Glass plates, 4 x 4"....
5 x 5"....6 x 6"....
4705 Graduated cylinders, 50 cc....
" " 100 cc....
" " 250 cc....
" " 500 cc....
" " 1000 cc....
12810 Horn scoop, 4"....5"....6"....
N340 Horseshoe magnet, 3"....4"....6"....
8033b Hydrometer, light, .700 to 1.000....
8026b " heavy, 1.000 to 2.000....
D300 " Universal, .700 to 2.000....
7470 Kipp's gas generator, 250 cc....
500 cc.... 1000 cc....
9205 Labels, gummed ....
7993 Lactometer, N. Y. Board of Health....
3386a Lamp Chimney, student's....
5335 Lead dish, 2"....2½"....4"....5"....
K30 Lens, magnifying, on tripod....
8880 Lightning or fruit jars, 1 pt....1 qt....
Litmus paper:
9585a sheets, 8 x 10"....red ....
" 8 x 10"....blue ....
" 8 x 10"....neutral ....
9585b books, 50 strips ....red ....
" 50 " ....blue ....
" 50 " ....neutral ....
9585c vials, 100 " ....red ....
" 100 " ....blue ....
" 100 " ....neutral ....
9580 Litmus pencils, red and blue, combined..
9642 Matches, safety, doz. boxes....
10986 Medicine droppers ....
B75 Meter sticks, brass tips....

Extra copies of order blanks mailed on request.

10201 Mortar and pestle, porcelain, glazed.....
No. 0, 70 mm diam.....
No. 1, 100 " " .....
No. 2, 126 " " .....
No. 3, 140 " " .....
No. 4, 160 " " .....
10475 Paper, glazed, white, black or colored....
10480 Parchment paper, sq. ft.....
10535 Pencil for marking glass.....
5345 Petri dish, double, 100 x 10 mm.....
3555 Pinchcock, Hofmann's screw.....
3560 " " " with side opening .....
3540 Pinchcock, Mohr's spring, small.....
medium..... large.....
11000 Pipette, volumetric, 1 cc.....
2 cc.....5 cc.....10 cc.....20 cc.....
11045 Pipette, Mohr's, graduated, 1 cc x 1/10..
" 2 cc x 1/10.....
" 5 cc x 1/10.....
" 10 cc x 1/10.....
11310 Platinum foil, thin, per sq. in.....
11300 Platinum wire, No. 27, per inch.....
11375 Pneumatic troughs, 7 x 10".....
9 x 12".....11 x 15".....
12555 Retorts, glass stoppered:
125 cc..... 350 cc.....
250 cc..... 500 cc.....
13827 Ring stand, with 2 rings...with 3 rings..
80 Rubber aprons .....
81 Rubber oversleeves, pair.....
12675 Rubber stoppers (give diam. small end)
solid.....1 hole.....2 hole.....

12710 Rubber tubing, red, 1/16".....
" 1/8".....
" 3/16".....
" 1/4".....
12715 ditto heavy wall, 1/16".....
" 1/8".....
" 3/16".....
" 1/4".....
12730 Rubber tubing, pressure 1/8".....
" 1/16".....
" 1/8".....
12700a Rubber tubing, gum, (red or black) light wall, 1/16" .....
" 1/8".....
" 3/16".....
" 1/4".....
12700b ditto heavy wall, 1/16".....
" 1/8".....
" 3/16".....
" 1/4".....
B57 Ruler, 12" and 30 cm, single bevel, box-wood .....
B55 Ruler, 12" and 30 cm, double bevel.....
B56 Ruler, 12" and 30 cm, double bevel, maple
12785 Sand baths, shallow, 4".....6" diam.....
12787 " " deep form, 4"...6 " diam...
A40 Sand paper, doz. sheets.....
13215 Spatulas, porcelain, double, 10 cm.....
13 cm.....16 cm long.....
13200 Spatulas, horn, double, 4, 5, 6, 8" long..

