

LEICH

**LEICH'S 1960 CATALOG OF LINE
SUPPLIES & TELEPHONE EQUIPMENT**

Tools • Hardware • Cable • Wire • Protection Equipment • Power & Test Equipment

TELEPHONE

• Booths & Paystations • Telephone Answering Machines • Telephones & Switchboards

your new LEICH catalog . . .

In this condensed catalog we have tried to include many of the things a telephone company needs in the way of construction materials, supplies and related equipment. Descriptions, information and prices on the many items were correct at the time of printing. They are, however, subject to change without notice.

Only tools and materials of the highest quality are shown. Most of them come from manufacturers well known to the Independent Telephone Industry. All new products are carefully investigated before being added to our line. When you buy from Leich you have the assurance that we fully guarantee everything we sell!

With this Leich catalog, we hope we have made your job of selecting and ordering materials a little easier and more pleasant. If you're looking for something not listed in this book, we'll be happy to send you information on the specific item.

POWER TOOLS

Speedway 1/4-Inch Electric Drills



This drill has an air-cooled, specially wound high-torque motor. Operates on 115 volts, A.C. or D.C. Capacity in steel, 1/4 inch; capacity in hardwood, 1/2 inch. Self-aligning, oil-less, ball thrust bearings. Equipped with 1/4-inch gear chuck and key.

Cat. No.	Mfr. No.	No Load Speed, RPM.	Full Load Speed, RPM.	Wt. Lbs.	Price Each
L-3968	201J	2400	1500	4	\$16.96

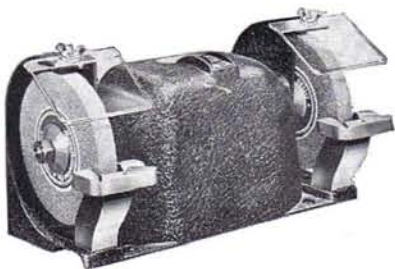
Thor Telephone Installers 3/8-Inch Drills



All ball-bearing heavy-duty industrial-type drill, equipped with safety switch, aluminum alloy housings with non-slip finish, heavy duty 3/8-inch capacity chuck, 25 feet of 3-conductor cable (including grounding wire), chuck key holder. Universal wound motor operates on 115 volts A.C. or D.C.

Cat. No.	Mfr. No.	Free Speed, RPM.	Wt. Lbs.	Price Each
L-4119	U22FD-GB	500	4 3/4	\$51.85

Speedway 1/4-Hp. Bench Grinders



Perfect for the repair shop, garage, or even home. Equipped with 50-60 cycle, 110-120 volt A.C. motor. Self-aligning, oil-impregnated bearings. Cast aluminum housing. Wheels are 6x3/4x1 1/2 inches with one 46 grit and one 75 grit. Fully adjustable tool rests with milled-in angle guides for sharpening drills, chisels, planes and other cutting tools. Portable, rubber feet.

Cat. No.	Mfr. No.	No Load Speed, RPM.	Wt. Lbs.	Price Each
L-4452	128	3450	19 1/2	\$27.63

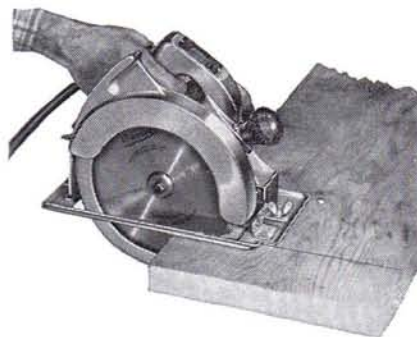
Milwaukee 1/4-Inch Electric Drills



Powered for drilling at maximum capacity in metal, wood or composition materials. Capacity in steel, 1/4 inch. Universal A.C.-D.C. 0 to 60 cycle motor. 115 volts standard. Equipped with lifetime lubricated ball and roller bearings throughout, multiple blade fan for cooler running, windings of high heat resistant wire.

Cat. No.	Mfr. No.	No Load Speed, RPM.	Full Load Speed, RPM.	Wt. Lbs.	Price Each
S-114	S-114	1900	1100	5 1/4	\$31.60

Milwaukee 6 1/2-Inch Hi-Speed Electric Saws



This popular model is powered by 1 1/2-hp. universal motor, A.C.-D.C. Features the exclusive coaster-brake clutch drive that will absorb the rocking of saw blade and prevents back-lash shock to gears. Ball and roller bearings. Full mitering 0 to 45 degree plus depth adjustment. Blade is at right side. Telescoping and automatically retractable blade guard. Rigid one piece steel shoe. Complete with combination saw blade, rip guide, 3 wire heavy-duty rubber covered cord with unbreakable plug and 2 utility wrenches.

Cat. No.	Mfr. No.	Blade Speed Idle, RPM.	Wt. Lbs.	Price Each
650	650	6800	12 1/2	\$55.60

Handy All Steel Carrying Cases

An attractive hammertone-finish steel case is available with the Model 650 Electric Saw. It provides ample space for extra blades, wheels and accessories. Fitted with snap lock and easy grip handle.

Cat. No.	Mfr. No.	Description	Price Each
650C	650C	Milwaukee Electric Saw w/Case	\$64.00

Prices shown are subject to change without notice.

TOOLS (Small)

Klein Side-Cutting Pliers



For use on bare and insulated wire. For linemen, electricians and mechanics. Adaptable for all uses where high quality plier is required. Handles shaped to curvature of hand. Powerful leverage and keen reinforced cutting knives adapt plier for heavy cutting. Full clearance back of knife permits use on insulated wire.

Temper blued handles; polished heads.

Cat. No.	Mfr. No.	Length Inches	Price Each
L-5742	201-7	7	\$3.07
L-5744	201-8	8	3.47
L-5746	201-9	9	3.90

Klein Side-Cutting Pliers N. E. Type—Stream-Lined



Same as No. 201 series (above), except that nose is round to permit working in confined space and all edges are rounded to prevent nicking of wire.

Cat. No.	Mfr. No.	Length Inches	Price Each
L-5749	201-5NE	5	\$2.50
L-5750	201-6NE	6	2.77
L-5752	201-7NE	7	3.07
L-5754	201-8NE	8	3.47
L-5756	201-9NE	9	3.90

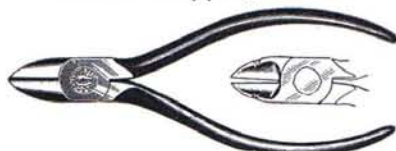
Klein High Leverage Pliers



The new high leverage side-cutting pliers for all your regular wire cutting needs and for quick and easy cutting of heavy-duty wire. Measures about 9-in. overall and weighs no more than regular pair. 13-1 leverage ratio. Forged from high-grade tool steel, tempered, adjusted and tested.

Cat. No.	Mfr. No.	Length Inches	Price Each
L-5747	213-9	9	\$4.40
L-5758	213-9NE	9	3.97

Klein Oblique Cutting Pliers With W Stripping Notches



Has two W-shaped notches at back of cutting knives. Specially designed for removing acetate cellulose insulation from .050 and .058 wires used on telephone distributing frames, etc. Polished heads; handles temper blued.

Cat. No.	Mfr. No.	Length Inches	Price Each
L-5802	245-5W	5	\$2.60

Klein Narrow Nose Oblique Cutting Pliers



Useful for electricians, telephone men and switchboard builders.

Temper blued handles; polished heads.

Cat. No.	Mfr. No.	Length Inches	Price Each
L-5760	202-5	5	\$2.30
L-5766	202-6	6	2.33

Klein Oblique Cutting Pliers Bell System Type with W Stripping Notches, Sleeve Openings and Skinning Hole



All-purpose. For telephone installation and maintenance work. W notch slits acetate cellulose and other insulations from wires up to .058 inch o.d. Diameter of stripping hole, .052 inch. Sleeve openings in handles. Notch also provides means for crimping on .032—.025-inch single tube copper sleeves often used in telephone work for splicing .032-inch bridle wire and .025-inch inside wire; when so used, make two crimps at each end of sleeve for .032 bridle wire and three crimps for .025 inside wire. Polished heads; temper blued handles.

Cat. No.	Mfr. No.	Length Inches	Price Each
L-5764	202-5SW	5½	\$2.80
L-5731	252-6SW	6	2.87

Klein Oblique Cutting Pliers Heavy Duty Pattern



Useful where it is not necessary to reach into closely confined spaces. Polished heads; handles temper blued.

Cat. No.	Mfr. No.	Length Inches	Price Each
L-5800	242-6	6	\$2.53
L-5732	220-7	7	2.83

Klein Long Nose Pliers



The standard pliers for telephone and switchboard work. No. 303-6 has needle-point nose.

Cat. No.	Mfr. No.	Length Inches	Price Each
L-5810	301-5	5	\$1.97
L-5812	301-6	6	2.00
L-5816	303-6	6	2.00
*L-5772	203-5	5	2.37
*L-5774	203-6	6	2.40

*With cutters.

Klein Long Flat Nose Spring Adjusting Pliers



Hollow ground on outside of jaws to reach between and grasp springs easily. Largely used by telephone men because it makes rapid and accurate adjustments possible. Inside of jaws smooth. Polished heads; handles temper blued.

Cat. No.	Mfr. No.	Length Inches	Price Each
L-5826	311-5½	5½	\$2.60

Klein Slim Long Nose Pliers



Cat. No.	Mfr. No.	Length Inches	Description	Price Each
L-5733	307-5½L	5½	With Spring	\$2.40
L-5821	307-5½	5½	Less Spring	2.20

Klein Duck Bill Pliers



Cat. No.	Mfr. No.	Length Inches	Description	Price Each
L-5736	306-5½L	5½	With Spring	\$2.77
L-5819	306-5½	5½	Less Spring	2.57

Klein Long Nose Side Cutting Pliers



Similar in design to No. 203, but with two notches designed to strip insulated wire gage 19 and 22. Designed for telephone switchboard work.

Cat. No.	Mfr. No.	Length Inches	Price Each
L-5743	203-6-H2	6½	\$3.30

Klein Special Skinning Pliers



This plier is specially designed for cutting and skinning 24 gage synthetic coated wire. A notch in the nose back of the cutting blade crushes insulation. Sharp blade assures a quick, clean cut. Nose tapered to permit access to confined space. Furnished standard red plastisol handles.

Cat. No.	Mfr. No.	Length Inches	Price Each
L-5771	317-5P	5	\$3.60

Klein Insulated Stripping Pliers



Here's just what the installer needs. This chain nose insulation stripping plier does a neat job of breaking the insulation, then stripping it off wherever desired. Removes insulation cleanly and quickly.

Cat. No.	Mfr. No.	Length Inches	Price Each
L-5751	2291	6	\$2.20

Klein Lamp Cap Extractors



Specially designed long nose plier to extract lamps from switchboards.

Cat. No.	Mfr. No.	Length Inches	Price Each
319-B	319-B	5	\$2.63

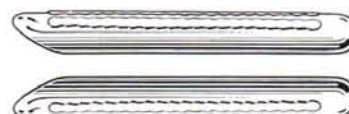
Klein Cord Tip Closing Pliers



Jaws are of sturdy design to permit use as hand press for closing cord tips such as W.E. 101 and 102 (new Nos. 120 and 121). Correctly sized circular opening in jaws assures perfect connection when closure is completed. Polished heads; handles temper blued.

Cat. No.	Mfr. No.	Length Inches	Price Each
L-5734	039	5	\$2.50

Klein-Koat Plier Grips

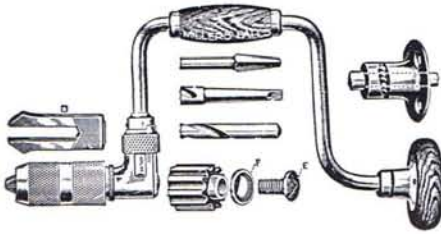


Made of transparent plastic in a bright maroon; will not slip or creep.

Cat. No.	Mfr. No.	For Pliers Length In.	Length Inches	Price per Pair
L-4501	60	6	4	\$.47
L-4502	70	7	4½	.50
L-4503	89	8 and 9	5½	.53

Prices shown are subject to change without notice.

Millers Falls Ratchet Braces



A fine quality brace, popularly known for years as the "Holdall," having been one of the first to be equipped with the universal type or "Master" chuck holding square, No. 1 Morse Taper and plain round shanks from $\frac{1}{8}$ to $\frac{1}{2}$ inch in diameter. Boxed ratchet mechanism with ring shift. Steel clad, ball bearing head. Handle has inserted metal rings. Head and handle of finely finished tropical hardwood.

All exposed metal parts polished, nickel plated and buffed.

Cat. No.	Mfr. No.	Sweep Inches	Wt. Lbs.	Price Each
L-2824	730A	14	$3\frac{1}{2}$	\$9.83
L-2825	731A	12	$3\frac{1}{4}$	9.00
L-2827	732A	10	$3\frac{1}{16}$	8.63
L-2829	733A	8	$2\frac{3}{4}$	8.63

Greenlee Car or Pole Bits



Twelve inch twist, with overall length of 17 inches. Six in box.

Cat. No.	Mfr. No.	Size Inches	Price Each
L-2517	56-6	$\frac{3}{8}$	\$1.30
L-2519	56-7	$\frac{7}{16}$	1.30
L-2521	56-8	$\frac{1}{2}$	1.33
L-2523	56-9	$\frac{9}{16}$	1.40
L-2525	56-10	$\frac{5}{8}$	1.50
L-2527	56-11	$\frac{11}{16}$	1.67
L-2529	56-12	$\frac{3}{4}$	1.77
L-2531	56-13	$\frac{13}{16}$	1.90
L-2641	56-14	$\frac{7}{8}$	2.10
L-2642	56-15	$\frac{15}{16}$	2.30
L-2643	56-16	1	2.47

Greenlee Solid Center Auger Bits



All purpose bits—double cutter head—medium screw point. Six in box. Length 7 to $9\frac{1}{2}$ inches.

Cat. No.	Mfr. No.	Size Inches	Price Each
L-2480	22-4	$\frac{1}{4}$	\$.70
L-2482	22-5	$\frac{5}{16}$	.70
L-2484	22-6	$\frac{3}{8}$	.70
L-2486	22-7	$\frac{7}{16}$	.73
L-2488	22-8	$\frac{1}{2}$	.77
L-2490	22-9	$\frac{9}{16}$	.80
L-2492	22-10	$\frac{5}{8}$	.83
L-2494	22-11	$\frac{11}{16}$	.87
L-2498	22-12	$\frac{3}{4}$	.90
L-2501	22-13	$\frac{13}{16}$	.93
L-2605	22-14	$\frac{7}{8}$	.97
L-2606	22-15	$\frac{15}{16}$	1.07
L-2504	22-16	1	1.13

Greenlee Bell Hanger Drills



Made with $3\frac{3}{4}$ -inch twist. Length 18 inches.

Cat. No.	Mfr. No.	Size Inches	Price Each
L-4004	48-6	$\frac{3}{16}$	\$1.53
L-4006	48-8	$\frac{1}{4}$	1.63
L-4008	48-10	$\frac{5}{16}$	1.67
L-4010	48-12	$\frac{3}{8}$	1.83
L-4012	48-14	$\frac{7}{16}$	2.00
L-4014	48-16	$\frac{1}{2}$	2.23

Millers Falls Automatic Drills



Has eight drill points, $\frac{1}{8}$ to $\frac{1}{64}$ -inch diameter, held in handle and removed by rotating cap opposite proper compartment and dropping out point. Chuck seats drill points positively and locks them securely. Length, 10 inches.

Cat. No.	Mfr. No.	Description	Price Each
L-3936	185A	Automatic Drill with Eight Drill Points	\$4.63

Diamond Drill Holders



Drill holder has rubber grip with flange to protect the hand. Made of vanadium steel. Complete with ejector pin. Use with Hamrtwist drill points.

Cat. No.	Mfr. No.	Description	Price Each
L-4806	Type C	Rubber Holder Only and Pin	\$3.20

Diamond Percussion Twist Drills



Will Drill where Carbide Tipped Drills fail. Entire fluted length of drill is heat treated for drilling hardness. Its two cutting edges easily resharpened on standard wheels. Ideally suited for use with Electric Hammers and Air Hammers. Drop-forged masonry drill of Vanadium steel.

Cat. No.	Mfr. No.	Diam. Inches	Length Overall Inches	Depth of Hole Inches	Price Each
L-4040	720-3	$\frac{3}{16}$	$2\frac{3}{4}$	$1\frac{3}{8}$	\$.79
L-4044	720-4	$\frac{1}{4}$	$3\frac{1}{16}$	$1\frac{3}{4}$	.79
L-4046	720-5	$\frac{5}{16}$	$4\frac{1}{16}$	$2\frac{1}{2}$	.94
L-4050	720-6	$\frac{3}{8}$	5	3	1.08
L-4052	720-7	$\frac{7}{16}$	$5\frac{1}{4}$	$3\frac{1}{4}$	1.38
L-4054	720-8	$\frac{1}{2}$	$5\frac{3}{4}$	$3\frac{3}{4}$	1.67
L-4056	720-9	$\frac{9}{16}$	$5\frac{7}{8}$	$3\frac{3}{4}$	1.96
L-4058	720-10	$\frac{5}{8}$	$6\frac{1}{8}$	4	2.11

In use, rotate between hammer blows in clockwise direction.

Irwin Pole-Bor Wood Bits



Comes Like This with Conventional Taper Square Shank for Use in Hand Braces



Cut Off Taper Square Shank for use in Both Hand Braces and Electric Drills

Approximately 18 inches long, with 12-inch twist and 6-inch shank.

Cat. No.	Mfr. No.	Size Inches	Price Each
415T	415T	$\frac{6}{16}$	\$1.87
415T	415T	$\frac{7}{16}$	1.87
415T	415T	$\frac{8}{16}$	1.94
415T	415T	$\frac{9}{16}$	2.00
415T	415T	$\frac{10}{16}$	2.06
415T	415T	$\frac{11}{16}$	2.14
415T	415T	$\frac{12}{16}$	2.27
415T	415T	$\frac{13}{16}$	2.40
415T	415T	$\frac{14}{16}$	2.67
415T	415T	$\frac{15}{16}$	2.87
415T	415T	$\frac{16}{16}$	3.00
415T	415T	$\frac{17}{16}$	3.20

Millers Falls Hand Drills

Single Speed — Capacity, 0 to 1/4 Inch



Length, 12 7/8 inches. With wide rim on large drive gear. Easily grasped by thumb and fingers to start small drills on delicate work. Steel drive and equalizing pinions, nickel-plated. All gears machine cut. Nickel-plated 3-jaw chuck holds 0 to 1/4-inch round shank drills. With one set of eight No. 403 drill points, 1/16 to 1/4 inch in diameter. Red enameled gear; rim polished and nicked. Black enameled frame. Tropical hardwood handle holds drill points. Handle ferrules bright nicked. Packed 1 in box.

Cat. No.	Mfr. No.	Wt. Lbs.	Price Each
L-3913	5-A	1 5/8	\$6.17

Greenlee Angle-Screwdrivers

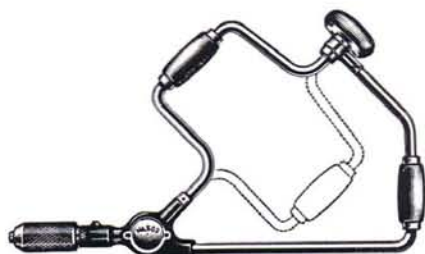


For quick, easy driving of telephone angle-screws without pre-boring. Standard 5/16-inch size. Approximate length, 4 inches. Saves worker's hands from injury. Simply insert angle screw in driver which lines up screw with center of drive; then give a few turns with a regular brace.

Barrel of driver protects upper threaded end of screw from marring, holds it straight and eliminates twisting. Body is painted green; extra-heavy shank is forge black.

Cat. No.	Mfr. No.	Wt., Lbs. per Doz.	Price Each
L-4078	727	5	\$1.25

Millers Falls Corner Braces



Master chuck holds square, No. 1 Morse Taper, and round shanks from 1/8 to 1/2-inch in diameter. Machine-cut, case-hardened gears, fully enclosed. Ball thrust bearing at base of chuck. Ball bearing head. Handles have inserted metal rings. All exposed metal parts, except frame, polished, nickel-plated and buffed. Length, 17 inches.