1425 Specific gravity bottles, adjusted
50 cc.....
13450 Sponges, laboratory, small or la
13500 Spoon, horn, with spatula, 4, 5
long .....
13525 Spoon, sodium, with wood handl
13550 Stencils for making drawings of
13585 Stirring rods, glass, 6".....8
10".....12" long.....
13665 Stopcocks, Geissler, straight, gla
4 mm.....5 mm bore..
13685 Stopcocks, glass, 3-way, 2 mm..4
13745 Stopcock grease, bottle .....
SA1 Stansiphon (Siphon) automatic
starting: 1/4" diam.....
SA20 Stansiphon, carboy size, with o
stopcock .....
SB2 Stansiphon (Siphon) bulb press
1/8" diam. of glass, brass or le
15050 T-tubes for connection, glass...
1655 Test tube brush, bristle end....
1640 " " " sponge end ..
3410 " " clamp, wire form, St
14155 " " rack, with pins and h
14265 Test tube on foot, 5 x 1/8"....6
14260 Test tube with side neck, 5 x
6 x 1/4".....8 x 1"...
14255 Test tubes, 4 x 1/2" gross.....
5 x 5/8" " .....
6 x 5/8" " .....
6 x 1/4" " .....
7 x 1/8" " .....
8 x 1" " .....
14275 Test tubes, ignition, hard glass,
6 x 1/4".....8 x 1" doz...
14300b Thermometer, single scale, etch
100° C.....
" -10 to + 200° C
14300c Thermometer, double scale, etc
" -10 + 110° C an
" -10 + 200° C an
14950 Triangles, pipestem .....
15014 Tripod, iron, for support.....
2430 U-tube, 3".....4".....5".....
1445b Wash bottle, 250 cc.....500
15135 Watch glasses, 2"....3"....4"
15140 Watch glass, Syracuse .....
15220 Water bath, copper, concentric
8".....10" diam.....
14240 Wax tapers, pkg.....
415 Weights, brass, 1 cg. to 100 g,
with forceps .....
B840 Weights, brass, in block, 1-500
B841 " " " " 1-1000
2365 Wing top for Bunsen burner..
15395 Wire gauze, copper, sq. ft.....
15410 " " iron, 4 x 4.....
5 x 5.....6 x
15425 " " with asbestos cente
16000 Wood splints, pkg.....
15053 Y-tubes for connections, glass.
A1200 "KLING KLAMPS," for
charts, maps or pictures on
doz. .....

Extra copies of order blanks mailed on request.

ORDER BLANK—BIOLOGY

ıIENTIFIC COMPANY
ſork.

ıter our order for the following biological supplies:

.....

.....

..... State.....

.....

.....

to.....

..... (Signed).....

Position.....

	quaria, round, 8".....10".....				
	12".....15" diam.....				
	alance, hand, horn pans, 7½ in. beam..				
	eakers, glass, low form with pour-out:				
	60.... 90.... 120.... 150.... 250....				
	350.... 500.... 800..... 1000 cc.....				
	orers, cork, 1-6, set.....				
	ottle, balsam, 1½ oz.....2 oz.....				
	ottles, dropping, T.K., 15...30...60 cc..				
	ottles, N.M., 2.....4.....6.....				
	8.....16.....32 oz.....				
	ottles, N.M., with glass stoppers, 2.....			R1123	Cork sheet, 12 x 4 x ¼".....
	4.....6.....8.....16.....32 oz.....			R1129a	Cotton, germinating .....
	ottles, W.M., 2.....4.....6.....			R865	Covers, specie, manila, quire, 11 x 17"....
	8.....16.....32 oz.....				16⅝ x 24".....
	ottles, W.M., with glass stoppers, 2.....			R878	Covers, genus, folded, 12 x 18".....
	4.....6.....8.....16.....32 oz.....				16⅝ x 24".....
	ox, slide for 25 slides 3 x 1".....			4705	Cylinder, graduated, 50 cc....125 cc....
	ox, germinating, Ganong, wood frame,				Ditto, 250 cc.....500 cc.....
	glass front				" 1000 cc.....
	lowpipe for inflation.....			4740	Cylinders, plain, glass, 2 x 12".....
	ristles				3 x 12".....3 x 15".....
	rush, test tube				3 x 18".....3 x 21".....
	urner, Bunsen			5320	Dish, evaporating, porcelain, 70....80....
	anada Balsam (see list of Chemicals)...				90.....100.....120 mm diam.....
	himney, student's lamp			5345	Dish, petri, with cover, 4 in.....
	lamp, burette			R700	Dissecting instruments, scalpel, forceps,
	lamp, test tube, wire.....				scissors, needle holder, in case.....
				6325	Flask, Florence, 60 cc.....125 cc.....
	orks, flat (specify diam. small end)....				Ditto, 250 cc....500 cc....1000 cc....
				R788a	Forceps, bone cutting .....
				R651	Forceps, cover glass .....
				R780	Forceps, narrow points—a (curved).....
					b (straight) .....
				6610	Funnels, glass, long stem, 2½" diam.....
					Ditto, 3"..... 4".....
					" 3½"..... 5".....
				6615	Funnels, glass, short stem, cheaper, 2½"..
					Ditto, 3¼"..... 4¼"..... 5¼".....
					" 5½"..... 7¼".....
				6785	Funnel tube, thistle top, 10"....12"....
				15410	Gauge, wire, iron, 5 x 5"....6 x 6"....
	orks, tapering " " " "			7750	Glass tubing, ⅛"....¼"....¼".....
					½"..... ¾"..... 1" diam.....