Sweep, 10 inches. Frame is black enameled. Head and handles mahogany finished hardwood.

Cat. No.	Mfr. No.	Wt. Lbs.	Price Each
L-3085	502A	4 5/8	\$14.00

Prices shown are subject to change without notice.

Greenlee Bit Extensions



Strong enough to drive bit up to 1-inch diameter yet small enough to follow 5/8-inch size. Positive lock insures absolute grip on shank at all times to prevent holding sleeve from loosening while boring or withdrawing.

Cat. No.	Mfr. No.	Wt. Lbs.	Price Each
L-2592	900-18	1 1/8	\$3.13
L-2594	900-24	1 3/8	3.34

Greenlee Electric Drill Bits

Designed for use in portable electric drills. They have fine-pitch screw points to compensate for high rpm. of electric drills. Completely heat-treated for extra strength, and shanks are accurately machined for precise alignment. On shank sizes 3/2 inch and larger, shanks have three flats to properly engage a three-jaw chuck.

Klein Stripping Tools

It's easy to strip insulation with the new Klein stripping tool. All that is necessary is to cut a small section of the insulation away with an electrician's knife, insert the point of the tool in the hole, and pull the tool toward you. Insulation may be slit from a few inches to as many feet as desired. Handle is made of cast aluminum with grip shaped to fit the hand; knife is of tempered tool steel and may be sharpened and is easily removed for replacement.

Cat. No.	Mfr. No.	Description	Price Each
L-9888	1558	Stripping Tool Complete	\$2.25
L-9889	058-K	Extra Knives	.90

Greenlee 56-Pt. Electric-Drill Bits



With 12-in. twist and overall length approximately 16 in.

Cat. No.	Mfr. No.	Size Inches	Shank Diam. Inches	Price Each
L-2513	56-PT- 6	3/8	1/4	\$1.57
L-2514	56-PT- 7	1/2	1/4	1.60
L-2516	56-PT- 8	1/2	1/4	1.67
L-2518	56-PT- 9	9/16	5/16	1.77
L-2520	56-PT-10	5/8	5/16	1.90
L-2522	56-PT-11	11/16	23/64	2.07
L-2524	56-PT-12	3/4	23/64	2.30
L-2530	56-PT-13	13/16	23/64	2.47
L-2532	56-PT-14	7/8	23/64	2.63
L-2533	56-PT-15	15/16	23/64	2.90
L-2534	56-PT-16	1	23/64	3.07

Diamond N 4-Point Drills

18-Inch Length



Made of high grade octagon drill rod. Heat-treated. Also available with tapered shanks to fit electric hammers. Also available in 8 and 12-inch lengths.

Cat. No.	Mfr. No.	Length Inches	Size Inches	Price Each
L-4047	700	18	1/4	\$.59
L-4051	700	18	3/8	.59
L-4065	700	18	1/2	.67
L-4071	700	18	5/8	.80
L-4077	700	18	3/4	.93

Millers Falls Screwdrivers



Torque tested blades.

Hammer-forged, heat-treated blade, finely polished. Pinned nickel-plated ferrule. Mahogany lacquered hardwood handle.

Cat. No.	Mfr. No.	Length Blade Inches	Diam. Blade Inches	Price Each
L-6390	909	2	$\frac{7}{32}$	\$.59
L-6391	909	3	$\frac{7}{32}$	.59
L-6392	909	4	$\frac{7}{32}$	.59
L-6393	909	5	$\frac{5}{16}$	.59
L-6394	909	6	$\frac{5}{16}$	.66
L-6395	909	8	$\frac{3}{8}$	.87
L-6396	909	10	$\frac{3}{8}$	.93
L-6397	909	12	$\frac{3}{8}$	1.10
L-6398	909	18	$\frac{3}{8}$	1.83

Millers Falls Cabinet Screwdrivers



Hammer-forged, torque-tested blade, hardened, tempered and polished. Hardwood handle fluted for grip. Mahogany lacquer finish. Heavy steel ferrules, pinned on.

Cat. No.	Mfr. No.	Length Blade Inches	Diam. Blade Inches	Price Each
L-6399	355	$2\frac{1}{2}$	$\frac{7}{32}$	\$.57
L-6400	355	$3\frac{1}{2}$	$\frac{7}{32}$	.57
L-6401	355	$4\frac{1}{2}$	$\frac{7}{32}$	.57
L-6402	355	$5\frac{1}{2}$	$\frac{7}{32}$	.63
L-6403	355	$6\frac{1}{2}$	$\frac{7}{32}$	.63
L-6404	355	$8\frac{1}{2}$	$\frac{7}{32}$	.73

Irwin Machinist Screwdrivers



Irwin screwdrivers with insulated handles of crystal-clear amber Irwinoid (plastic)—indestructible, shock-proof. Hammering, hard-usage, grease or oil won't hurt them. Round shank of alloy tool steel, tempered and hardened. Highly polished.

Cat. No.	Mfr. No.	Length Blade Inches	Diam. Blade Inches	Price Each
L-6427	400	3	$\frac{3}{16}$	\$.32
L-6433	400	6	$\frac{5}{16}$	.47
L-6437	400	8	$\frac{7}{8}$	.68

Irwinoid Cabinet Screwdrivers



Similar to the Irwinoid Machinist in construction—has the same amber plastic handle which withstands blows, oil, grease and other solvents. Insulated and shock proof. Alloy tool steel blades, highly tempered. Sides of blade in line with shank—especially adapted to electrical work. Convenient for countersunk screws.

Cat. No.	Mfr. No.	Length Blade Inches	Diam. Blade Inches	Price Each
L-6449	400-C	3	$\frac{3}{16}$	\$.29
L-6455	400-C	6	$\frac{5}{16}$	.33
L-6459	400-C	8	$\frac{3}{16}$	.35

Yankee Phillips Screwdrivers



Straight screwdriver with special blade for Phillips recessed head screws. Black hardwood handle, chromium plated metal parts.

Cat. No.	Mfr. No.	Length Blade Inches	Drives Screws No.	Price Each
L-6465	2501	3	2, 3, 4	\$.52
L-6467	2502	4	5, 6, 7, 8, 9	.56
L-6468	2703	6	10, 12, 14, 16	.52

Yankee Spiral Ratchet Screwdrivers

Quick Return Type

Improved spiral ratchet screwdrivers. Drives or draws screws by pushing on handle for ratchet movement or, can be locked rigid if desired.

Light Screwdrivers



Cat. No.	Mfr. No.	Style	Length Open Inches	Length Closed Inches	Price Each
L-6418	135A	Light	$13\frac{1}{4}$	$10\frac{1}{4}$	\$5.63

Standard Screwdrivers



Cat. No.	Mfr. No.	Style	Length Open Inches	Length Closed Inches	Price Each
L-6414	130A	Standard	20	$14\frac{3}{4}$	\$6.33

Millers Falls Hammer-Forged Cold Chisels



Carefully heat-treated for uniformly high grade chisel. Ground and polished blade and head. Head has vermilion lacquer finish.

Cat. No.	Mfr. No.	Width Blade In.	Diam. Stock In.	Length Overall In.	Wt., Lbs. per Doz.	Price Each
L-3535	1150	$\frac{1}{4}$	$\frac{1}{4}$	5	$\frac{7}{8}$	\$.46
L-3342	1150	$\frac{3}{8}$	$\frac{5}{16}$	5	$1\frac{3}{4}$	.50
L-3344	1150	$\frac{1}{2}$	$\frac{3}{8}$	5	$2\frac{3}{8}$	.57
L-3339	1150	$\frac{5}{8}$	$\frac{1}{2}$	$6\frac{1}{2}$	$4\frac{1}{4}$	.73
L-3340	1150	$\frac{3}{4}$	$\frac{5}{8}$	7	7	.86
						1.40

Telephone Files

A complete line of files for telephone construction work. Best quality steel, designed to do specific jobs.

Combination Files

Cat. No.	Size In.	Cut {Single One Side, Double One Side}	Price Each
L4192	8x1		\$.79

Linemen's Files

Cat. No.	Size In.	Cut Double, Both Sides	Price Each
L-4193	10x1		\$.93

Splicers' Rasps

Cat. No.	Size In.	Cut Float Cut, Both Sides	Price Each
L-4194	10x1		\$.97

File Cleaners

Steel back, frame and face. Wire handle, steel wire bristles. With pick for removing any substance from file.

Cat. No.	Description File Center	Price Each
L-4199		\$.59

Atkins Hacksaw Frames



Black plastic handle now designed for greater ease in cutting. Spring steel round edge frame $\frac{3}{16}$ inch thick, $\frac{1}{16}$ inch wide. Will cut at four different angles. Chrome finish.

Cat. No.	Mfr. No.	Adj. for Length Blade, In.	Price Each
L-4254	10	10 & 12	\$2.60

Atkins Tuttle Tooth Pruning Saws



High grade silver steel. Extra fine temper sharp teeth. Handle of kiln dried beech with extra large grip reinforced with dowel pin. Lacquered and polished.

Cat. No.	Mfr. No.	Length Inches	Price Each
L-6336	40-A	20	\$5.33
L-6338	40-B	24	6.44

Atkins Curved Pruning Saws



Pull cut. Favorite of telephone linemen and tree surgeons. Closed handle.

Cat. No.	Mfr. No.	Length Inches	Price Each
L-6318	3-14	26	\$5.65

Atkins Cablemen's Saws



A saw with coarse teeth on one side for cutting through lead sheath and fine teeth on the other side for cutting the wire core.

Cat. No.	Mfr. No.	Length Inches	Price Each
L-6332	24-12	12	\$2.53

Atkins AAA Standard Hand Hacksaw Blades



Flexible back; hard edge; non-breakable.

For Cutting Annealed Tool Steel, High Speed Steel, Rail, Bronze, Aluminum, Light Structural Shapes, Brass, Copper and Cast Steel—Raker Set

Cat. No.	Mfr. No.	Length In.	Width In.	Thick. In.	Teeth per In.	Price per 100
L-2973	300-10	10	$\frac{1}{2}$	.025	18	\$11.22
L-2975	300-12	12	$\frac{1}{2}$	.025	18	13.75

For Cutting Iron, Steel, Brass and Copper Tubing, Wrought Iron Pipe, Drill Rod, Conduit, Extra Light Structural Shapes, Metal Trim and Sheet Metal Thicker than 18-Gage—Undulated Set

L-2981	310-10	10	$\frac{1}{2}$	.025	24	\$11.22
L-2978	310-12	12	$\frac{1}{2}$	.025	24	13.75

For Cutting Same Materials as No. 310, Except Thinner than 18-Gage—Undulated Set

L-3073	315-10	10	$\frac{1}{2}$	.025	32	\$11.22
L-2979	315-12	12	$\frac{1}{2}$	.025	32	13.75

Prices shown are subject to change without notice.

Estwing Curved Claw Hammers



Forged one-piece head and handle with genuine leather grip.

Cat. No.	Mfr. No.	Wt. Oz.	Price Each
L-4580	E-16-C	16	\$3.32
L-4582	E-20-C	20	3.50

Estwing Engineers' Hammers



Forged in one piece. The non-slip leather grip has proven durable in all climates.

Cat. No.	Mfr. No.	Wt. Oz.	Length Inches	Price Each
L-4572	E-40-L	40	14	\$3.40

V&B Bell Face Nail Hammers



Extra refined steel, drop forged, tempered faces and non-slip claws that will firmly grip any size nail from brad to spike.

Cat. No.	Mfr. No.	Wt. Head Oz.	Length Inches	Price Each
L-4615	S-20	20	14	\$2.83
L-4614	S-16	16	13	2.67

V&B Linemen's Double Face Hammers



A short, heavy hammer used by linemen. Full polished faces and heads, smooth black body. Best grade two-tone hickory handle.

Cat. No.	Mfr. No.	Wt. Head Oz.	Length Inches	Price Each
L-4612	L-36	36	15	\$3.20

Axes Dayton Pattern



Cat. No.	Mfr. No.	Wt. Head Lbs.	Price Each
L-2310	AX-3 $\frac{1}{2}$	3 $\frac{1}{2}$	\$4.74

Klein-Line Tool Belts



A full-floating, sliding trace of Klein-Kord material—1¾ in. wide—carries single bar Dee rings. Trace slides through leather guides allowing approx. 6 in. of free movement. Tool strap, 1¾ in. wide, has five tool loops—is riveted on apron with reinforcing strap.

The soft, pliable, latigo leather cushion—4¾ in. wide—is pad-lined and edge-rolled for comfort.

The 2-in. wide belt strap is of heavy harness leather with drop-forged buckle. Buckle and Dee rings tested to 1500 pounds. All sewing is lock stitched with hot waxed linen thread—rivets are solid copper, hand set. Fitted with tape thong, knife snap and ring for glove pouch. Furnished with pocket tabs on both sides, punched for lacing. One, two or three partition holsters can be furnished to order.

Cat. No.	Mfr. No.	Size Inches	Price Each
5249	5249	38	\$32.30
5249	5249	40	32.30
5249	5249	42	32.30
5249	5249	44	32.30

Other sizes to order.

Buhrke Linemen's Body Belts



Super comfort safety belt. Body strap is floating type, 2 in. wide. Saddle is 5 in. wide. Right angle Dee ring is securely stitched and riveted to saddle; inside cushioned with flexible full grain elk leather.

Dee rings are also padded. Pockets can be swung on either left or right sides.

Cat. No.	Mfr. No.	Size Inches	Price Each
L-2462	1299	38	\$19.20
L-2463	1299	40	19.20
L-2464	1299	42	19.20

Klein Leather Tool Belts



First quality harness leather. Cushion, 3½ in. wide, carries std. double-bar Dee rings. Loop layer, 1½ in. wide, formed into tool loops by riveting to cushion and passes through Dee rings. Drop-forged hardware tested to 1500 lb. Hot waxed lock-stitched sewing. Gal-

vanized finish on Dee rings and buckle.

Cat. No.	Mfr. No.	Size Inches	Price Each
L-2427	5204	38	\$11.75
L-2428	5204	40	11.75
L-2429	5204	42	11.75
L-2430	5204	44	11.75

Other sizes to order.

Directions to Assure Proper Fit of Belts

Linemen's belts are usually specified by waist or body size, but to assure comfort it is important that Dee rings do not rest on hipbones. The correct position of the Dee rings is about one inch in front of hipbones. To obtain correct size belt, measure from hipbone to hipbone around the back and add two inches. Then refer to table below and select belt size.

Dist. bet. Dee Ring.....in.	20	22	22	24	26	28
Belt Size.....in.	36	38	40	42	44	46

Klein-Kord Nylon Safety Straps

Red Cotton Center



Made of multiple plies of strong, finely woven nylon fricated in neoprene and vulcanized. Provides desired flexibility. The smooth surface gives long service, wears evenly and does not require dressing or treatment.

Cat. No.	Mfr. No.	Strap Width Inches	Strap Length Ft. In.	Description	Price Each
L-7339	5294	1¾	5 8	Std. Snaps, Stainless Clips.....	\$13.20
5294-7	5294-7	1¾	7 0	Std. Snaps, Stainless Clips.....	14.25
L-7258	KL-5233	1¾	5 8	Klein-Lok Snaps, Stainless Clips.....	14.95
KL-5294-7	KL-5294-7	1¾	7 0	Klein-Lok Snaps, Stainless Clips.....	16.40

Other lengths can be furnished to order.

Klein Leather Safety Straps



Klein's safety strap of first quality harness leather with metal parts of drop-forged steel. Solid copper rivets are hand burred. Free adjustment of strap to length desired. Furnished with drop-forged roller snaps.

Cat. No.	Mfr. No.	Strap Width Inches	Strap Length Feet	Strap Length Inches	Price Each
L-7280	5257-S	2	5	1½	\$14.75
L-7287	5257-L	2	5	10	14.85

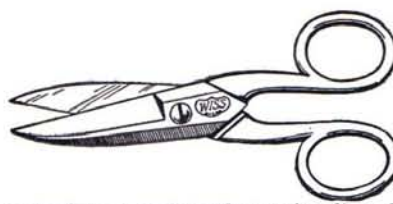
Buhrke Nylon Safety Straps



Six-ply, 1¾-inch woven nylon, bonded and vulcanized in Neoprene. Inner plies colored red for safety warning. Breaking strength over 3500 lbs.

Cat. No.	Mfr. No.	Strap Width In.	Strap Length Feet	Wt. Lbs.	Price Each
L-7331	1498N	1¾	6	3	\$15.85

Electricians' Scissors and Pockets



No. L-6375, 5-inch scissors with two stripping notches.

No. L-6376, 5-inch scissors without stripping notches.

No. L-5875, natural russet leather pocket with metal clip riveted

on back to permit pocket to be clipped over belt.

Cat. No.	Mfr. No.	Description	Price Each
L-6375	175-E5	5-Inch Scissors	\$2.06
L-6376	175-E	5-Inch Scissors	1.95
L-5875	6994	Leather Pocket	.50

Klein Linemen's Tool Pockets



No. L-5869

Top grade harness leather. Opening at bottom prevents accumulation of dirt or water. Top flap, double thickness leather for riveting to belt. Plier compartment for side-cutting pliers. **No. L-5869.** For screwdriver, sliding rule and pliers. **No. L-5867.** For plier and screwdriver.

Cat. No.	Mfr. No.	Overall Height In.	Max. Width In.	Wt., Lbs. per Dozen	Price Each
L-5869	5118-PRS	8¾	6½	8	\$3.85
L-5867	5118-S	8	4	5½	2.80

Buhrke All-Leather Tool Pouches



Natural strap leather utility pouches designed to hang from waist belt.

No. L-5948. Contains two front pockets for diagonal and long-nose pliers, and one large rear pocket for about four assorted tools.

No. L-5946. Has seven individual pockets for pliers, screwdrivers, and other small tools.

Cat. No.	Mfr. No.	Description	Price Each
L-5948	1049	Small Pouch	\$3.10
L-5946	1048	Large Pouch	4.75
L-2461	1050	Waist Belt	1.20

Klein Electricians' Waist Belts



A lightweight belt of genuine harness leather with tool loops and tape thong may be used with Klein tool pouches Nos. L-5791 and L-5977.

Cat. No.	Mfr. No.	Size Adjustable Inches	Wt., Lbs. per Dozen	Price Each
5207-M	5207-M	32 to 40	7	\$3.75
5207-L	5207-L	38 to 46	8	3.75

Klein Combination Tool Pouches



High-quality leather pouch specially designed for electricians. Has large gusseted utility pocket, two plier pockets, two screwdriver pockets and a knife snap. Used with Klein's Electrician's Waist Belts.

Cat. No.	Mfr. No.	Overall Height Inches	Max. Width Inches	Wt., Lbs. per Dozen	Price Each
L-5971	5126	8½	6½	7½	\$3.95
L-5976	5127	10	7	8	4.80

Buhrke Linemen's Tool Bags



Sturdy No. 8 canvas with leather bottom and one-piece construction. Straps at top keep bag closed when not being carried. A Naugahide tool bag made of very durable plastic fabric can also be supplied.

Cat. No.	Mfr. No.	Length Inches	Height Inches	Width Inches	Price Each
L-2320	250-20	20	15½	5½	\$11.60

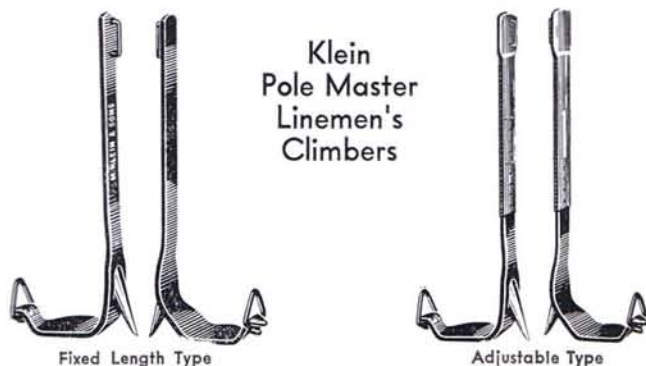
Klein Canvas Tool Bags



Made of one piece of white duck, this bag is reinforced with heavy leather on the bottom and 3½ inches up the sides. Mouth is formed by a 12-gauge steel frame. Has harness leather handles and two retaining straps with buckles.

Cat. No.	Mfr. No.	Length Inches	Wt. Lbs.	Price Each
L-2327	5102-18	18	3¼	\$12.05
L-2331	5102-24	24	4	13.35

Prices shown are subject to change without notice.



Klein
Pole Master
Linemen's
Climbers

Extra wide stirrup gives more arch support. Made in matched pairs—one "right," the other "left"—with drop forged triangular strap rings at ankle. Stock sizes in fixed length pattern: 15, 15½, 16, 16½, 17, 17½ and 18 in., measured from instep to end of shank. Adjustable pattern climbers are adjustable to 15, 15½, 16, 16½, 17, 17½ and 18 in., measured from instep to top of slide. Special sizes in either fixed length or adjustable climbers made to order. *Every climber individually tested.* Gaffs 3½ in. long measured on the outside. All climbers have aluminum finish. When Ankle Straps No. 5301-16 or 5301-26 are desired attached at the factory, specify on your order. No extra charge.

Cat. No.	Mfr. No.	Description	Price per Pair
1945	1945	Fixed Length; Drop Forged Triangular Strap Rings at Ankle.....	\$8.00
L-3565	1945-A	Adjustable; Drop Forged Triangular Strap Rings at Ankle.....	9.60
L-3595	C-1945-A	Adjustable; Complete with No. 5301-9 Calf Straps, No. 5301-26 Ankle Straps and No. 8207 Climber Pads.....	19.05



Fixed Length Type

Klein Standard Climbers

Fixed length climbers available in 15, 15½, 16, 16½, 17, 17½ and 18 inch sizes. Adjustable climbers can be fitted by adjusting sliding portion of leg iron to all sizes. Adjustable type can be ordered as a complete assembly. The complete assembly includes climbers, calf straps, ankle straps and climber pads. Gaffs on both are 3½ in. long. Both have riveted strap loops, are individually tested.



Adjustable Type

Cat. No.	Mfr. No.	Description	Price per Pair
1901-M	1901-M	Fixed Length.....	\$7.25
L-3570	1901-M-A	Adjustable.....	8.80
L-3597	C-1901-M-A	Adj.; Com. with Straps and Pads.....	16.75

Klein Angle Shape Climber Pads



Right and left pad—of high grade latigo leather, padded for maximum comfort. The wing of the pad protects the leg from chafing and provides a more secure hold for the climber.

Cat. No.	Mfr. No.	Description	Size In.	Wt., Lbs. per Dozen	Price per Pair
L-5595	8210	Padded	8x8	12	\$4.85

Klein Straps for Climbers



Set consists of two upper or calf straps 1¼x22 in. with 4x4-in. pads as shown and two lower or ankle straps 1¼x22 in. First quality harness leather; buckles are drop forged and fitted with roller.

Cat. No.	Mfr. No.	Description	Price per Pair
L-7286	5301-1	Plain.....	\$7.00
L-7288	5301-2	With Sheep-Lined Pads.....	7.65
L-7290	5301-3	With Felt-Lined Pads.....	7.60
L-7292	5301-4	Straight Strap without Pad (2 Straps).....	3.05

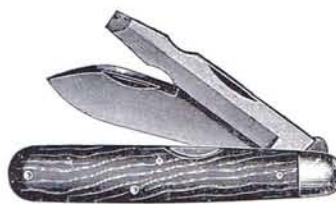
Klein Linemen's Wrenches



At the larger end the openings are 1½-inch and 1⅝-inch, the smaller end ⅞-inch and 1-inch. There is a hole provided at the larger end so that the wrench may be used for turning in standard pole steps.

Cat. No.	Mfr. No.	Size In.	Price Each
L-8034	3146	13	\$2.75

Klein Xela Electricians' Knives



Handy combination. Blades made of high grade cutlery steel, carefully tempered.

Locking feature on screw-driver blade automatically locks blade when open; slight side pressure of thumb releases lock and permits blade to close. Handle of cocobola.

Cat. No.	Mfr. No.	Wt., Lbs. per Dozen	Price Each
L-5066	1550-2	2	\$1.80

Klein Chicago Fish-Tape Pullers



To engage puller on fish-tape, place tape sidewise in slot and give puller a slight forward motion while pushing tape deeper into slot; this slips tape under ratchet wheel; then pull. Slide forward on tape to position for new bite.

Grips like vise; never slips. Does not injure tape. Length, 3¾ in.; can be carried in pocket. Fish-tape not furnished.

Cat. No.	Mfr. No.	Description	Wt., Lbs. per Dozen	Price Each
L-6008	1629	For Standard Fish Tapes	2½	\$1.80

Buhrke Installers' Tool Pouches



Expanded type for general tool carrying. 4 inches wide, 5 inches deep with 1 inch gusset reinforced with fibre strips. Outside compartment is 4 inches wide.

Cat. No.	Mfr. No.	Price Each
L-5947	1045	\$3.90

Klein Chicago Grips

For Bare Wires — Solid and Strand



Steel body piece, lever and draw parts. Plain jaw as suited for bare wire. Letter B after Mfr. No. indicates bronze-lined jaw, preventing slipping and abrasion of wire.

Cat. No.	Mfr. No.	MAX. B&S WIRE			MIN. B&S WIRE			Ap- prox. Safe		Price Each
		No.	In.	Type	No.	In.	Type	Open.	Load	
L-4484	1613-30	6	.162	Solid	12	.081	Solid	.22	1500	1½ \$3.20
L-4397	1613-30B									4.80
L-4486	1613-40	0	.373	Strand	10	.102	Solid	.44	2250	3 5.40
L-4398	1613-40B									7.60
L-4399	1613-50									10.25
L-4400	1613-50B	4/0	.552	Strand	6	.162	Solid	.62	4000	8 15.20

Klein Improved Chicago Grips

For Messenger, Guy Strand and Conductors
Up to 1½-Inch Diameter



Long jaws; increased leverage. Jaws prevent slippage and damage to galvanized finish or to copper or aluminum conductors. For use on any strand or solid wire up to 8000-pound load. Forged from heat-treated alloy steel.

Cat. No.	Mfr. No.	MAX. CABLE			MIN. CABLE			Ap- prox. Safe		Price Each
		B&S Dia.	In.	Type	B&S Dia.	In.	Type	Open.	Load	
L-4494	1628-5	4/0	.522	{7-Strand Copper}	.198	6	ACSR	.58	8000	6 \$9.80

Klein Haven's Steel Grips



No. L-4474

Heat-treated solid steel drop forging. Pear-shaped 7/8x1/8-inch eye and roller fitted to body yoke permit freedom of motion. Instantaneous hold, yet a shake on tackle rope releases grip. Hand-cut serration in face of eccentric prevents slipping. Galvanized finish (except eccentric).

Cat. No.	Mfr. No.	MAX. OPEN			MIN. OPEN			Max. Wire		Approx. Wt. per Doz.	Price Each
		Size	Dec.	In. Equiv.	Size	Dec.	In. Equiv.	Size	Lbs.		
L-4472	1604-10	1¼	.24	1/16	.06			No. 4 B&S	2500	12	\$3.75
L-4474	1604-20	1½	.53	¼	.14			1½-Inch	5000	28½	4.80

Prices shown are subject to change without notice.

Klein Chicago Grips

For Messenger and Guy Strand, Heavy Cables,
Wire Rope, Etc.



Letter B after Mfr. No. indicates bronze-lined jaw for stranded conductors. Bronze lining prevents slippage and consequent surface abrasion of strand.

Cat. No.	Mfr. No.	MAX. CABLE			MIN. CABLE			Ap- prox. Safe		Price Each
		Size	Dec.	In. Equiv.	Size	Dec.	In. Equiv.	Open.	Load	
L-4496	1628-6	7/16	.438	3/16	.188			Galv. .50	8000	8½ \$13.50
L-4500	1628-6B							Steel .50		17.50
L-4498	1628-16	5/8	.625	5/16	.312			Strand .69	15000	15½ 23.75
L-4466	1628-16B									27.00

Klein Self-Lubricating Heavy Block Tackles



M. KLEIN & SONS

Consists of two special double sheave blocks. Bronze bushed, self-lubricating pulleys. Galvanized finish. Rope spliced to eye of block with galvanized thimble.

Cat. No.	Mfr. No.	Description	Wt. Lbs.	Price Each
L-2714	1802-40	With 30 Ft. of 1½-In. Rope	15½	\$17.60
L-2716	1802-50	With 30 Ft. of 2-In. Rope	17¾	20.20

Other lengths of rope furnished to order.

Klein Self-Locking Block Tackles



Consists of light steel shell blocks Galvanized, fitted with snubbing hook to lock load in any position. Hook shaped to fit under D.P. insulator on cross arm. Shipped unassembled.

Cat. No.	Mfr. No.	Description	Wt. Lbs.	Price Each
L-2712	1802-30	{With 25 Ft. of 3/8-In. Rope and No. 258 Detachable Anchor Hook}	3	\$6.05

Klein Hand Lines



M. KLEIN & SONS

Spliced to eye of snap hook with galvanized steel thimble. Snap hook is drop-forged and similar to those used on safety straps, except that it has round eye; it opens to 3/4 inch.

Cat. No.	Mfr. No.	Description	Wt. Lbs.	Price Each
L-4660	1803-60	{With 75 Ft. of 3/8-In. Rope and No. 443-A Drop-Forged Strap Hooks}	3½	\$5.95

Other lengths of rope furnished to order.



Coffing Safety Load Binders

This Coffing Safety Load Binder can be used for practically every telephone hoisting, pulling and binding job. It saves time because loads can be adjusted without releasing the load. It's safe, because load can be released slowly. No eccentric handle to fly and injure user.

Cat. No.	Mfr. No.	Cap. Lbs.	Std. Lift In.	Wt. Lbs.	Price Each
L-5280	A	3000	20½	11½	\$36.00

Coffing Safety Pull Ratchet Lever Hoists

Single Pawl

Adapts to all types of work where full stroke of handle is permitted.

Convertible types: Nos. ATG and FTG are convertible when special snap hook is unsnapped from connecting link at bottom of hoist and snap hook is allowed to act as lug, preventing end of chain from passing through super block.

Capacities for convertible types: No. ATG: 1-chain, ¾ ton, 112-inch lift; 2-chain, 1½ tons, 57-inch lift. No. FTG: 1-chain, 1½ tons, 112-inch lift; 2-chain, 3 tons, 57-inch lift.

Cat. No.	Mfr. No.	Rated Cap. Tons	Std. Lift In.	Net Wt. Lbs.	Price Each
L-4792	AG	¾	56½	14	\$64.50
L-4794	FG	1½	57	17	90.00
L-4793	ATG	1½	56½	25	80.50
L-4795	FTG	3	57	34	114.50

Power-Pulls

Has a lift of 72 inches. Auto-Matic let-down feature: to operate, move lever to forward position; moving handle forward releases load a notch at a time. Hand has rubber grip.

Uses preformed ¾-inch diameter aircraft cable; rated 4200 pounds.

Aluminum alloy ratchet wheel protected by bronze cable guard. Drop-forged slip hook easily changed for other accessories by removing clip-lock and heat-treated clevis pin. All steel parts cadmium-plated.

Cat. No.	Mfr. No.	Cap. Tons	Leverage	Wt. Lbs.	Price Each
72	72	¾	18:1	6½	\$23.00
72A	72A	1	36:1	7½	35.00
72S-6	72S-6	1½	20:1	6¼	22.95

Lufkin Sterling Woven Tapes



Tape width, 5/8 inch. Used by telephone and utility companies, etc. Marked one side only in feet, inches and ½ inches. Line has linen strands; leather reinforcement first end. Threader simplifies removal of old and attachment of new line. Clear markings, prominent figures. Last preceding foot number repeated at each inch or each 10th of foot. Zero begins at outer end of ring. Brown leather case, hand-stitched, has plated steel liner and folding flush handle. Nickel-plated mountings.

Cat. No.	Mfr. No.	Length Feet	Wt. Oz.	Price Each
L-7448	403	50	12	\$8.49
L-7450	406	100	24	13.75

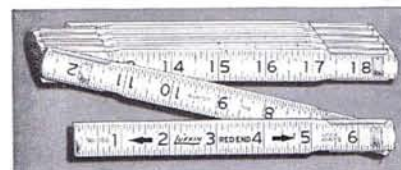
Lufkin Mezurall Tape-Rules



For standard measuring, gaging height or depth and for inside measuring. Blade width, ½ inch. Compact and lightweight. Nickel-plated blade has dark and prominent markings: both edges, inches to 16ths; first 6 inches upper edge to 32nds. Case is 9/16 inch thick and 2 inches at greatest width. Blade stiffened by concave forming; manually withdrawn and returned to case; remains set at any length withdrawn and does not spring back into case.

Cat. No.	Mfr. No.	Length Feet	Wt. Oz.	Price Each
L-7425	926	6	3	\$1.33

Lufkin Red End Spring Joint Rules



Flexible hardwood, 5/8 inch wide. White. Has 6-inch folds, patented lock joints, strike plates and solid brass mountings. Marked consecutive inches to 16ths; both edges of both sides.

Cat. No.	Mfr. No.	Length Feet	Wt., Lbs. per Dozen	Price Each
L-6272	066	6	3½	\$1.20

Ideal Fish Tapes



Cat. No.	Mfr. No.	SIZE TAPE Lgth. Ft.	Size In.	Ship. Wt. Lbs.	Price Each
L-7996	31-004	50	1/8x.060	1½	\$1.65
L-8005	31-036	100	1/8x.060	3	2.95

NOTE: .060—1/16.
Each tape individually packaged.

Arrow Stapling Guns



Arrow T-25 Stapling Gun automatic jam-proof operation for any kind of wire up to 1/4-inch in diameter. Will not injure wire. Tapered head gets into tight corners. Tack-pointed staples spread to lock themselves into wood for good holding power.

Cat. No.	Mfr. No.	Description	Wt. Lbs.	Price Each
L-6746	T-25	Gun Only	2	\$10.00

Staples

Made of .050 wire, round top. Packed 5000 per box; order by box.

Cat. No.	Length Staple In.	Color of Staple	Wt., Lbs. per Box	Price per Box
L-6755	3/8	Natural	1 3/4	\$2.67
L-6757	3/8	Brown	1 3/4	3.00
L-6758	3/8	Ivory	1 3/4	3.00
L-6747	1/16	Natural	1 3/4	2.67
L-6749	1/16	Brown	1 3/4	3.00
L-6750	1/16	Ivory	1 3/4	3.00
L-6751	9/16	Natural	2	3.00
L-6753	9/16	Brown	2	3.34
L-6754	9/16	Ivory	2	3.34
L-9846	3/8	Bronze	1 3/4	6.00
L-9812	1/16	Bronze	1 3/4	6.00
L-9841	9/16	Bronze	2	6.67

Parallel Wire Slitters



For use with parallel neoprene-jacketed drop wires. Lightweight; vest pocket size.

Uses standard safety-razor blade for knife.

Three different size ports accommodate different sizes of wire.

Furnished with blade.

Cat. No.	Mfr. No.	Wt. Oz.	Price Each
L-7508	PW-1718	2	\$1.75

Reliable Terminal Wrenches



Finger type terminal socket wrench that will not injure small gauge wire. Has hex ends for 3/8 and 7/16 nuts with deep socks for terminal posts. Plated steel hex ends are separate pieces molded in bright red phenolic and thus insulated from each other.

Cat. No.	Mfr. No.	Diam. Inches	Length Inches	Price Each
L-8060	15	1	3	\$1.65

Buhrke Rubber Glove Carriers



Made of 36-ounce (4/0) hard-woven belting duck; heavy gussets. Front, bottom, back and flaps of one piece.

Furnished with snap for Dee ring on belt. Ventilating eyelets in bottom.

Cat. No.	Mfr. No.	Width In.	Length In.	EXPANSION INCHES		Price Each
				At Top	At Btm.	
L-2337	1106	8	15	5 1/2	2 3/4	\$4.25

Surety Linemen's Gloves



Provides large margin of safety. Available with curved hand in B weight. Meets A.S.T.M. specifications. Tensile strength insures maximum resistance to snagging and abrasion. Current leakage regulated to be well within specifications and yet permit very high puncture voltage (usually around 35000 volts). Maintains high dielectric strength even if used for several years with no change in power factor or leakage.

Cat. No.	Mfr. No.	Size	Length Inches	Price per Pair
L-4442	E-74	9	14	\$8.63
L-4446	E-74	10	14	8.63

Leather Protectors for Rubber Gloves

Made of imported goatskin leather with adjustable straps.

Cat. No.	Mfr. No.	Description	Price per Pair
L-5962	1005	For Glove Sizes 9 and 10	\$3.25

Buhrke Non-Metallic Collapsible Buckets



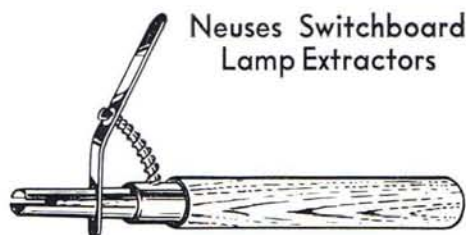
Made of No. 1, 29-ounce canvas. Bottom is 1/8-inch leather pressed to shape, hardened and waterproofed.

Equipped with spliced 3/8-inch manila rope handle in which has been placed a heavy galvanized swivel marine snap for hoisting, suspending from wires, etc. Bucket is equipped with 1/4-inch steel ring in top.

Cat. No.	Mfr. No.	DIAM. IN.		Ht. In.	Price Each
		Top	Btm.		
L-3186	1084-S	12	9	12	\$8.15

Prices shown are subject to change without notice.

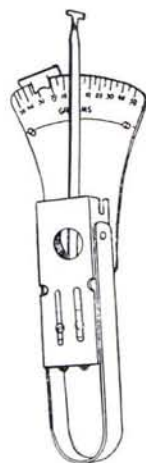
Specialty Tools for Your Dial Switchboard



**Neuses Switchboard
Lamp Extractors**

Handy, fast, saves time. Grasps lamp firmly and evenly for extracting from or pushing into socket.

Cat. No.	Mfr. No.	Price Each
L-9206	553A	\$1.68



Neuses Spring Tension Gauges

These gauges consists of a nickel silver frame on which are assembled an indicating spring, a folding handle and an adjustable tension attachment. The folding handle when closed, serves as a protector for the indicating spring. The adjustable tension attachment provides for setting the indicating spring at an initial tension

Scale is calibrated on front and back so gauge can be used for indicating left to right or right to left.

Overall size, $4\frac{1}{2} \times 1\frac{1}{2}$ inches.

Cat. No.	Mfr. No.	Description	Price Each
L-4413	STG-2-D	(Illustrated) Scale Extends 50 Grams on Either Side of Center Zero in 5-Gram Steps (#70-D Type, 50-0-50 Grams).....	\$6.95
L-9601	STG-2-H	Scale Extends 30 Grams from Zero at Side in 2-Gram Steps (#70-H Type, 0-30 Grams).....	6.95
L-4403	STG-2-J	Scale Extends 150 Grams from Zero at Side in 5-Gram Steps (#70-J Type, 0-150 Grams).....	6.95
L-9603	STG 2-F	Scale Extends 10 Grams on Either Side of Center Zero in 1-Gram Steps (#70-F Type, 10-0-10 Grams).....	6.95

Neuses Guide Pin Screwdrivers



Screw guiding screwdriver for small "hole-in-head" screws. Retractable guide pin makes screw insertion or removal easy.

Cat. No.	Mfr. No.	Price Each
L-6339	N-2348	\$3.80



**Neuses Dial Bank
Cleaning Brushes**

For brushing dust and other accumulations from the terminal levels of selector and connector banks in step-by-step dial systems. Has dielectric fibre handle and best grade nylon bristles. Overall size, $2\frac{3}{8} \times 6$ in.