Extra copies of ***order blanks mailed on request.***

R660 Glasses, cover, ¾" square.....
R662 Glasses, cover, ¾" round.....
R845 Hone, for sharpening.....
8850 Jars, battery, 4 x 5".....6 x 8".....
765 Jar, bell, open top, 6½ x 11"...7 x 15"...
8880 Jars, fruit, screw top, 1 pt..1 qt..2 qts..
R688 Labels, for slides, box of 100.....
1930 Lamp, alcohol, glass, 3 oz.....4 oz.....
1945 Lamp, alcohol, copper, 4 oz.....
R560 Lens, Coddington magnifying, 10X.....
K30 Lens, magnifying, tripod.....
R825 Lifter, section .....
R130 Microscope, compound, F4.....
R500 Microscope, dissecting, Barnes.....
R1200 Mounts, Riker specimen:
2½" x 3".....4 x 5".....
5 x 6".....6½ x 8½"....8 x 12".....
R1201 Ditto, botanical (same sizes).....
R730 Needles, dissecting, doz.....
R731 " " bone handle, adjustable
10400a Oven, drying, single wall, 6 x 8".....
8 x 10".....10 x 12".....
10400b Oven, drying, double wall, 6 x 8".....
8 x 10".....10 x 12".....
R882 Pan, dissecting, wax lined.....
R862 Paper, spore, black, quire.....
R868 " paraffined, 12 x 18", quire.....
R876 " drying, 12 x 18", quire.....
R879 " mounting, 11 x 16½", white, quire
5965 " filter, white.....3".....4".....
5"..... 6"..... 7"..... 8".....
R850 Pins, insect, white .....
R851 " " black .....
3540 Pinchcock, Mohr's spring .....
3555 " Hofmann's screw .....
R837 Pith, in sticks, for making sections.....

R870 Plant press, with straps, 6 driers.....
11310 Platinum foil, thin, sq. in.....
R835 Razor for sectioning .....
12710 Rubber tubing, red, ⅛".....ft.....
1/16".....¼".....⅜".....ft.....
⅝"..... ½"..... ft.....
R789 Saw, bone .....
B600 Scale, trip, square pans, grad. arm and rider .....
R750 Scalpel .....
R790 Scissors, straight, fine points.....
R792c Scissors, curved, fine points.....
12670 Sheet, rubber, sq. ft.....oz.....
R680 Slides, microscope, 3 x 1", gross...doz...
R685 " with concave center, doz.....
13827 Stand, ring, with 2.....3.....4 rings....
R640 Sterilizer, Arnold steam, copper bottom, 10⅛"..... 12½" diam.....
13585 Stirring rod, glass, 6"....8"....10"....
12675 Stoppers, rubber, solid, one or two holes (specify diam. small end).....
14255 Test tubes, 4 x ½"...5 x ⅝"...6 x ¾"..
6 x ¾".....7 x ⅞".....8 x 1".....
doz. or gross .....
14300c Thermometer, chemical, double scale, 0-100° C. and 212° F.....
R860 Vasculum .....
15135 Watch glass, 2"...3"...4" diam...doz...
15140 Watch glass, Syracuse.....
B840 Weights, brass, in block, 1-500 g.....
1000 g.....
415 Weights, metric, in block, 1 cg. to 50 g...
100 g.....500 g.....
A1200 "Kling-Klamps" for supporting charts, maps, pictures, etc., from wall..doz. $3.00

Extra copies of order blanks mailed on request.

ADDENDA

A1505 **Universal Spring Holder (Patented),** an excellent clamp for the chemical laboratory. holds cylindrical objects such as burettes, thermometers, etc., up to 45 mm diam.:

a Iron ..... .50
b Brass 1.00

B55 **Ruler, Boxwood,** 12 inches and 30 centimeters, double bevel ..... .15

B57 **Ruler, Boxwood,** 12 inches and 30 centimeters, single bevel ..... .15

B56 **Ruler, Maple,** 12 inches and 30 centimeters, double bevel, with protractor on reverse side.. .10

B75 **Meter Stick,** with inches on reverse side, brass tips ..... .45

B600 **Laboratory Trip Scale** (Harvard), balance arm graduated to 0.1 gram with rider, capacity 1 Kg., square scale pans (see cut p. 180)..... 8.50

B602 Ditto, with agate bearings 12.00

R3000 **Aquarium Tanks, Rectangular,** all glass, of clear white quality:

Width, inches	5	9	9
Height, inches	7	12	10
Length, inches	8	12	14½
Each	6.50	12.00	14.00

R3025 **Aquarium Tanks,** rectangular, heavy plate glass sides, metal frame and stone base:

Width, inches	5	7	9	12	14
Height, inches	7	9	10	14	12½
Length, inches	9	12	16	18	20½
a Enameled Frame	5.50	8.00	12.00	14.00	30.00
b Aluminum Frame	7.50	10.00	16.00	....	....

R3040 **Aquarium Tanks,** rectangular, plate glass sides, enameled metal frame, lighter construction than R3025:

Width, inches	7	8
Height, inches	8	9
Length, inches	10	12
Each	4.00	7.00

Aquarium Jars (see Nos. 8845-8846, on page 89).

K30 **Tripod Magnifier,** consisting of two double convex lenses separated by a diaphragm in adjustable screw mount on three legs. Gives a large field. Diam. of lens 1 in., focus 1 5/16 in., magnifying power 7.5X. One of the best lenses for laboratory work 1.10

Magnifying Lenses, folding type, for pocket or laboratory use:

		Diam.	Focus	Power	
K70	Single Lens	⅞ in.	2 in.	5X	1.00
K71	Single Lens	1⅛ in.	3 in.	3.5X	1.40
K73	Double Lens	1 in.	2, 2½ in.	4 to 9X	1.60
K74	Double Lens	1⅛ in.	3, 3½ in.	3 to 6X	2.00
K76	Triple Lens	1 in.	2, 2½, 3 in.	3.5 to 17X	2.00
K77	Triple Lens	1⅛ in.	3, 3½, 4 in.	2.5 to 9X	2.40

Z100 **Loose-Leaf Laboratory Note-Books,** with stiff covers having cloth back, and 2 rings, spring action, capacity ½ inch:

a **Covers, Side Opening:**

Size, inches	8¼x6⅜	8½x5½	9½x6	9½x7½	10½x8	11x8½
Each	.80	.80	.80	1.00	1.00	1.10

b **Covers, End Opening:**

Size, inches	3⅝x5⅞	4½x7¼	9½x6	5½x8½	8x10½
Each	.65	.75	.80	.80	1.00

(For Paper Fillers see Z110 and Z120.)

Z110 **Paper Fillers for Loose-Leaf Laboratory Note-Books.**

Plain, Ruled and Quadrille:

Size, inches	3⅝x5⅞	4½x7¼	5½x8½	7½x9½	8x10½
a Plain, per 100	.30	.32	.33	.34	.35
b Ruled, per 100	.30	.32	.33	.36	.38
c Quadrille, per 100	.35	.36	.38	.40	.42

Size, inches	8¼x6⅜	8½x5½	9½x7½
a Plain, per 100	.36	.37	.38
b Ruled, per 100	.39	.40	.41
c Quadrille, per 100	.43	.45	.46

Z120—Cross-Section Paper, inches by tenth, for Loose-Leaf Laboratory Note-Books Z100:

Size, inches	9½x7½	10½x8
Per 100 sheets	.75	.80

Z200 **Loose-Leaf Laboratory Note-Book Covers,** stiff, with cloth back and 2 spring acting rings 4⅝ inches apart:

a With Fixed Back:

Size, inches	8x10½	8x10½	5¼x8	5¼x8	4¼x7	4¼x7
Capacity, sheets	150	100	150	100	150	100
Each	.60	.60	.56	.56	.56	.56

b With Adjustable Back:

Size, inches	8x10½	5¼x8
Capacity, sheets	150	150
Each	.60	.60

(For Paper Filler see Z210.)

Z210 **Paper Fillers,** punched with 2 holes 4⅝ inches apart, for Loose-Leaf Laboratory Note-Book Covers Z200:

Size, inches	8x10½	5¼x8	4¼x7
a Plain, 100 sheets	.65	.35	.25
b Ruled, 100 sheets	.65	.35	.25

Z220 **Cross-Section Paper, Metric,** in centimeters by millimeters, punched with 2 holes 4⅝ inches apart, for Loose-Leaf Note-Book Covers Z200, size 8x10½ inches, per 100 sheets ..... .80

PROTECTIVE COATINGS FOR LABORATORY TABLES, ETC.

5 **Black Acid-Proof Stain and Finish,** for wood only. A thin solution easily applied with a brush, and which prevents staining of the table tops. Widely used by makers of Laboratory tables. One-half gallon of each of the two solutions, making a total of one gallon, will be sufficient for coating about 100 square feet of table surface. Directions included. Price per gallon (½ gallon of each solution)..... 3.00

6 **Black Preservative Paint, Acid, Alkali and Water-Proof.** Protects and preserves wood, metal, plaster or similar materials. Excellent for laboratory sinks, table tops, reagent shelves, hoods or fume closets, walls, etc.:

Amount	½ pt.	1 pt.	1 qt.	½ gal.	1 gal.	5 gals.
Price	.50	.90	1.50	2.50	4.00	18.00


STANDARD SCIENTIFIC COMPANY
STANDARD
NEW YORK