Cat. No.	Mfr. No.	Price Each
L-9207	389A	\$1.89

Neuses Contact Burnishers



With pocket clip and magazine of extra blades. Blades fit into chuck at end of barrel. Practically any degree of blade rigidity is possible by varying depth of blade in chuck. Black plastic barrel and cap permit working on "live" contacts.

Overall dimensions: length, $4\frac{1}{4}$ inches; diameter, $\frac{3}{8}$ inch. Blade: width, $\frac{3}{16}$ inch; length, $1\frac{1}{2}$ inches.

Cat. No.	Mfr. No.	Description	Price Each
L-9876	CB-5	Complete with 6 No. 266B .007-In. Thick Blades.....	\$3.80
L-9605	CB-54	Complete with 6 No. 466B .0035-In. Thick Blades.....	3.95

Extra Blades

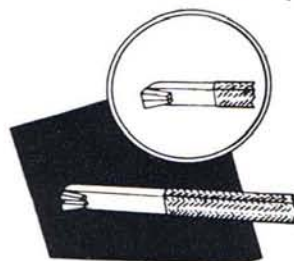
Cat. No.	Mfr. No.	Description	Price per 100
L-2933	266B	.007-Inch Blades.....	\$9.50
L-2929	466B	.0035-Inch Blades.....	12.00

Ball Ended Abrasive Rods

For cleaning concave contact points. Length, $1\frac{1}{4}$ inches; diameter, .025 inch with mildly abrasive .020-inch diameter balls at ends.

Cat. No.	Mfr. No.	Description	Price per 50
L-6161	266C	Fits Nos. CB-5 and CB-54 Contact Burnishers.....	\$14.50

Neuses Spring Adjusters



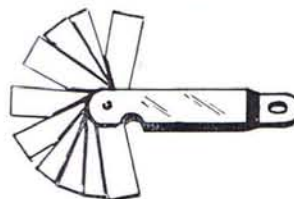
These spring benders are used for adjusting contact springs of many relays. The $6\frac{3}{4}$ -in. long handle is covered with an insulating plastic sleeving and the slots permit use with most spring sizes. Adjuster heads are hardened and tempered.

Width, $\frac{1}{4}$ inch; thickness, $\frac{1}{8}$ inch.

Cat. No.	Mfr. No.	Description	Price Each
L-2097	SA-5	(#505-A Type) .014-In. Wide Slot.....	\$2.75
L-9208	SA-7	(#507-A Type) .032-In. Wide Slot.....	2.75

Special Spring Adjusters for getting into "tricky" places are available; information on request.

Neuses Thickness Gauges



Easy-to-use feeler gauge set mounted in a holder. Individual gauges are removable and replaceable. Holder is nickel silver, gauge leaves are tempered steel chromium plated and ground to exact thickness.

Leaves: length $1\frac{5}{16}$ in.; width, $\frac{5}{16}$ in.

Cat. No.	Mfr. No.	Description	Price per Set
L-9606	N-74	Set Complete with 12 Leaves—.002, .003, .004, .005, .006, .007, .008, .009, .010, .011, .012 and .018 Inch.....	\$2.90

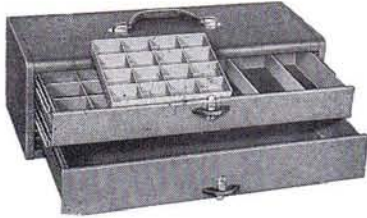
Neuses Individual Thickness Gauges

Feeler gauges are of chromium-plated tempered steel. Length, $1\frac{1}{2}$ in.; width, $\frac{1}{2}$ in. Ground to following exact thicknesses: .004, .006, .008, .010, .013, .015, .017, .029, .032, .035, .038, .047, .050 and .053 inch.

Cat. No.	Mfr. No.	Description	Price Each
N-92	N-92	Thickness Gauge Leaves.....	\$3.30
L-9607	N-131A	Sliding Member Ring for Gauges.....	.15

(Large) TOOLS

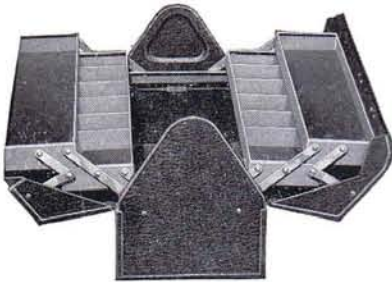
Kennedy Portable Service Tool Kits



Completely portable with roominess of bench type tool chest. Equipped with two large easily sliding drawers. Upper drawer divided into 12 small compartments on one end, and three larger compartments on the other. Removable 16 compartment tray over this. Lower drawer divided in two large compartments. Snap type key locks on both drawers. Over-all kit finished in dark brown ripple baked enamel.

Cat. No.	Mfr. No.	Size Inches	Wt. Lbs.	Price Each
L-3016	2020	20x8 $\frac{3}{4}$ x6 $\frac{3}{4}$	17	\$11.65

Kennedy Metal Tool Boxes



Heavy duty kit for general plant work. Has four trays linked to lids. Fitted with leather handle, lock and side catches. Three skidrails are welded to bottom. Finished in brown baked enamel with green baked enamel trays.

Cat. No.	Mfr. No.	Size In.	Wt. Lbs.	Price Each
L-3018	1018	18x10x12	17 $\frac{1}{2}$	\$13.01

Kennedy Flat-Top Tool Boxes



All purpose tool kit especially suited for telephone work. Convenient divided carrying tray is supported by sides of box. All-steel construction with protective irons on all corners. Fitted with hasp and staple catch and metal handle. Green baked-enamel finish.

Cat. No.	Mfr. No.	Size In.	Wt. Lbs.	Price Each
L-3014	K-20	21x8x9	11	\$7.39

Drop Wire Reels



Combination payout and takeup reel designed for use in a horizontal or vertical position, either on or away from truck. The outer spider, which is held in position by a plunger-type lock, is removable to permit placing up to four widths of coil. Reel is equipped with an adjustable friction type disk brake for controlling wire tautness and payout speed.

Cat. No.	Mfr. No.	Description	Wt. Lbs.	Price Each
L-6040	PR	Drop Wire Reel.....	32	\$44.00
L-3124	...	Truck Mounting Brackets..	12	15.80

Hykon Jumper Wire Reels

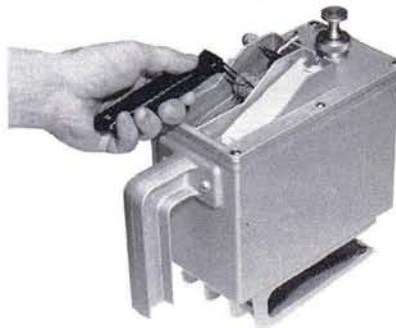


Double unit reels that permit reeling from any angle—top or bottom. Never kink, never snarl. Turn easily but never coast because of adjustable tension brake.

When loading, reel is placed on side and tension-cone face plate removed. Center pins are adjustable for coil eyes from 4 $\frac{1}{2}$ to 12 $\frac{1}{2}$ inches, on 6 $\frac{1}{2}$ -inch wide coil. When loaded, tension is adjusted and face plate replaced. Hole in face plate provided to anchor free end of wire. Standard finish, black enamel.

Cat. No.	Mfr. No.	Size In.	Wt. Lbs.	Price Each
L-6046	2033	15	30	\$25.00

Bank Cleaners For Step-By-Step Equipment



Wipes five banks in the same time that old-type cleaners do one. Consists of two basic units—flushing unit and cleaning rotor. By ordering one of each of the following units, you get the complete Bank Cleaning outfit.

Cat. No.	Mfg. No.	Description	Price Each
L-9911	KS-16297-1	Flushing Unit	\$45.00
L-9914	KS-16366	Filler Can	4.50
L-9909	KS-16298	Handles	1.00
L-9910	KS-16062	Rotors	*9.00
L-9912	KS-16297-2	Pads	1.00
L-9928	KS-16436	Cleaning Solvent	†1.85
L-9913	KS-16365	Wiper Pads	*3.00

Bank Cleaning Outfit Complete.....each \$65.35
*Per box of 20. †Per 1-gallon can.

Prices shown are subject to change without notice.

Tool Guards

Cat. No.	Style and Use	Price Each
L-4527	Fibre, Tuttle Tooth Saw—Fits Saws L-6336 and L-6338.....	\$3.55
L-4528	Fibre, Chopping Axe—Fits Axes L-2310, L-2314 and L-4740.....	1.45
L-4529	Fibre, 30-Inch Docking Saw—Fits Saw L-6359.....	3.90
L-4530	Fibre, 2-Inch Chisel or Smaller—Fits Chisels L-3330, L-3332, L-3334, L-3336, and L-3338.....	1.50
L-4532	Fibre, Curved Pruning Saw—Fits Saw L-6318 (See L-4557 for Leather).....	3.60
L-4533	Fibre, Saw—Fits Saws L-6342, L-6346 and L-6348.....	3.90
L-4534	Fibre, Pole Pruning Saw—Fits Saw L-6324.....	2.40
L-4538	Fibre, Bush Hook—Fits Bush Hook L-4811.....	2.60
L-4539	Fibre, Cable Saw—Fits Saw L-6332.....	2.40
L-4542	Leather, No. 11 Tree Trimmer Head—Fits Tree Trimmer L-7572.....	1.75
L-4543	Leather, No. 12 Tree Trimmer Head—Fit Tree Trimmer L-7574.....	1.90
L-4544	Fibre, Backsaw—Fits Saw L-6316.....	1.70
L-4545	Fibre, Compass Saw—Fits Saw L-6322.....	2.00
L-4546	Fibre, One Man Saw 4 Ft.—Fits Saw L-6356.....	8.65
L-4547	Fibre, Lug Hooks, Peavy and Cant Hooks L-4816, L-5671, L-4814 and L-4813.....	.65
L-4548	Leather, Shave Hook—Fits Shave Hooks L-4862 and L-4864.....	.65
L-4549	Fibre, Draw Knife—Fits Draw Knife L-5072.....	1.65
L-4557	Leather with Snap, Curved Pruning Saw—Fits Saw L-6318 (See L-4532).....	8.00

Buhrke Installers' Canvas Pouches

Made of No. 10 (15-ounce) olive drab canvas with double-sewed seams.

Has vulcanized hard fiber ring in top. Web strap and snap securely attached for hanging on Dee ring. Two small pockets for small parts. Pointed bottom keeps parts in center of bag.

Cat. No.	Mfr. No.	Diam. Top In.	Depth In.	Price Each
L-5954	1430	6½	8	\$2.70

Buhrke Linemen's Canvas Pouches

One-piece; made of No. 8 (18-ounce) olive drab canvas with ¼-inch rope sewed in top. Depth, 9 in. Rectangular bottom 7½x3½ in.

Cat. No.	Mfr. No.	Description	Price Each
L-5952	1079	With Two Belt Loops	\$1.85
L-5953	1089	With Snap instead of Belt Loops.....	2.10



No. 11-18
1¼-In. Diam. Pole

Seymour Smith Tree Trimmers

Rugged pruners which are widely used in the telephone field.

Malleable iron heads with heat-treated steel blades.

Furnished in light weight type (No. 11-18) which cuts up to 1 inch branches and heavy duty type (No. 12-18) which cuts heavier limbs.

Complete pruners consist of pruner head, 6-foot head section, two 6-foot extension sections and rope.



No. 12-18
1¼-In. Diam Pole

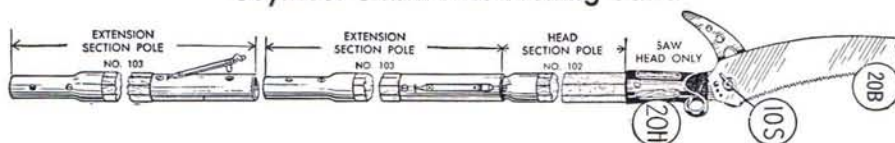
No. 11-18 Light Weight Tree Trimmer

Cat. No.	Mfr. No.	Description	Price Each
L-7572	11-18	Complete Trimmer with Rope.....	\$13.80
L-4744	11	Pruner Head Only.....	3.88
L-5924	102	6-Ft. Head Section Pole Only.....	2.56
L-5916	103	6-Ft. Extension Section Only.....	3.68

No. 12-18 Heavy Duty Tree Trimmer

Cat. No.	Mfr. No.	Description	Price Each
L-7574	12-18	Complete Trimmer with Rope.....	\$22.24
L-4746	12	Pruner Head Only.....	8.40
L-5928	202	6-Ft. Head Section Pole.....	3.52
L-5920	203	6-Ft. Extension Section Pole.....	5.16

Seymour Smith Pole Pruning Saws



With No. 20 saw head which has 16-inch blade; No. 102 head section and two No. 103 extension poles.

No. 20 Saw Head. Taper-ground steel with fast-cutting needle teeth. Length of blade, 16 inches. Attached to head by bolt and thumb nut. Holes in blade allow 3-position adjustment. Unbreakable aluminum alloy head has extra large hook for pulling out loose branches.



No. 20 Head Less Poles

Cat. No.	Mfr. No.	Description	Price Each
L-6309	20-18	Pole Saw Complete.....	\$14.32
L-6324	20	Head, Saw, less Poles.....	4.40
L-6326	20-B	Saw Blade Only.....	2.80

Seymour Smith Long-Handled Professional Pruners

Dual cutting action. Branches will not slip from between blades. Tempered steel forgings; blade and handle in one piece. Hardwood hand grips.



Cat. No.	Mfr. No.	Cuts Limbs Inches	Length Inches	Price Each
L-5990	530	1½	28	\$7.00



Standard Earth Augers Less Handles

Add auger handle for complete unit.

Cat. No.	Mfr. No.	DIAM. HOLE INCHES		Net Wt. Lbs.	Price Each
		Min.	Max.		
L-2282	6	8	14	10½	\$4.70
L-2283	8	5	8	7	5.10

Blackburn's Auger Handles

For Use with Standard and Iwan Earth Augers



Cat. No.	Mfr. No.	Max. Depth Hole Feet	Wt. Lbs.	Price Each
L-2288	8	8	19	\$7.25
L-2291	10	10	22	7.25



Seymour Atlas Pattern Post Hole Diggers

Forged steel frame with heavy double hinges operating on a steel bolt. The blades are 9½ inches long, are riveted to the heavy shouldered frame. The northern hardwood handles are sanded and lacquered.

Cat. No.	Mfr. No.	Lgth. Hdle. Feet	Price Each
10	10	4	\$3.64
10	10	7	5.70
10	10	8	6.49

Telegraph Shovels

Plain Back—Strap Pattern
With 22-Inch Strap



Blade: 13-gage, heat-treated, forge finish.
Handle, XX grade hickory, maple or ash with lacquer finish.

Cat.No.	Mfr.No.	Lgth. Hdle. Ft.	Size Blade In.	Price Each	Extra Handles		
					Cat. No.	Mfr. No.	Price Each
L-6834	T16	7	9x12	\$10.65	L-4686	T28	\$4.95
L-6836	T17	8	9x12	11.50	L-4688	T29	5.80
L-6838	T18	9	9x12	12.45	L-4690	T30	7.15
L-6840	T19	10	9x12	13.60	L-4692	T31	9.05

Telegraph Spoons

Western Pattern
Plain Back—Strap Pattern
With 22-Inch Strap



Blade: 13-gage heat-treated, forge finish.
Handle: XX grade hickory, maple or ash with lacquer finish.

Cat. No.	Mfr. No.	Length Handle Feet	Size Blade Inches	Price Each
L-7136	T50	7	8½x9	\$10.65
L-7138	T51	8	8½x9	11.50
L-7142	T52	9	8½x9	12.45

Sturd-E Round Point Shovels



Blade: 15-gage heat-treated steel. One piece solid shank; 11-inch socket.

Handle: Ash with lacquer finish.

Cat. No.	Mfr. No.	Length Handle Inches	Size Blade Inches	Price Each
T823	T823	24	9x12	\$4.95

Sturd-E Round Point Back Saver Shovels



Blade is similar to shovel above, only this shovel has 46½-inch long handle which eliminates considerable strain on the user's back.

Cat. No.	Mfr. No.	Length Handle Inches	Size Blade Inches	Price Each
T826	T826	46½	9x12	\$4.95

Sturd-E Timber Carriers or Lug Hooks

Regular Pattern



Has lacquered hickory handle.

Cat.No.	Mfr.No.	Size	Price Each	Extra Handles		
				Cat. No.	Mfr. No.	Price Each
T103	T103	2½"x4'	\$10.95	T109	T109	\$4.40
T104	T104	2½"x4½'	11.55	T110	T110	4.60
T105	T105	2½"x5'	12.05	T111	T111	4.95

Prices shown are subject to change without notice.

Oshkosh Carrying Hooks

Regular Pattern—Malleable Clasp and Swivel



For carrying poles. Selected air-seasoned rock maple handles, turned and nicely finished. Hooks forged out of crucible steel are attached to handle with swivel which makes easier operation.

Cat. No.	Mfr. No.	Size	Price Each	Extra Handles	
				Cat. No.	Price Each
295	295	2 1/2" x 4'	\$8.80	593	\$3.85
296	296	2 1/2" x 4 1/2'	9.20	594	4.10
297	297	2 1/2" x 5'	9.55	595	4.40
298	298	3" x 5'	13.60	963	5.35
299	299	3" x 6'	14.20	964	6.35
300	300	3" x 7'	14.65	965	7.80

Oshkosh Cant Hooks



Fitted with handles.

Finished with high polish. Sockets, clasps and toe rings of best grade malleable iron, lightweight and strong. Duck bill hooks and pikes correctly shaped and hammered out of crucible steel. Stop prevents hook from falling back onto handle and injuring fingers.

Maple Handles

Cat. No.	Mfr. No.	Size	Price Each	Extra Handles	
				Cat. No.	Price Each
188A	188A	2 1/4" x 4'	\$7.55	541	\$2.95
189A	189A	2 1/4" x 4 1/2'	7.85	542	3.15
188	188	2 1/2" x 4'	7.85	544	3.15
189	189	2 1/2" x 4 1/2'	8.25	545	3.45

Hickory Handles

Cat. No.	Mfr. No.	Size	Price Each	Extra Handles	
				Cat. No.	Price Each
199A	199A	2 1/4" x 4'	\$9.30	572	\$3.30
200A	200A	2 1/4" x 4 1/2'	9.70	573	3.70
199	199	2 1/2" x 4'	9.70	575	3.70
200	200	2 1/2" x 4 1/2'	10.10	576	4.00

Sturd-E Cant Hooks



Hickory handle is lacquered.

Cat. No.	Mfr. No.	Size	Price Each	Extra Handles	
				Cat. No.	Price Each
T118	T118	2 1/2" x 4'	\$10.00	T130	\$3.50
T119	T119	2 1/2" x 4 1/2'	10.45	T131	3.80
T120	T120	2 1/2" x 5'	11.30	T132	4.00

Oshkosh Pike Poles

Lightweight, sturdy Washington fir handle. Steel pike of one-piece type with upset face taking end thrust and distributing it over entire end of handle. Malleable iron ferrule. Pike set in oil; rivet runs completely through ferrule, handle and pike. Pike projects 4 inches from end.

Coating available at extra charge.

Standard, Light

Diameter, 2 inches; not tapered.

Cat. No.	Mfr. No.	Size	Price Each	Extra Handles	
				Cat. No.	Price Each
806	806	2" x 12'	\$8.40	971	\$6.95
807	807	2" x 14'	9.15	972	7.75
808	808	2" x 16'	9.85	973	8.45

A. T. & T. Pattern

Diam. at center, 2 1/2 in., tapering to 2 in.

Cat. No.	Mfr. No.	Size	Price Each	Extra Handles	
				Cat. No.	Price Each
818	818	2 1/2" x 12'	\$10.65	982	\$9.15
819	819	2 1/2" x 14'	11.75	983	10.05
820	820	2 1/2" x 16'	12.75	984	11.05
821	821	2 1/2" x 18'	13.60	985	12.00
822	822	2 1/2" x 20'	14.75	986	13.05

Oshkosh Pike Pole Guards



Eliminates hazardous point. Fastens securely in either guarded or open position.

Fits 2 and 2 1/2-inch pike poles. Guard adds only 7 ounces to pike pole.

Cat. No.	Mfr. No.	Ship. Wt. Lbs.	Price Each
10	10	3/4	\$2.65

Sturd-E Fir Pike Poles

Plain or Gimlet Point—Light Pattern



Available with straight or twisted points at no extra cost. Metal band can be added at bottom of pole if desired. Handle is lacquered.

Cat. No.	Mfr. No.	Size	Price Each	Extra Handles	
				Cat. No.	Price Each
T205	T205	2" x 12'	\$9.15	T241	\$8.25
T206	T206	2" x 14'	9.95	T242	8.95
T207	T207	2" x 16'	10.80	T243	9.75
T208	T208	2" x 18'	11.75	T244	10.65
T209	T209	2" x 20'	12.90	T245	11.40

A. T. & T. Pattern

Cat. No.	Mfr. No.	Size	Price Each	Extra Handles	
				Cat. No.	Price Each
T218	T218	2 1/2" x 10'	\$10.60	T248	\$10.10
T219	T219	2 1/2" x 12'	11.40	T249	11.50
T220	T220	2 1/2" x 14'	12.70	T250	12.35
T221	T221	2 1/2" x 16'	13.70	T251	13.40
T222	T222	2 1/2" x 18'	14.75	T252	14.70
T223	T223	2 1/2" x 20'	15.90		

Sturd-E Tubular Pike Pole Guards



Guard in Protective Position

Length, 6 5/8 in. Tubular guard—not attached.

Cat. No.	Mfr. No.	Wt. Lbs.	Price Each
G	G	1	\$2.50

Sturd-E Crow and Digging Bars

Hexagon shape.

Cat. No.	Mfr. No.	Size Inches	Length Feet	Wt. Lbs.	Price Each
T401	T401	1	7	20	\$10.65
T402	T402	1	8	23	11.45
T404	T404	1 1/8	7	25	11.90
T405	T405	1 1/8	8	28	13.15
T406	T406	1 1/4	8	34	17.15
T405A	T405A	1 3/8	9	32	15.10
T405B	T405B	1 1/8	10	35	16.50

Oshkosh Octagon Digging Bars

Of special crucible steel of grade equal to Black Diamond or Crescent steel. Stiff and unbending, but not brittle; will not chip and break. Perfectly straight.

Each type has 2-inch chisel on one end.

Crow and Digging Bars

With chisel on one end, pointed on other end.

Cat. No.	Mfr. No.	Size Inches	Length Feet	Wt. Lbs.	Price Each
1061	1061	1	7	20	\$10.70
1062	1062	1	8	23	11.50
1064	1064	1 1/8	7	26	11.90
1065	1065	1 1/8	8	28	13.15
1066	1066	1 1/8	9	31	15.10

Tamping and Digging Bars

With chisel on one end, malleable iron tamper on other.

Cat. No.	Mfr. No.	Size Inches	Length Feet	Wt. Lbs.	Price Each
1071	1071	1	7	21	\$11.00
1072	1072	1	8	24	11.65
1074	1074	1 1/8	7	27	12.90
1075	1075	1 1/8	8	30	14.25

Plain Digging Bars

With 2-inch chisel on one end.

Cat. No.	Mfr. No.	Size Inches	Length Feet	Wt. Lbs.	Price Each
1081	1081	1	7	20	\$10.85
1082	1082	1	8	23	11.80
1084	1084	1 1/8	7	26	12.40
1085	1085	1 1/8	8	28	13.50

Sturd-E Tamping and Digging Bars

Hexagon shape.

Cat. No.	Mfr. No.	Size Inches	Length Feet	Wt. Lbs.	Price Each
T409	T409	1	8	25	\$11.95
T411	T411	1 1/8	7	27	13.05
T412	T412	1 1/8	8	30	14.55

Sturd-E Plain Digging Bars

Round shape.

Cat. No.	Mfr. No.	Size Inches	Length Feet	Wt. Lbs.	Price Each
T413	T413	1 1/8	8	28	\$12.65

Sturd-E Special Spuds With Tamper

Made of 1 5/16-inch diameter seamless tubing.

Cat. No.	Mfr. No.	Length Feet	Wt. Lbs.	Price Each
T415A	T415A	8	15	\$20.20

Oshkosh Digging Spuds with Tamper

Well balanced. Handle of steel tubing, 1 5/16 inches in diameter. Blade and socket of one-piece high grade steel; tamping head of malleable iron. Tamping head and blade shrunk onto handle, allowing no possibility of coming off.

Cat. No.	Mfr. No.	Length Feet	Blade Width Inches	Wt. Lbs.	Price Each
852	852	9	3 1/2	20	\$20.30

Oshkosh Light Tamping Bars

Of rock maple with integral head, 1 3/4 inches wide by 4 inches long. Steel shoe, 3/4 inch thick, riveted to head.

					Extra Handles		
Cat. No.	Mfr. No.	Length Feet	Wt. Lbs.	Price Each	Cat. No.	Mfr. No.	Price Each
854	854	7	13	\$10.20	1002	1002	\$7.45
855	855	8	14	11.05	1003	1003	8.65
856	856	9	16	12.90	1003A	1003A	10.45

Oshkosh Heavy Tamping Bars

Rock maple handle, 1 5/8 inches in diameter, in one piece with head. Size of tamping face, 1 1/4 inches wide by 3 1/2 inches long. Head faced with 1/2-inch thick heavy steel shoe.

					— Extra Handles —		
Cat. No.	Mfr. No.	Length Feet	Wt. Lbs.	Price Each	Cat. No.	Mfr. No.	Price Each
1054	1054	7	13	\$11.55	2002	2002	\$6.65
1055	1055	8	15	12.50	2003	2003	7.15
1056	1056	9	17	13.65	2003A	2003A	9.25

Sturd-E Wood Handle Tamping Bars With Light Shoe

Diameter, 1 5/8 inches. Wood head, 3 1/2 x 1 3/4 inches. Shoe, 3/4 x 1 3/4 inches. Lacquer finish handle.

Cat. No.	Mfr. No.	Length Feet	Wt. Lbs.	Price Each
T417	T417	7	10	\$9.75
T418	T418	8	11	11.00
T418A	T418A	9	12	12.35
T418B	T418B	10	13	13.25

With Heavy Shoe

Handle diameter, 1 5/8 inches. Head, 3 1/2 x 1 3/4 inches. Shoe, 5/8 x 1 3/4 inches.

Cat. No.	Mfr. No.	Length Feet	Wt. Lbs.	Price Each
T419	T419	7	11	\$11.15
T420	T420	8	12	12.05
T420A	T420A	9	13	13.15
T420B	T420B	10	14	13.55

With Extra Heavy Shoe — A. T. & T. Pattern

Handle diameter, 1 5/8 inches. Head, 3 1/2 x 1 3/4 inches. Shoes, 3/4 x 1 3/4 inches.

Cat. No.	Mfr. No.	Length Feet	Wt. Lbs.	Price Each
T421	T421	7	12	\$14.05
T422	T422	8	13	15.45
T422A	T422A	9	14	16.40
T422B	T422B	10	15	17.55

Prices shown are subject to change without notice.

NICOPRESS SLEEVES, TOOLS

Nicopress Splicing Sleeves for Communication Lines



Copper Sleeves for Copper Wire

Cat. No.	Mfr. No.	B&S Gauge	Use Tool Groove	Price per 100
L-7030	3-064-B	14	17-2	\$2.25
L-6859	1-064-C	14	C	4.10
L-7016	1-102-C	10 (or 12NBS)	C	5.00
L-7014	1-080-C	12	C	4.28

Copper Sleeves for Copperweld Wire

Cat. No.	Mfr. No.	AWG Gauge	Use Tool Groove	Price per 100
L-6859	1-064-C	14	C	\$4.10
L-6860	1-080-D	12	D	7.49
*L-7010	3-102-D	10	D	8.10

*Bronze sleeve for .102 inch or .104 inch high, or extra high strength Copperweld line wire.

Galvanized Steel Sleeves for BB Galvanized Wire

Cat. No.	Mfr. No.	BWG Gauge	Use Tool Groove	Price per 100
L-7026	5-083-C	14	C	\$6.26
L-7020	5-109-C	12	C	6.68

Galvanized Copper Sleeves for BB Galvanized Wire

Cat. No.	Mfr. No.	BWG Gauge	Use Tool Groove	Price per 100
L-7022	4-109-C	*12	C	\$5.45
L-7003	2-102-C	†12	C	5.45
L-6875	2-134-J	10	J	10.47

*Galvanized Bronze Sleeve

†For use with rusty No. 12 BB wire.

Galvanized Steel Sleeves for "85" Galvanized Wire

Cat. No.	Mfr. No.	BWG Gauge	Use Tool Groove	Price per 100
L-7026	5-083-C	14	C	\$6.26
L-7025	5-109D-85	12	D	9.00

Galvanized Steel Sleeves for "135" and "190" Galvanized Wire

Cat. No.	Mfr. No.	BWG Gauge	Use Tool Groove	Price per 100
L-7041	5-109D135	12	D	\$10.50
L-7099	5-109D190	12	D	14.63

Galvanized Copper Sleeves for Spinning Wire

Cat. No.	Mfr. No.	Diam. Inches	Use Tool Groove	Price per 100
L-7079	4-045-B	.045	17-2	\$3.00
L-6887	2-061-C	.061	C	4.10
L-7074	2-065-C	.065	C	4.10
L-6885	2-091-C	.091	C	5.00

Nicopress Sleeves for Drop, Bridle, Inside Wires or Cables

Packed 200 per box.

Cat. No.	Mfr. No.	Wire Sizes	Price per 100
L-7036	3-036A	19, 20, 22 B/S Copper	\$2.25
L-7018	3-045B	{ 17, 18 AWG Copperweld 17 B&S Bronze 17, 18 B&S Copper }	2.25
L-7031	3-051B	16 B&S Copper	2.25
L-7030	4-049B	14 B&S Copper	2.25

Quick-Order Reference for Most Commonly Used Straight Splicing Nicopress Sleeves

Type and Grade of Wire	Sleeve to Order	Price per 100
12 BWG Galv. Wire, BB Grade	L-7020	\$6.68
12 BWG Galv. Wire, Grade 85	L-7025	9.00
12 BWG Galv. Wire, Grade 135	L-7041	10.50
12 B&S .080" Copperweld	L-6860	7.49
10 B&S .102" or .104" Copperweld	L-7010	8.10
10 B&S .102" or 12 NBS .104" Copper	L-7016	5.00
17 or 18 Copperweld or Bronze Drop Wire	L-7018	2.25

Nicotap Sleeves



For Steel to Steel

Cat. No.	Mfr. No.	Gauge BWG to BWG	Use Tool Groove	Price per 100
L-6837	T2-109-D	12 to 12	D	\$11.03
L-7283	T2-109-083-D	12 to 14	D	15.78

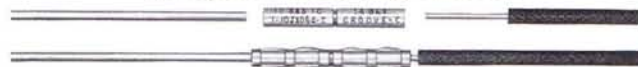
For Copper, Copperweld and Bronze

Cat. No.	Mfr. No.	Gauge B&S to B&S AWG to AWG	Use Tool Groove	Price per 100
L-6832	T2-045-B	17, 18, 19 to 17, 18, 19	17-2	\$4.13
L-7149	T1-064x045C	14 to 17-18	C	13.88
L-7251	T1-080x045C	12 to 17, 18	C	13.88
L-7254	T1-080x064C	12 to 14	C	13.88
L-7249	T1-080-C	12 to 12	C	9.00
L-7257	T1-102x045D	10 to 17 or 18	D	15.00
L-7259	T1-102x051D	10 to 16	D	15.00
L-7262	T1-102x064D	10 to 14	D	15.00

For Steel to Copper, Copperweld and Bronze

Cat. No.	Mfr. No.	Gauge BWG to B&S	Use Tool Groove	Price per 100
L-6839	T2-109x045D	12 to 17 or 18	D	\$15.78
L-7281	T2-109x064D	12 to 14	D	15.78
L-6837	T2-109-D	12 to 10	D	11.03

Nicopress Reducing Sleeves



Used for splicing two wires of different sizes. Reductions and tool grooves are listed below.

For Copper Wire to Drop, Bridle, Inside and Line Wire

Cat. No.	Mfr. No.	Gauge B&S to B&S	Use Tool Groove	Price per 100
L-6842	2-045 x 036 B	17 to 19,20,22	17-2	\$4.50
L-6949	1-080 x 045 C	12 to 17,18	C	6.42
L-6953	1-080 x 064 C	12 to 14	C	6.42
L-6957	1-102 x 045 C	10 to 17,18	C	7.50
L-6961	1-102 x 064 C	10 to 14	C	7.50
L-6963	1-102 x 080 C	10 to 12	C	7.50

For Galvanized BB Line Wire

Cat. No.	Mfr. No.	Gauge BWG to BWG	Use Tool Groove	Price per 100
L-6987	4-109 x 083 C	12 to 14	C	\$8.18
L-6989	2-109 x 083 D	12 to 14	D	8.18
L-6993	2-134 x 109 J	10 to 12	J	15.71

Reducing Sleeves for Galvanized Line Wire to Drop, Bridle and Inside Wires

Cat. No.	Mfr. No.	Gauge BWG to B&S	Use Tool Groove	Price per 100
L-7005	4-109 x 045 C	12 to 17,18	C	\$8.18
L-7032	2-109 x 045 D	12 to 17,18	D	8.18

Nicopress Type H Sleeves

Used for lap-splicing telephone cable conductors to terminal block conductors.

Cae. No.	Mfr. No.	Cable Conductor AWG	Terminal Block Conductor AWG	Use Tool Groove	Color Code	Price per 100
H-19B	H-19B	19	24	17-2	Blue	\$1.65
H-20-22B	H-20-22B	20 or 22	24	17-2	Plain	1.65
H-24-26B	H-24-26B	24 or 26	24	17-2	Red	1.65

Nicotap Sleeves For Multi-Pair Rural Distribution Wire

Cat. No.	Mfr. No.	AWG Gauge	Use Tool Groove	Price per 100
L-7068	1727B	19, 20, 22, 24 to 14	17-2	\$3.38
L-7089	1744B	19, 20, 22, 24 to 17-18	17-2	3.38

Nicopress Insulated Sleeves



A factory-assembled unit composed of three integral parts. The inner-most part is a short, stout copper sleeve ensuring high conductivity. The intermediate part is a plastic insulating sleeve covering the copper sleeve and extending a short distance beyond each end of the outer part which is a copper jacketing sleeve.

Cat. No.	Mfr. No.	Wire Size AWG	Use	Price Each
L-6811	3319	19	Rural	\$9.30
L-6431	3322	22	Suburban	9.30
L-6810	3324	24	Urban	9.30

Nicopress Offset Dead-Ends Copper, for Copper Wire

Cat. No.	Mfr. No.	B&S Gauge	Use Tool Groove	Price per 100
L-7015	91-080-C	12	C	\$7.49
L-7011	91-102-C	10 (or 12 NBS)	C	8.75

Copper, for Copperweld Wire

Cat. No.	Mfr. No.	AWG Gauge	Use Tool Groove	Price per 100
L-6889	91-080-D	12	D	\$13.10
*L-7013	93-102-D	10	D	14.17

*Bronze sleeve for .102 inch or .104 inch high or extra-high strength Copperweld line wire.

Galvanized Steel, for BB Galvanized Wire

Cat. No.	Mfr. No.	BWG Gauge	Use Tool Groove	Price per 100
L-7027	95-083-C	14	C	\$10.95
†L-7023	94-109-C	12	C	9.53

†Indicates Galvanized Bronze Sleeve.

Galvanized Steel, for Galvanized "85" Wire

Cat. No.	Mfr. No.	BWG Gauge	Use Tool Groove	Price per 100
L-7007	95-109D-85	12	D	\$15.75

Galvanized Steel, for Galvanized "135" and "190" Wire

Cat. No.	Mfr. No.	BWG Gauge	Use Tool Groove	Price per 100
L-7009	95-109D-135	12	D	\$18.38

Nicopress Made-Up Dead-Ends



Simply slips over the insulator, the line wire is inserted into the sleeve section and the compressions made with the standard Nicopress tool.

Cat. No.	Mf. No.	Line Wire	Price per 100
67-080D	67-080D	12 AWG Copperweld or Copper	\$17.50
67-102D	67-102D	10 AWG Copperweld or Copper	21.59
67-109D85-135	67-109D85-135	12 BWG "85" or "135" Galvanized Steel	25.66
67-109D-190	67-109D190	12 BWG "190" or "195" Galvanized Steel	29.79

Prices shown are subject to change without notice.

Nicopress Splice Separators



Efficiently separate and insulate splices in drop wire and one pair parallel ("C" Rural) distribution wire. Easily snap between the two splices and the assembly and adjacent wire quickly taped.

Cat. No.	Mfr. No.	Wire Size and Type	Price per 100
L-6800	3456-B	Drop Wire 17 & 18 AWG	\$2.25
L-6881	3457-CD	One Pair Parallel ("C" Rural) Distribution Wire 12 AWG, 14 AWG, 14 BWG	3.38

Nicopress Tools

For Communication Line Wire



Two-groove tools for splicing and dead-ending.

Cat. No.	Mfr. No.	Length Inches	Wt. Lbs.	Price Each
L-7527	31 DC	11 3/4	2	\$9.60
L-7518	31 DJ	11 3/4	2	9.60
L-7519	31 CJ	11 3/4	2	9.60

Also available in EJ, DE and CE groove combinations.

For Telephone Drop, Bridle and Inside Wire



Two grooves, A and B. Small, light and compact.

Cat. No.	Mfr. No.	Length Inches	Wt. Oz.	Price Each
L-7530	17-2	8	9	\$3.00

For Compressing Insulated Sleeves



For use on rural or urban distribution wire.

Cat. No.	Mfr. No.	Length Inches	Wt. Oz.	Price Each
L-7528	D-17	8 1/4	9 1/2	\$3.90

Nicopress Tool Holsters

A leather holster for carrying Nicopress tools. Attaches to lineman's belt.

Cat. No.	For Tool Nos.	Wt., Lbs. per Dozen	Price Each
L-4810	L-7527, L-7518 and L-7519....	4	\$1.60
L-4821	L-7530 and L-7528.....	3	1.20

POLE LINE HARDWARE

NOW . . . IMMEDIATE SHIPMENT OF ANY HARDWARE ITEM IN THIS CATALOG FROM OUR GENOA WAREHOUSE. ON HARDWARE ORDERS FOR 300 LBS. OR MORE, WE PAY THE FREIGHT!

Everstick Expanding Anchors



Closed



Expanded

The ideal guy anchor for permanent construction. Made of malleable iron. Easy to install and expand. Expanding plates and spreader arms are designed to cut down earth resistance and insure even expansion without distorting rod. Expanding blades with cutting edge sliding horizontally on base plate allow anchor to be installed in heavy shale. When expanded, plates contact solid earth at every point around base plate. Heavy ribbed base plate has nut housing feature, allowing anchor to be locked solidly on rod; this and heavy expanding arms give 100 per cent safety factor. Complete, ready to install.

Two Way Anchor

Cat. No.	Mfr. No.	Size Anchor and Hole In.	Max. Rod Size In.	Area Expanded Sq. In.	Wt. Lbs. per 100	Price Each
L-2030	62	6	5/8	55	685	\$1.80
L-2036	82	8	3/4	100	1130	2.90

Three Way Anchor

L-2042	633	6	5/8	65	780	\$2.25
L-2045	834	8	5/8	90	1120	2.90
L-2048	836	8	3/4	110	1380	3.55
L-2051	8310	8	3/4	125	1515	3.80

Four Way Anchor

L-2063	84-3/4	8	3/4	125	1650	\$4.30
L-2069	104	10	1	210	3050	7.45

Screw Anchors

Has a forged eye with three circular grooves. When used with a single guy, load is centralized in center groove; used with two guys, load is divided uniformly on outer grooves. The eye will accommodate 1 1/4-inch bar used to twist anchor into earth.

Cat. No.	Mfr. No.	Diameter Wing Inches	Diameter Rod Inches	Length Feet	Wt. Lbs. per 100	Price Each
L-2098	J6524	4	3/4	4 1/2	765	\$2.80
L-2102	J6526	6	3/4	5 1/2	1065	3.85
L-2104	J6528	8	1	5 1/2	2016	6.57
L-2107	J6530	10	1 1/4	5 1/2	3025	9.68
L-2110	J6550	10	1 1/4	8	4275	11.03

Chance 8-Way Steel Expanding Anchors



The Chance 8-way steel expanding anchor has eight steel blades that expand to form a cone shaped square. They distribute the load evenly all the way around the anchor. There are no non-holding areas between blades. The construction of the anchor is sturdy but simple. There are no hinges, moving parts, or mechanical devices to hinder its smooth operation. A nut retainer on the base helps in pushing the anchor down into the hole and reinforces the base plate. Anchors are coated with a special asphalt paint to protect them during handling and to guard against corrosive conditions when installed.

Cat. No.	Mfr. No.	Hole Size In.	Rod Diam., In.	Rod Lgth. Ft.	Approx. Wt., Lbs. per 100	Price Each
L-2039	6860	6	1/2 5/8	6 7 8	503	\$1.35
L-2037	6870	6	1/2 5/8	6 7 8	504	1.55
L-2038	88100	8	5/8 3/4	7 8	875	2.35
L-2040	88115	8	5/8 3/4	7 8	887	2.40
L-2041	88135	8	5/8 3/4	7 8	932	2.45
L-2044	1082	10	1 1/4	10	1865	4.80

Ultimate Soil-Anchor Holding Strength — Pounds No Safety Factors Included

Cat. No.	Mfr. No.	Class 3	Class 4	Class 5	Class 6	Class 7
L-2039	6860	10000	8500	7000	5500	4000
L-2037	6870	16000	14000	11000	8500	5000
L-2038	88100	22000	18500	15000	13000	8000
L-2040	88115	24500	20500	17000	14000	9000
L-2041	88135	26500	22000	18500	15000	10000
L-2044	1082	31000	26500	21000	16500	12000

Thimbleye Threaded Anchor Rods



Cat. No.	Mfr. No.	Diam. In.	Length Feet	Weight Pounds per 100	Price per 100
L-6156	J7405	1/2	5	350	\$120.01
L-6158	J7406	1/2	6	410	135.07
L-6160	J7407	1/2	7	470	150.14
L-6162	J7415	5/8	5	550	164.59
L-6164	J7416	5/8	6	650	188.66
L-6166	J7417	5/8	7	750	212.75
L-6168	J7418	5/8	8	850	236.81
L-6176	J7427	3/4	7	1090	298.32
L-6178	J7428	3/4	8	1240	334.12
L-6179	J7429	3/4	9	1390	369.96
L-6173	J7430	3/4	10	1540	405.77
L-6172	J7438	1	8	2250	665.45
L-6267	J7439	1	9	2530	734.09
L-6269	J7440	1	10	2810	802.71

Double and tripleye rods also available.

Orders of 300 lbs. or more of hardware to states of Connecticut, Delaware, Illinois, Indiana, Iowa, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia, Wisconsin are shipped freight prepaid. All orders of less than 300 lbs. of hardware are shipped F.O.B. Chicago or Pittsburgh and proportional freight is allowed.

For delivered prices to states of Alabama, Arkansas, Florida, Georgia, Kansas, Louisiana, Mississippi, Nebraska, North Dakota, North Carolina, South Carolina, South Dakota, Oklahoma, add approximately 2 to 5 per cent to prices shown.

For delivered prices to states of Colorado, Montana, New Mexico, Texas, Wyoming add approximately 5 to 13 percent to prices shown. Prices shown are in Eastern or Zone 1.

Machine Bolts



3/8-Inch Diameter

Cat. No.	Mfr. No.	Length In.	Length Thread In.	Wt. Lbs. per 100	Price per 100
L-2858	J8603	3	1	13.0	\$6.64
L-2860	J8603 1/2	3 1/2	3	15.0	7.07
L-2862	J8604	4	3	16.2	7.52
L-2864	J8604 1/2	4 1/2	3	16.4	7.85
L-2865	J8605	5	3	19.0	8.45
L-2868	J8605 1/2	5 1/2	3	19.4	8.88
L-2870	J8606	6	3	21.3	9.34

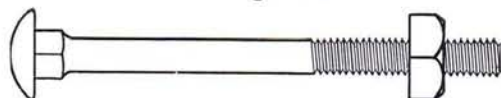
1/2-Inch Diameter

L-2878	J8704 1/2	4 1/2	3	34.0	\$13.92
L-2882	J8705	5	3	36.0	14.90
L-2885	J8706	6	3	42.0	15.93
L-2887	J8707	7	4	47	21.35
L-2886	J8708	8	4	50	22.56
L-2888	J8709	9	4	56	23.79
L-2890	J8710	10	4	60	24.34
L-2892	J8712	12	6	64	27.48
L-2894	J8714	14	6	80	30.01
L-3061	J8716	16	6	87	32.55

5/8-Inch Diameter

L-2898	J8806	6	3	67	\$25.17
L-2899	J8807	7	4	74	27.11
L-2900	J8808	8	4	82	28.99
L-2902	J8810	10	4	100	32.68
L-2904	J8812	12	6	116	36.48
L-2906	J8814	14	6	132	40.27
L-2908	J8816	16	6	146	44.12

Carriage Bolts



3/8-Inch Diameter

Cat. No.	Mfr. No.	Length In.	Length Thread In.	Wt. Lbs. per 100	Price per 100
L-2800	J8633	3	1 3/4	13.0	\$5.98
L-2802	J8633 1/2	3 1/2	1 3/4	15.0	6.50
L-2804	J8634	4	1 3/4	16.0	6.92
L-2806	J8634 1/2	4 1/2	1 3/4	17.1	7.39
L-2808	J8635	5	1 3/4	20.0	7.90
L-2809	J8635 1/2	5 1/2	1 3/4	20.2	8.34
L-2810	J8636	6	1 3/4	21.1	8.80

1/2-Inch Diameter

L-2845	J8644	4	3	32.5	\$11.70
L-2821	J8644 1/2	4 1/2	3	33.0	12.46
L-2801	J8645	5	3	36.0	13.11
L-2803	J8645 1/2	5 1/2	3	38.0	13.77
L-2805	J8646	6	3	41.5	14.47

Double Arming Bolts



1/2-Inch Diameter

Cat. No.	Mfr. No.	Length In.	Wt. Lbs. per 100	Price per 100
L-2826	J8842	12	86	\$34.45
L-2828	J8844	14	95	37.49
L-2830	J8846	16	104	40.50
L-2832	J8848	18	113	43.33

5/8-Inch Diameter

L-2836	J8862	12	135	\$50.41
L-2838	J8864	14	152	54.45
L-2840	J8866	16	168	58.47
L-2842	J8868	18	186	62.53
L-2844	J8870	20	196	66.60

Thimbleye Bolts

Standard Drop Forged Straight Bolts

5/8-Inch Diameter



Minimum breaking strength, 14000 pounds.

Cat. No.	Mfr. No.	A Length Inches	Wt. Lbs. per 100	Price per 100
L-2855	J8049	6	104	\$58.40
L-2753	J8050	8	134	62.74
L-2755	J8051	10	152	67.05
L-2757	J8052	12	168	71.35
L-2759	J8053	14	182	75.67
L-2760	J8054	16	204	80.13

Standard Drop Forged 45° Angle Bolts

5/8-Inch Diameter



Minimum breaking strength, 14000 pounds.

Cat. No.	Mfr. No.	A Length Inches	Wt. Lbs. per 100	Price per 100
L-2776	J8149	6	116	\$60.90
L-2777	J8150	8	138	65.21
L-2779	J8151	10	154	69.50
L-2781	J8152	12	169	73.78
L-2783	J8153	14	184	78.08
L-2784	J8154	16	204	82.36

NOTE: Larger sizes and larger diameters can be furnished on request.

Prices shown are subject to change without notice.

Reliable Strandvises



For quick, easy dead-ending of messenger strand. Assemble the pieces as shown above and push strand through strandvise. Use short bail for eye type hardware, long bail for strain insulators.

Cat. No.	Mfr. No.	Description	Price per 100—	
			1 to 24	25 to 100
L-7221	5100	For 1/4-In. Strand; Short Bail for Eye Type Hardware.....	\$114.00	\$108.00
L-7203	5101	For 5/16-In. Strand; Short Bail for Eye Type Hardware.....	134.00	127.50
L-7205	5102	For 3/8-In. Strand; Short Bail.....	165.00	157.00
L-7223	5150	For 1/4-In. Strand; Long Bail for Strain Insulators.....	118.00	112.00
L-7207	5151	For 5/16-In. Strand; Long Bail for Strain Insulators.....	147.00	140.00
L-7211	5152	For 3/8-In. Strand; Long Bail..	179.00	170.00

Reliable Strandlinks



For splicing steel strand messenger and changing guy installations. Splice is made by merely pushing ends of strand into the link. Makes a permanent splice that is stronger than the strand itself.

Cat. No.	Mfr. No.	Description	Price per 100—	
			1 to 24	25 to 100
L-7217	5000	Strandlink for 1/4-In. Strand...	\$105.00	\$99.00
L-7213	5001	Strandlink for 5/16-In. Strand...	121.00	115.00
L-7214	5002	Strandlink for 3/8-In. Strand...	141.50	135.00
L-7225	5022	Reducer Strandlink for 3/8 to 5/16-In. Strand.....	155.00	146.00

Lag Screws



Furnished with sharp wood screw threads only.

1/4 and 5/16-Inch Diameters

Cat. No.	Mfr. No.	Size Inches	Wt., Lbs. per 100	Price per 100
L-6481	J8721 1/2	1/4 x 1 1/2	2.5	\$4.57
L-6482	J8722	1/4 x 2	3.0	4.97
L-6484	J8722 1/2	1/4 x 2 1/2	3.3	5.37
L-6486	J8732	5/16 x 2	5.0	5.54
L-6488	J8732 1/2	5/16 x 2 1/2	5.8	5.93
L-6490	J8733	5/16 x 3	6.5	6.50
L-6492	J8733 1/2	5/16 x 3 1/2	7.7	7.04

3/8, 1/2 and 5/8-Inch Diameters

The 3/8 and 1/2-inch sizes have upset shoulders.

Unless otherwise specified, furnished with Fetter Drive threads.

Cat. No.	Mfr. No.	Size Inches	Wt., Lbs. per 100	Price per 100
L-6496	J8743	3/8 x 3	10.0	\$6.64
L-6498	J8743 1/2	3/8 x 3 1/2	12.1	7.15
L-6500	J8744	3/8 x 4	13.1	7.59
L-6502	J8744 1/2	3/8 x 4 1/2	14.2	8.03
L-6504	J8746	3/8 x 6	17.7	9.43
L-6508	J8753	1/2 x 3	19.1	8.85
L-6510	J8753 1/2	1/2 x 3 1/2	21.0	9.57
L-6512	J8754	1/2 x 4	24.2	10.28
L-6514	J8754 1/2	1/2 x 4 1/2	26.0	10.97
L-6479	J8755	1/2 x 5	28.4	11.79

Support Brackets For Rural Distribution Wire



For automatic deadending and splicing the 109 steel messenger which supports the 6 pair rural distribution wire. The deadend or wirevise is in one piece, but one end can be freed to assemble around insulator spools or through thimbleys. Standard package 25.

Cat. No.	Mfr. No.	Description	Wire Size	Price per 100—	
				1-99	100-499
L-7969	5058	Wirevise	12 BWG .109	\$52.50	\$49.85
L-7966	5059	Wirelink	12 BWG .109	35.00	33.25
L-7978	*5059N	Wirelink	12 BWG .109	59.00	53.10

*Neoprene covered.

Support Brackets for copper and copperweld wire with copper tubes, bronze jaws and yoke, and stainless steel bail.

L-7974	5078	Wirevise	{ 9 & 10 AWG .102-.114 }	\$65.00	\$62.00
L-7976	5079	Wirelink	{ 9 & 10 AWG .102-.114 }	45.00	43.00

Brackets

For Rural Distribution Wire

"B" Wire Pole Bracket supports the rural distribution wire at the pole. The steel support is held by the clamp and the wire rests in the curved bracket. The bracket is attached to the pole with two 3/8 x 4-inch fitter drive lag screws.

"C" Wire Bracket is for supporting rural distribution wire beneath a crossarm. Place this bracket on the lowest arm as close to the pole as possible.

Cat. No.	Mfr. No.	Description	Price per 100
L-3119	J8236	"B" Wire Pole Bracket.....	\$96.24
L-3121	J8235	"C" Wire Bracket.....	160.81

Square and Round Washers

Square Washers for Guy Rods

Cat. No.	Mfr. No.	Size Inches	For Rod Size, In.	Wt., Lbs. per 100	Price per 100
L-7707	J1073	2 x 2 x 1/8	1/2	13.6	\$3.96
L-7708	J1074	2 x 2 x 1/8	5/8	13.5	3.96
L-7709	J1075	2 1/4 x 2 1/4 x 3/16	1/2	25.3	6.50
L-7710	J1076	2 1/4 x 2 1/4 x 3/16	3/4	24.0	6.50
L-7712	J1078	3 x 3 x 3/16	5/8 and 3/4	47	13.37
L-7714	J1079	3 x 3 x 1/4	5/8 and 3/4	64	16.65
L-7717	J1077	3 1/2 x 3 1/2 x 3/8	3/4	128	32.78
L-7716	J1080	4 x 4 x 3/16	5/8 and 3/4	81.0	21.77
L-7718	J1082	4 x 4 x 1/4	5/8 and 3/4	111.0	29.49
L-7719	J1081	4 x 4 x 1/2	1	230	60.44

Square Curved Washers

Cat. No.	Mfr. No.	Size Inches	Hole, In.	Wt., Lbs. per 100	Price per 100
L-7722	J6822	2 1/2 x 2 1/2 x 3/16	1 1/16	31.0	\$8.50
L-7727	J113	3 x 3 x 1/4	1 1/16	59.0	16.03
L-7724	J6823	3 x 3 x 1/4	1 1/16	59.0	16.12
L-7726	J133	3 1/4 x 3 1/4 x 1/4	1 3/16	72.0	19.77
L-7715	J6829	4 x 4 x 1/4	7/8	110.0	28.42

Round Washers

Cat. No.	Mfr. No.	O.D. In.	Size Hole, In.	Wt., Lbs. per 100	Price per 100
L-7700	J1084	1	7/16	1.6	\$1.06
L-7702	J1085	1 1/4	9/16	2.1	1.29
L-7704	J1086	1 3/8	9/16	4.2	1.98
L-7706	J1088	1 3/4	1 1/16	8.0	3.59

Prices shown are subject to change without notice.

Copperweld Telephone Ground Rods With Annealed Copper Pigtails



Cat. No.	Mfr. No.	—SIZE—		Pigtail Inches	Wt., Lbs. per 100	Price per 100
		Diam.	Lgth. In. Ft.			
L-6222	J7105	3/8	x5	18	195	\$96.40
L-6224	J7106	3/8	x6	18	230	111.40
L-6226	J7305	1/2	x5	18	330	180.30
L-6228	J7306	1/2	x6	18	395	207.40
L-6230	J7307	1/2	x7	18	455	234.70

Ground Rods Hot Dip Galvanized



Without Wire

When ordering rods with hole add suffix letter A to catalog number.

Cat. No.	Mfr. No.	—SIZE—		Wt., Lbs. per 100	Price per 100
		Diam.	Lgth. In. Ft.		
L-6234	J5305	3/8	x5	190	\$58.19
L-6236	J5306	6		230	67.68
L-6238	J5315	1/2	x5	325	88.63
L-6231	J5316	6		390	103.97
L-6235	J5326	5/8	x6	600	154.53

With Wire

Has five turns of .104 inch tinned copper wire (free end 18 inches long) soldered to the upper end of the rod, insuring a proper electrical connection.

Cat. No.	Mfr. No.	—SIZE—		Wt., Lbs. per 100	Price per 100
		Diam.	Lgth. In. Ft.		
L-6240	J1098	1/2	x5	340	\$125.17
L-6244	J1099	6		400	140.66
L-6250	J1100	5/8	x6	605	195.14
L-6247	J1148	8		810	240.83



Reliable Galvanized Steel Kling Klamps For Steel Rods and Pipes

Heavily galvanized; provided with tinned washers to clamp small copper or iron ground wires. Galvanized steel set-screws have cupped points to bite into rods.

Standard package, 100.

Cat. No.	Mfr. No.	ROD SIZE —INCHES—		—PRICE PER 100—	
		Max.	Min.	1 to 9	10 to 99
L-5058	K48	1/2	3/8	\$30.00	\$28.50
L-5060	K58	5/8	1/2	35.00	33.75

Bronze—For Copper and Copperweld Rods

Cat. No.	Mfr. No.	ROD SIZE —INCHES—		—PRICE PER 100—	
		Max.	Min.	1 to 9	10 to 99
L-3583	E48	1/2	3/8	\$30.00	\$28.50
L-3587	E58	5/8	1/2	33.90	32.25
L-3623	E68	3/4	5/8	37.70	35.85



Reliable Adjustable Station Ground Clamps For Grounding of Communication Circuits

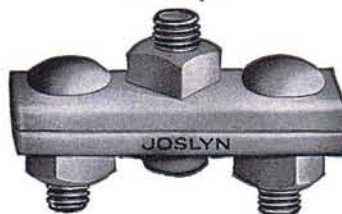
For telephone, radio and signal circuit station grounds.

Screws and nuts have close-fitting threads.

Standard package, 100.

Cat. No.	Mfr. No.	PIPE SIZE —IN.—		Ship. Wt., Lbs. per 100	—PRICE PER 100—	
		Max.	Min.		1 to 499	500 & Over
L-3412	1	1 1/4	3/8	6	\$16.75	16.50

Clamps



Cat. No.	Mfr. No.	No. of Bolts	Lgth. In.	For Use on Size Strand Inches	Size Bolt In.	Wt. Lbs. per 100	Price per 100
L-3522	J1061	1	1 5/8	3/16, 1/4, 5/16	1/2	58	\$26.02
L-3524	J1030	2	3 3/8	3/16, 1/4, 5/16	1/2	132	46.97
L-3530	J930	*3	4	1/4 to 7/16	1/2	232	79.69
L-3534	J931	*3	6	5/16 to 1/2	5/8	280	95.81

*Center bolt is reversible.

Suspension Clamps

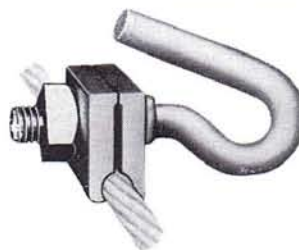


1-Bolt Type. Used for light cables and on cable arms. Furnished without a bolt, the 5/8-inch through bolt being used both for attaching clamp to pole and tightening clamp on strand.

3-Bolt Type. Used for heavy cables and long spans. Furnished with but two 1/2-inch high carbon steel track bolts, the center hole for a 5/8-inch through bolt.

Cat. No.	Mfr. No.	No. of Bolts	Lgth. In.	For Use on Size Strand Inches	Wt. Lbs. per 100	Price per 100
L-3416	J1095	1	2 1/2	1/4 to 7/16	76	\$25.11
L-3418	J1096	3	5 3/4	1/4 to 7/16	220	75.65

Diamond Span Clamps Hot Dip Galvanized



Used to take off drop wire leads along span and for pull-offs to hold cable away from trees and so avoiding use of tree guards. Can be used either with suspended cable or lashed cable.

Cat. No.	Mfr. No.	Style	No. in Ctn.	Ship. Wt., Lbs. per 100	Price per 100
L-3421	869	C	100	41	\$37.20

Span Clamps Hot Dip Galvanized



Consists of a No. J1095 suspension clamp fastened with a bolt to a spreader strap. Two No. J2586 two-groove knobs are fastened with stove bolts to the straps for service drops between spans.

Cat. No.	Mfr. No.	Wt., Lbs. per 100	Price per 100
L-3424	J7910	139	\$60.28

Prices shown are subject to change without notice.

Western Union Steel Pins

With Short Shank

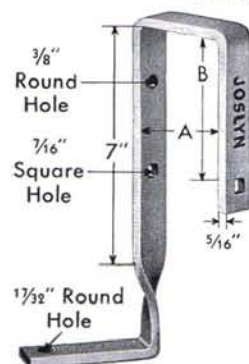


Cat. No.	Mfr. No.	Diameter Shank Inches	Wt. Lbs. per 100	Price per 100
L-5698	J1193	1/2	44	\$34.96
L-5700	J1195	5/8	65	54.30

With Long Shank

Cat. No.	Mfr. No.	Diameter Shank Inches	Wt. Lbs. per 100	Price per 100
L-5696	J1190	1/2	70	\$37.37
L-5697	J1191	5/8	104	56.10

Old Style Western Union Single Circuit Type Transposition Brackets



Furnished without bolts, pins or wood screw. Made of 1 1/4 x 5/16-inch steel.

No. 451 requires 2-inch x No. 14 round head wood screw, 1/2-inch short shank Western Union Pin and 3/8 x 4-inch carriage bolt.

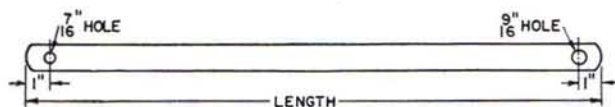
No. J450 requires 2-inch x No. 14 round head wood screw, 1/2-inch short shank Western Union Pin and 3/8 x 4 1/2-inch carriage bolt.

Cat. No.	Mfr. No.	CROSS ARM SIZE, IN.		Wt., Lbs. per 100	Price per 100
		A	B		
L-3149	J451	2 3/4	3 3/4	239	\$79.56
L-3155	J450	3 3/4	4 1/4	240	82.95

Flat Cross Arm Braces

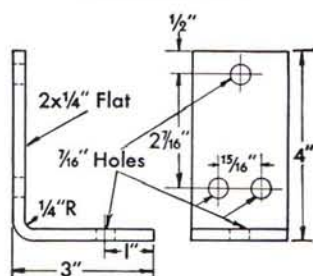
1 1/2 x 7/32-Inch Size

A.S.T.M. A107 .35/.50 Carbon



Cat. No.	Mfr. No.	For Arms with Brace Bolt Spacing		Weight Pounds per 100	Price per 100
		Inches	Length Inches		
L-3036	J7020	25	20	135	\$37.05
L-3038	J7022	28	22	150	40.46
L-3040	J7024	32	24	165	43.88
L-3042	J7026	33	26	175	47.26
L-3044	J7028	36-38	28	190	50.73
L-3046	J7030	42	30	200	54.19

Pole Brackets



Used with porcelain knobs for telephone service drops, fastened to pole with 3/8-inch lag screws.

Cat. No.	Mfr. No.	Wt., Lbs. per 100	Price per 100
L-3116	J1202	96	\$28.04

Pole Steps



Cat. No.	Mfr. No.	Size Inches	Wt., Lbs. per 100	Price per 100
L-7198	J1116	3/16 x 9	73	\$26.65
L-7196	J1117	5/8 x 9	80	29.70
L-7202	*J1118	5/8 x 10	95	31.69

*E.E.I. Standard.

Drive and Screw Hooks



Drive Hook



Screw Hook

Cat. No.	Mfr. No.	Type	Size Inches	Wt., Lbs. per 100	Price per 100
L-4822	J3316	Drive	3/16 x 5 1/4	26	\$19.38
L-4832	J3317	Screw	3/16 x 4	13	9.64

Diamond Angle Screw Fixtures



For attaching knobs for drop wiring. On brick or stone, use multi-size screw anchors.

Cat. No.	Mfr. No.	Size Inches	Length Shank Inches	Price per 100
L-4212	840	5/16	2 1/4	\$10.35
L-4214	841	3/8	3 1/2	17.10

Diamond Drive Rings



Serves the same purpose as bridle rings. Drive like an ordinary nail—easy to install. Hot galvanized.

Cat. No.	Mfr. No.	Diam. Eye Inches	Length Inches	Price per 100
L-6090	801	1/2	2	\$1.20
L-6086	804	5/8	2 1/2	2.20
L-6088	805	7/8	2 3/4	3.20

Galvanized Bridle Rings



Wood screw thread, hot dip galvanized. Use multi-size screw anchors to install in masonry.

Cat. No.	Mfr. No.	Style	Diam. Eye Inches	Price per 100
L-6066	814	E	5/8	\$3.00
L-6068	812	C	1 1/4	6.50
L-6070	810	A	1 5/8	7.50

Wire Clips



Cat. No.	Mfr. No.	Wt., Lbs. per 100	Price per 100
L-3688	D	1	\$1.21

Diamond DHD Hammer Drive Anchors

Hot Galvanized



Made of aluminum, with steel nails. For attaching trim, etc., to concrete.

Holds greater load when fastened to stone than wood screw of same diameter screwed into wood. Simply drill hole, place shield through hardware and hammer nail in.

Packed with nails in same container.

Cat. No.	Mfr. No.	Size, In.	Std. Pkg.	Wt. Lbs. per 100	Price per 100
		*O.D.	Lgth.		
L-2115	4314	3/16	7/8	100	1 \$4.30
L-2118	4320	3/16	1 1/4	100	1 1/8 4.86
L-2121	4416	1/4	1	100	1 1/2 5.40
L-2124	4420	1/4	1 1/4	100	2 5.94
L-2133	4528	5/16	1 3/4	100	3 1/2 8.64
L-2136	4536	5/16	2 1/4	100	4 1/2 9.72
L-2140	4632	3/8	2	100	6 1/2 10.80

*Use same diameter drill as o.d. of anchor shown.

Diamond Multi-Size Screw Anchors



Cat. No.	Mfr. No.	Size	Drill Size In.	Ship. Wt. Lbs. per 100	Price per 100
L-2148	5212	6-8x 3/4"	1/4	1	\$3.40
L-2151	5224	6-8x1 1/2"	1/4	1 3/4	3.81
L-2154	5316	10-14x1"	5/16	1 3/4	3.81
L-2155	5324	10-14x1 1/2"	5/16	2 1/2	5.44
L-2158	5516	16-18x1"	3/8	2 3/4	4.25
L-2159	5524	16-18x1 1/2"	3/8	4	6.12
L-2160	5628	20-24x1 3/4"	7/16	5 1/4	6.80

†First two numbers in column show standard size of wood screws which can be used; last number shows length of anchor.

Calking Anchors



Furnished with a screw. Heavy nut. Full diameter. Lead alloy sleeve. Free turning threads. Open back type. One calking tool in each box of anchors without extra charge. 50 in pkg.

Cat. No.	Mfr. No.	Bolt Size	Price per 100
L-2142	3040	1/4-20	\$8.58
L-2141	3030	10-24	5.85

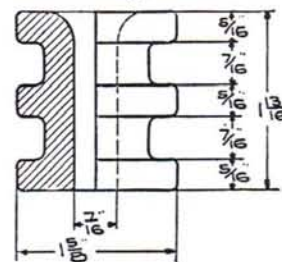
Drop Wire Clamps

Cat. No.	Mfr. No.	Description	Type Drop Wire	1-999 Price per 100
L-3432	PS-3	All Stainless—with Shim	For Dumbbell Drop Wire	\$16.40
L-3433	PS-4	Stainless Wedge and Bail Aluminum Shell and Shim	Nos. 20-17	13.65
L-3434	P-1	All Stainless—No Shim	For Non-reinforced Parallel and Twisted Pair Nos. 20-17	15.90
L-3435	P-2	Stainless Wedge and Bail Aluminum Shell—No Shim		13.15
L-3436	PR-1	All Stainless—No Shim		18.50
L-3437	PR-2	Stainless Wedge and Bail Aluminum Shell—No Shim		13.65
L-3439	PRS-3	All Stainless—with Shim	For Reinforced Parallel 20-17 and 16-14	19.00
L-3441	PRS-4	Stainless Wedge and Bail Aluminum Shell and Shim	Twisted Pair	14.20

Prices shown are subject to change without notice.

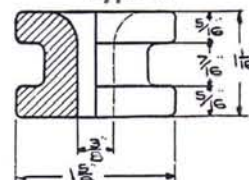
Porcelain Telephone Knobs

Type T



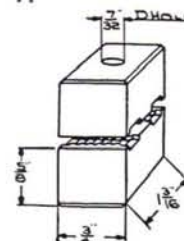
Cat. No.	Mfr. No.	Description	Price per 1000
L-5094	T	Two Groove.....	\$77.15

Type S



Cat. No.	Mfr. No.	Description	Price per 1000
L-5092	S	Single Groove.....	\$52.00

Type C—Two Piece



Introduced only a few years ago, the Type C two-piece knob is one of the most popular in use today. Fastened to surfaces with No. 10x2 1/2" round head wood screw.

Cat. No.	Mfr. No.	Description	Price per 1000
L-5090	C	Two Piece.....	\$42.95

Diamond Insulated Screw Eyes

Hot Galvanized Screw Eye



Porcelain ring has diagonal opening which allows easy insertion of wires and when pulled taut it cannot become released from ring. Porcelain is glazed on interior surface of ring and on surfaces of slot.

If used in masonry, use multi-size screw anchors.

Opening in all sizes, 5/32 inch.

Packed in containers of 100.

Cat. No.	Mfr. No.	Type	Dimen., In.—Eye Shank	Approx. Ship. Wt., Lbs. per 100	Price per 100
L-6470	830	5/8"S	5/8 1	85	\$9.24
L-6472	831	5/8"L	5/8 2	95	10.92
L-6478	832	1"S	1 1 1/8	180	15.54
L-6476	833	1"L	1 2 1/8	190	16.80

Malleable Iron Pole Hardware

Washers

Malleable Iron—Hot Dip Galvanized



Designed for greater strength and added resistance to corrosion. Reinforced rib design puts metal where strength requirements dictate. Each design includes a heavy boss around the bolt hole. Radial ribs extend from the boss to the outer edges of the washer to reinforce the washer against compressive or dishing loads.

Square-Curved						
Cat. No.	Size In.	Max. Bolt Diam. In.	Thick at Boss In.	Wt. per 100 Lbs.	Std. Pkg	*Zone 1 Per 100
P141	2 1/4 x 2 1/4	5/8	1/4	26	200	\$7.39
P141A	2 1/4 x 2 1/4	3/4	1/4	24	200	7.39
P143	3 x 3	5/8	3/16	54	100	13.94
†P143A	3 x 3	3/4	3/8	60	100	14.02
P144	4 x 4	3/4	7/16	106	50	24.71
Square-Flat						
†P56	2 1/4 x 2 1/4	5/8	1/4	20	250	\$5.65
P56A	2 1/4 x 2 1/4	3/4	1/4	24	250	5.65
Round-Flat						
P54	2 1/2 Dia.	1/2	1/4	15	250	\$6.18
P55	2 1/2 Dia.	5/8	3/8	30	200	8.85
P54	3 Dia.	3/4	7/16	40	100	11.89

†REA telephone accepted.

Guy Hooks

Malleable Iron—Hot Dip Galvanized



An efficient and economical transition piece for use between the thru bolt and down guy.

Ear design permits easy attachment of most types of guy loops and clamping device bails at any angle—0 to 90 degrees—at any time during construction. After the guy hook is attached to the pole, the guy strand loop or bail can be turned at right angles to the longitudinal axis of the guy hook, slipped over first one ear, then the other, and finally, rotated to the pulloff position. Once attached the guy strand cannot jump off or become otherwise disengaged until the loop or bail is again rotated to the horizontal position.

For maximum performance, guy hook should be backed up by curved reinforced rib design washers.

Cat. No.	Max. Bolt Diam. In.	Max. Strand Diam. In.	Thimble Diam. In.	Wt. per 100 Lbs.	Std. Pkg.	*Zone 1 Per 100
PX85	5/8	3/8	1 3/8	49	100	\$17.48
P135A	5/8	1/2	1 1/2	122	50	34.57
P133A	3/4	1/2	1 1/2	150	50	41.69

†Lower hole—5/16-inch diam. for lag screw or thru bolt.

Guy Hooks with Integral Spurs

Malleable Iron—Hot Dip Galvanized



Same design, installation and performance advantages of the regular guy hooks with following features:

More economical since separate lag screw is not required.

Less pieces for lineman to juggle.

Eliminates possibility of loose hardware.

Cat. No.	Max. Bolt Diam. In.	Max. Strand Diam. In.	Thimble Diam. In.	Wt. per 100 Lbs.	Std. Pkg.	*Zone 1 Per 100
P135AX	5/8	1/2	1 1/2	132	50	\$39.93
P133AX	3/4	1/2	1 1/2	160	50	46.88

Span Guy Hooks

Malleable Iron—Hot Dip Galvanized



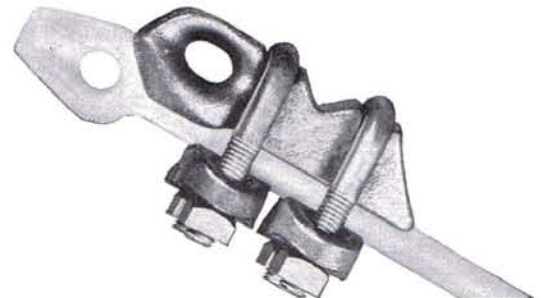
For use at any angle from 0 to 30 degrees with the horizontal. Accepts all types of guy loops and clamping device bails. Attachment of the guy loop is identical with regular guy hooks and can be made at any time during construction.

Reduces bending stresses on the thru bolt since the load is imposed only 5/8-inch from the surface of the pole.

Cat. No.	Bolt Hole	Max. Strand Diam. In.	Thimble Diam. In.	Wt. per 100 Lbs.	Std. Pkg.	*Zone 1 Per 100
P137	5/8" Clearance	1/2	1 5/16	90	100	\$32.56
P137A	5/8" Tapped	1/2	1 5/16	96	100	37.27
P137B	3/4" Tapped	1/2	1 5/16	88	100	37.91
P137C	3/4" Clearance	1/2	1 5/16	83	100	32.56

Auxiliary Eyes with Square Nuts

Malleable Iron—Hot Dip Galvanized Body and Plates
Hi-Strength Steel—Hot Dip Galvanized U Bolts and Nuts



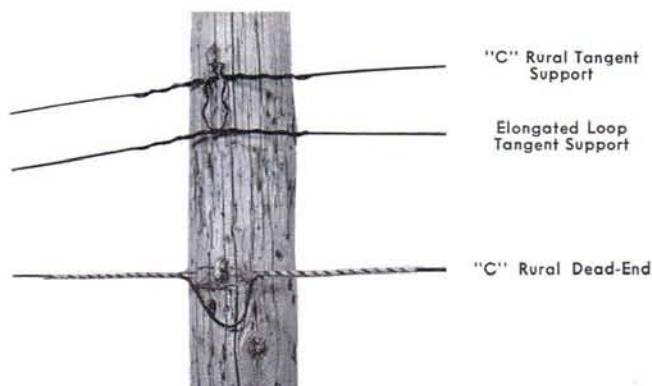
An economical method of adding one or even two additional guys to any type of existing anchor rod. Can also be used for temporary guying or a pulling eye for a come along to tension guys.

Cat. No.	Mfr. No.	Anchor Rod Diam. In.	Max. Strand Size In.	Thimble Diam. In.	Ult. Rating Lbs.	Wt. per 100 Lbs.	Std. Pkg.	*Zone 1 Per 100
L-4147	PA155	5/8-3/4	1/2	1 1/2	18,000	280	25	\$173.46
L-4151	PA155A	7/8-1	1/2	1 1/2	18,000	360	25	206.19

Strand Splices and Dead-Ends

Dead-Ends and Supports

For "C" Rural Wire



"C" Rural Tangent Supports

Cat. No.	Mfr. No.	Conductor Size	Price Each
L-7595	20 NSTS-C	2 No. 14 CW	\$.33
L-7597	22 NSTS-C	{ 2 No. 12 CW 2—.083" Steel }	.34

Elongated Loop Tangent Supports

Cat. No.	Mfr. No.	Conductor Size	Price Each
L-5789	25 NSTS-14C-E	2 No. 14 CW	\$.40
L-6295	25 NSTS-12C-E	{ 2 No. 12 CW 2—.083" Steel }	.45

"C" Rural Dead-Ends

Cat. No.	Mfr. No.	Conductor Size	Price Each
L-3925	15 NSDE-14C	2 No. 14 CW	\$.52
L-3927	20 NSDE-12C	{ 2 No. 12 CW 2—.083" Steel }	.60

Crossarm Tangent Supports

Cat. No.	Mfr. No.	Conductor Size	Price Each
L-5788	30 NSTS-14C-C	2 No. 14 CW	\$.48
L-5785	30 NSTS-12C-C	{ 2 No. 12 CW 2—.083" Steel }	.55

Plastic Vibration Dampers



Cat. No.	Mfr. No.	Wire Size Inches	Material Diam. Inches	Price Each
PVD-B	PVD-B	.080-.134	1/4	\$.30

Communication Ties



To order ties, specify the catalog No. which corresponds to the proper insulator and wire size in the table below.

Insulator No.	Wire Size .080-In. CW		Wire Size .102-.104-In. CW		Wire Size .109-In. Galv. Steel	
	Cat. No.	Price Each	Cat. No.	Price Each	Cat. No.	Price Each
H-16 & H-17	CWTW-080-A	\$16.00	CWTW-102-A	\$17.00	GTW-109-A	\$14.00
H-42 & H-45	CWTW-080-B	17.00	CWTW-102-B	18.00	GTW-109-B	15.00
H-56	CWTW-080-D	18.00	CWTW-102-D	19.00	GTW-109-D	16.00

Strand Splices and Dead-Ends

Splices

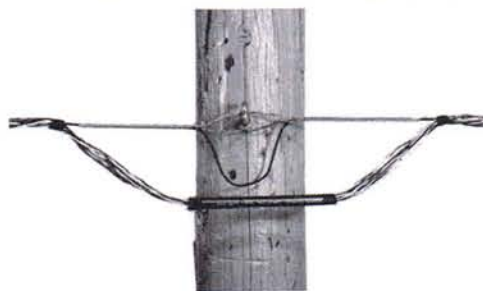
Cat. No.	Mfr. No.	Strand Size Inches	Price Each
27 GLS-3/16	27 GLS-3/16	3/16	\$.72
35 GLS-1/4	35 GLS-1/4	1/4	.99
L-5973	42 GLS-5/16	5/16	1.26
L-5974	50 GLS-3/8	3/8	1.66

Guy—Grip Dead-Ends

Cat. No.	Mfr. No.	Strand Size Inches	Price Each
20 GDE-3/16	20 GDE-3/16	3/16	\$.45
25 GDE-1/4	25 GDE-1/4	1/4	.60
L-5977	30 GDE-5/16	5/16	.80
L-5979	35 GDE-3/8	3/8	.90

Dead-Ends

For Rural Distribution Wire (B Rural)



Galvanized Steel Dead-Ends for Galvanized Steel Wire or Messenger

Cat. No.	Mfr. No.	Line Wire or Messenger	Price Each
11GDE-083	11GDE-083	14BWG—.083" Diam.	\$.21
12GDE-109	12GDE-109	12BWG—.109" Diam.	.25

Copperweld Dead-Ends for Copperweld and Copper Line Wire and Messenger

No.	Mfr. No.	Line Wire or Messenger	Price Each
11CWDE-080	11CWDE-080	.....—.080" Diam.—CW	\$.20
12CWDE-102	12CWDE-102	10 AWG—.102" Diam.—CW	.30
12CWDE-104	12CWDE-104	.....—.104" Diam.—CW	.30
12CWDE-104	12CWDE-104	.....—.104" Diam.—CU	.30

Prices shown are subject to change without notice.

PLASTIC PRODUCTS

Detroit Plastic Tubes



These new plastic tubes have many advantages over the unglazed porcelain tubes which they replace. They are much lighter, and practically unbreakable. The outside diameter on the plastic tube with a $\frac{3}{8}$ " opening is only $\frac{1}{2}$ ". Thus a smaller hole need be drilled than with the porcelain tube. The thermoplastic material is non-inflammable and may be easily cut with a hack saw. Since they are not fragile, shipping costs are lower. Order a hundred and try them.

Cat. No.	Mfr. No.	Inside Diam. Inches	Length Inches	Price per 1000
L-7583	PT- 4	$\frac{3}{8}$	4	\$57.00
L-7585	PT- 6	$\frac{3}{8}$	6	64.00
L-7587	PT- 8	$\frac{3}{8}$	8	71.20
L-7589	PT-12	$\frac{3}{8}$	12	87.20

Detroit Plastic Tree Wire Guards



Protects drop wire from abrasion where it runs through trees. This type P guard is helically slit and comes in three foot lengths. It can readily be spiraled on wire already in place, or can be threaded over the end of a loose wire.

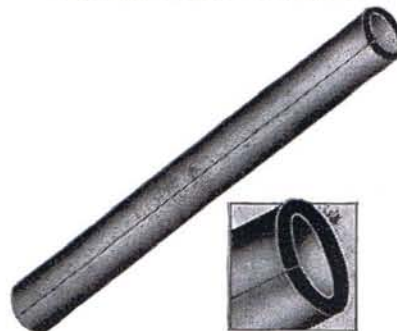
Cat. No.	Mfg. No.	Length Inches	Price Each
L-4519	P	36	\$1.16

Plastic Wire Guards

Clear, plastic tubing used for insulating line and station wires. This material is extremely rugged, resistant to abrasion and treated with a violet ray inhibitor to withstand severe weather conditions. Types L and LL are for use in insulating line wires. Type LL inside diameter is approximately $\frac{5}{16}$ inch. Type E is for protection of station wires where attached to walls or passed through partitions.

Cat. No.	Mfr. No.	Size Inches	Wall Inches	Ft. per Coil	Wt. Lbs. per Coil	Price per Coil
L-4520	L	$\frac{3}{16}$ I.D.	.037	100	1.6	\$1.70
L-4550	E	$\frac{1}{4}$ I.D.	.040	50	1	1.60
L-4552	LL	$\frac{3}{8}$ O.D.	.035	100	2	2.60

Detroit Cable Guards



To protect plastic sheath cable and distribution wire against abrasion where it rubs against suspension clamps. Made of Flexible Polyethylene and slit all the way along one side with overlap.

Cat. No.	Size In.	Wall In.	Length In.	For Cable Size Inches	Wt., Lbs. per 100	Price per 100
L-4522	$\frac{1}{2}$	.070	8	$\frac{3}{8}$ to $\frac{5}{8}$	4	\$6.65
L-4524	1	.070	8	$\frac{3}{8}$ to 1	5	8.55
L-4551	$1\frac{1}{2}$	.070	8	1 to $1\frac{3}{4}$	$8\frac{1}{2}$	13.35
L-4555	$2\frac{1}{4}$	.070	8	$1\frac{3}{4}$ to 3	$16\frac{1}{2}$	20.00

Holub Plastic Wood Screw Anchors



Specify catalog No. and anchor size; anchor should be as long as threaded part of screw.

Cat. No.	ANCHOR SIZE		For Screw Length In.	Drill Hole In.	Price per 100
	Screw Gage	Length In.			
L-2047	6	$\frac{3}{4}$	1 - $1\frac{1}{4}$	$\frac{11}{64}$	\$1.26
L-2064	6	1	$1\frac{1}{2}$	$\frac{11}{64}$	1.38
L-2049	8	$\frac{3}{4}$	1 - $1\frac{1}{4}$	$\frac{3}{16}$	1.53
L-2052	8	1	$1\frac{1}{2}$	$\frac{3}{16}$	1.73
L-2065	8	$1\frac{1}{2}$	2 - $2\frac{1}{2}$	$\frac{3}{16}$	2.09
L-2050	10	$\frac{3}{4}$	1 - $1\frac{1}{4}$	$\frac{7}{32}$	1.73
L-2053	10	1	$1\frac{1}{2}$ - $1\frac{3}{4}$	$\frac{7}{32}$	1.97
L-2067	10	$1\frac{1}{2}$	2 - $2\frac{1}{2}$	$\frac{7}{32}$	2.40
L-9999	12	$\frac{3}{4}$	$1\frac{1}{4}$	$\frac{1}{4}$	2.09
L-9999	12	1	$1\frac{1}{2}$	$\frac{1}{4}$	2.36
L-2075	12	$1\frac{1}{2}$	$1\frac{3}{4}$ - 2	$\frac{1}{4}$	2.79
L-2055	14	1	$1\frac{1}{2}$ - $1\frac{3}{4}$	$\frac{9}{32}$	2.76
L-2076	14	$1\frac{1}{2}$	2 - $2\frac{1}{2}$	$\frac{9}{32}$	3.31
L-2087	14	2	3 - $3\frac{1}{2}$	$\frac{9}{32}$	3.86

Kinsel Plastic Cable Spacers



$\frac{1}{4}$ -In. Size



$\frac{1}{2}$ -In. Size



$\frac{3}{4}$ -In. Size

Used in lash cable construction to provide a separation between cable and strand. Upper concaved surface bears against underside of strand; lower concaved flanges fit curve of cable.

Cat. No.	Mfr. No.	Size Inches	Price per 100
L-7130	AT-7396	$\frac{1}{4}$	\$3.00
L-7131	AT-7396	$\frac{1}{2}$	3.50
L-7132	AT-7396	$\frac{3}{4}$	5.00

POLES—PINS—BRACKETS—CROSSARMS

Pine or Cedar Poles

Since poles represent such a large proportion of the total cost of line construction, it is important to determine the value obtained in every pole purchase. We will gladly supply you with figures on poles conforming with all recognized specifications covering dimensions, material and treatment.

When requesting pole prices, specify number of poles, sizes (A.S.A. or top sizes), treatment, framing instructions (if any) and give freight address and name of delivering railroad. Be sure to specify sufficient number of poles to make carload weight, minimums which range between 34,000 to 40,000 lbs.—depending on the size and types of poles. See Leich's No. 50 catalog for pole weights.

Specification Locust Pins



Made from selected locust which is hard close-grained wood, impenetrable to moisture and practically impervious to decay. Threads are smoothly and accurately formed. Tops are threaded $2\frac{1}{4}$ inches in length—four threads to the inch, tapering $1/16$ inches in diameter to 1 inch in length.

Two sizes of pins are carried in stock— $1\frac{1}{4} \times 8$ inch which is the standard telephone pin, and the $1\frac{1}{4} \times 9$ -inch, which has an extra long thread for use with transportation insulators. When order does not specify size, the $1\frac{1}{4} \times 8$ -inch pins are furnished. Packed in heavy burlap bags.

Cat. No.	Mfr. No.	Size In.	Wt. Lbs. per 100	PRICE PER 100		
				1 to 250	250 to 4999	5000 or More
L-5676	J-1760	$1\frac{1}{4} \times 8$	32	\$8.54	\$7.90	\$6.83
L-5678	J-1761	$1\frac{1}{4} \times 9$	48	11.95	11.05	9.56

Galvanized Nails or Spikes

Cat. No.	Mfr. No.	Length Inches	Wt. Lbs. per 100	PRICE PER 100 LBS.		
				1 to 99 Lbs.	100 Lbs. or More	
L-5396	6-D	2		\$21.15	\$17.70	
L-5402	20-D	4		20.45	17.15	
L-5404	30-D	$4\frac{1}{2}$		20.45	17.15	
L-5406	40-D	5		20.45	17.15	
L-5408	50-D	$5\frac{1}{2}$		20.45	17.15	
L-5410	60-D	6		20.40	17.10	

Locust Pin Bushings

Used as locust pin hole plug in cross arm, when steel pin is used in place of wood pin. Also used with carriage and machine bolts for mounting transposition brackets. Bushing is $1\frac{1}{4}$ inches by $3\frac{7}{8}$ inches long.

Cat. No.	Hole Size In.	Steel Pin Size In.	Wt. Lbs. per 1000	PRICE PER 100		
				1 to 999	1000 to 4999	5000 or More
L-3219	$\frac{1}{16}$	$\frac{5}{8}$	150	\$5.31	\$4.91	\$4.24
L-3221	$\frac{9}{16}$	$\frac{1}{2}$	150	5.31	4.91	4.24

The Finest Washington Fir Crossarms



The finest Washington Fir crossarms of selected fir, obtained from virgin forests of the northwest, manufactured in accordance with the strictest specifications.

It is possible to obtain arms at lower prices, but experienced telephone men know the danger of departing from established specifications. Buy quality and be safe.

Cat. No.	Mfr. No.	Length In.	Dimensions Inches	No. of Pins	Wt. Lbs. per 100
J-5822	J-5822	42	$2\frac{3}{4} \times 3\frac{3}{4}$	4	945
J-5823	J-5823	62	$2\frac{3}{4} \times 3\frac{3}{4}$	6	1395
J-5824	J-5824	82	$2\frac{3}{4} \times 3\frac{3}{4}$	8	1845
J-5825	J-5825	102	$2\frac{3}{4} \times 3\frac{3}{4}$	10	2295
J-5809	J-5809	120	$3\frac{1}{4} \times 4\frac{1}{4}$	10	3540

Delivered Prices or Prices F.O.B. Cincinnati or New Orleans Warehouses Furnished Upon Request.

Note—We can also furnish treated pine crossarms. Creosote or Penta treatment available. Write—tell us what you need and we'll send you a quotation.

Perfect Cut Oak Brackets



Clean, precision cut brackets of the finest oak—thoroughly seasoned and dried. Accurate, tapered threading, $2\frac{1}{4}$ inches long—four threads to the inch. Carried in stock in the following two sizes:—Long Distance, $1\frac{5}{8} \times 2 \times 12$; and the big Western Union size, $2 \times 2\frac{3}{8} \times 12$. The Long Distance size are furnished in bundles of 25—the Western Union in bundles of 20.

The Western Union Bracket is generally used on long span construction with the L-7299 Bottom and L-7300 Top Bracket supports. Use 60D Galvanized Nail for upper hole and 40D for lower hole when fastening brackets to pole (except small creosoted pine poles; use 50D and 30D respectively).

Cat. No.	Mfr. No.	Size Inches	Wt. Lbs. per 100	PRICE PER 100		
				1 to 999	1000 to 4999	5000 or More
L-3136	J-2553LD	$1\frac{5}{8} \times 2\frac{1}{2} \times 12$	80	\$10.19	\$9.42	\$8.15
L-3140	J-2555WU	$2 \times 2\frac{3}{8} \times 12$	100	12.46	11.52	9.97

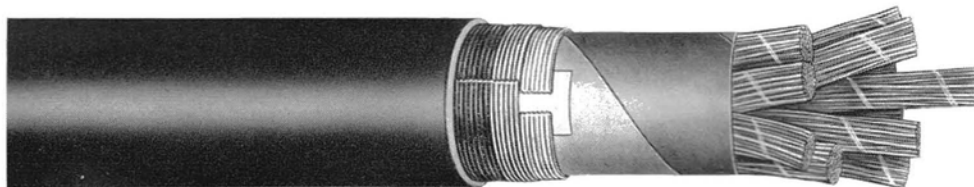
F.O.B. Genoa, Ill., Front Royal, Va., Franklin Park, Ill.

Prices shown are subject to change without notice.

CABLE

Stalpeth Telephone Cable

Light Weight . . . Handle Easily . . . Install Rapidly



General Cable quality engineering has been well-known throughout the independent industry. Now, for example, General Cable offers Stalpeth cable with the highest number of guaranteed pairs in the history of the industry.

Stalpeth sheath consists of three components. The first is a corrugated aluminum shield tape applied longitudinally over the cable core. The second is a corrugated coated steel tape applied longitudinally with the overlap seam continuously soldered. The third and final component is an extruded, high molecular weight, moisture- and weather-resistant polyethylene jacket, which is bonded to the underlying steel tape by means of a thermoplastic cement.

Installations can be more economical with Stalpeth Sheathed Cables. For example, in aerial installations there can be a reduction in messenger strand size and associated pole supports, or an increase in sheaths also permit pulling through intermediate manholes in under-span lengths with resulting savings in pole line costs. These light-weight ground installations, with consequent savings in splicing costs and installation time. An excellent solution for your corrosion problems!

Prices shown are F.O.B. shipping point for estimating only. Actual delivered prices can be obtained from your nearest Leich representative.

26 AWG Type 26S-85-SP Type 26SU-85-SP				24 AWG Type 24S-90-SP Type 24SU-90-SP				22 AWG Type 22S-90-SP Type 22SU-90-SP				19 AWG Type 19S-90-SP Type 19SU-90-SP			
No. of Pairs	No. of Guaranteed Pairs	Price per 1000 Feet	Approx. Ship. Wt. per 1000 Feet	No. of Guaranteed Pairs	Price per 1000 Feet	Approx. Ship. Wt. per 1000 Feet	No. of Guaranteed Pairs	Price per 1000 Feet	Approx. Ship. Wt. per 1000 Feet	No. of Guaranteed Pairs	Price per 1000 Feet	Approx. Ship. Wt. per 1000 Feet	No. of Guaranteed Pairs	Price per 1000 Feet	Approx. Ship. Wt. per 1000 Feet
16	....	....	....	....	....	....	....	....	....	16	\$273.50	363	....	....	....
26	....	....	....	....	....	....	....	....	....	26	\$246.00	291	....	....	....
51	50	\$233.00	257	50	\$274.00	361	51	\$390.00	466	51	\$383.00	474	....	....	....
76	75	\$294.00	354	75	\$368.50	444	76	\$519.50	607	76	\$631.50	802	....	....	....
101	100	\$366.00	409	100	\$448.50	540	101	\$657.50	794	101	\$921.00	1181	....	....	....
152	151	\$501.50	573	151	\$625.00	769	152	\$950.00	1171	152	\$1181.50	1443	....	....	....
202	201	\$619.00	684	201	\$805.50	1025	202	\$1207.50	1587	202	\$1515.50	2107	....	....	....
303	301	\$892.00	1011	302	\$1173.00	1376	303	\$1717.50	2300	303	\$3074.50	2904	....	....	....
404	401	\$1121.50	1320	402	\$1489.00	1820	404	\$2163.50	2988	404	\$4014.50	4406	....	....	....
455	....	....	....	....	....	....	455	....	....	455	\$4482.00	5427	....	....	....
606	603	\$1633.50	1792	604	\$2154.50	2623	606	\$3232.50	4164	606	....	6761	....	....	....
909	905	\$2359.00	2584	906	\$3169.00	4104	909	\$4744.00	6818	909	....	....	....	....	....
1212	1207	\$3030.00	3713	1209	\$4139.50	5193	....	....	....	....	....	....	....	....	....
1515	1510	\$3752.00	4464	1512	\$5104.00	7079	....	....	....	....	....	....	....	....	....
1818	1813	\$4441.00	5085	....	....	....	....	....	....	....	....	....	....	....	....
2121	2116	\$5134.50	6533	....	....	....	....	....	....	....	....	....	....	....	....

NOTE: Stalpeth Sheathed cable is supplied only in the gauges and number of pairs listed above.

Where pulling eyes are required they will be furnished at a charge of \$4.70 each. A credit of \$1.00 each will be allowed for pulling eyes if returned in good condition.

All Stalpeth can be shipped under gas pressure at no extra cost.

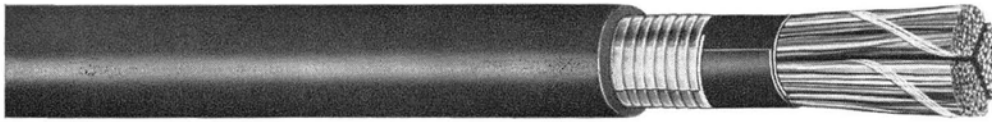
Delivery Information

Contact your nearest Leich representative. He can furnish you with deliveries on any General Cable product.

Terms: 1/2 of 1%, 10 Days.

Alpeth Polyethylene Insulated Telephone Cable

For Aerial and Duct Service



Alpeth, manufactured by General Cable, is the finest available to the independent telephone industry. All pairs are guaranteed. What's more, each pair is individually color-coded for easy identification in outside plant engineering records, and also for crews in the field working on cable.

Prices are F.O.B., factory freight allowed to destination on 300 pounds or more.

26 Gauge Copper Conductor

No. of Pairs	Price per 1000 Feet	*Std. Reel Length Feet	Approx. O.D. In.	Approx. Ship. Wt. Lbs. per 1000 Feet
11	\$ 85.00	5000	0.37	92
12	90.50	5000	0.38	96
16	110.00	5000	0.40	108
18	118.50	5000	0.42	115
25	167.50	5000	0.46	138
50	291.50	3000	0.57	217
75	378.50	3000	0.66	294
100	494.00	3000	0.73	352
150	710.00	3000	0.93	490
200	898.50	1000	1.04	692
300	1430.50	1000	1.21	923
400	1837.00	1000	1.36	1180

22 Gauge Copper Conductor

No. of Pairs	Price per 1000 Feet	*Std. Reel Length Feet	Approx. O.D. In.	Approx. Ship. Wt. Lbs. per 1000 Feet
6	\$ 93.00	5000	0.40	104
11	123.00	5000	0.47	139
12	140.00	5000	0.48	147
16	165.00	5000	0.53	177
18	179.00	5000	0.55	193
25	228.50	5000	0.61	245
50	407.00	3000	0.79	425
75	584.00	3000	1.00	591
100	748.00	3000	1.11	729
150	1102.50	3000	1.33	1117
200	1423.00	1000	1.47	1570
300	2310.50	1000	1.80	2130
400	3029.50	1000	2.04	2677

24 Gauge Copper Conductor

No. of Pairs	Price per 1000 Feet	*Std. Reel Length Feet	Approx. O.D. In.	Approx. Ship. Wt. Lbs. per 1000 Feet
6	\$ 76.50	5000	0.34	89
11	100.50	5000	0.41	111
12	107.00	5000	0.42	116
16	133.50	5000	0.46	136
18	144.00	5000	0.48	147
25	190.50	5000	0.53	183
50	328.00	3000	0.67	302
75	451.50	3000	0.77	404
100	595.00	3000	0.94	531
150	861.00	3000	1.09	714
200	1129.00	1000	1.22	960
300	1855.00	1000	1.45	1348
400	2388.00	1000	1.68	1794

19 Gauge Copper Conductor

No. of Pairs	Price per 1000 Feet	*Std. Reel Length Feet	Approx. O.D. In.	Approx. Ship. Wt. Lbs. per 1000 Feet
6	\$118.00	5000	0.49	149
11	180.00	5000	0.59	213
12	192.50	5000	0.61	226
16	234.00	5000	0.68	276
18	256.00	5000	0.71	304
25	346.00	5000	0.80	403
50	671.00	3000	1.13	722
75	971.50	3000	1.33	1096
100	1258.00	3000	1.51	1360
150	1846.50	2000	1.82	2021
200	2363.00	1000	2.08	2630
300	3554.00	1000	2.48	3910
400	4415.00	1000	2.82	4954

*Standard Package—Lengths as specified above, shipped on non-returnable reels. No charge will be made for reels and no credit will be allowed if returned.

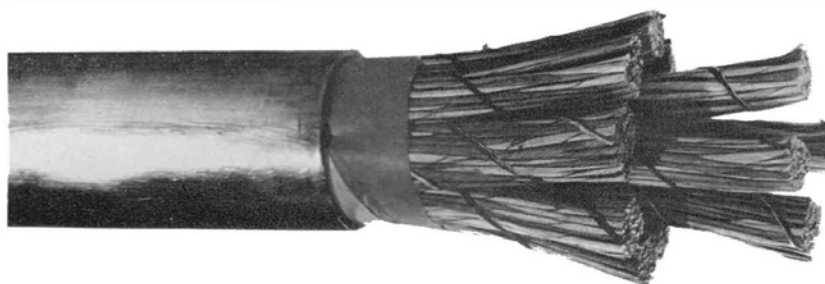
Delivery Information

Contact your nearest Leitch representative. He can furnish you with deliveries on any General Cable product.

Terms: ½ of 1%, 10 Days.

Prices shown are subject to change without notice.

Single Wrap Paper Insulated Lead Sheathed Telephone Cable



This cable, known and used throughout the Independent Industry, is now available with the highest number of guaranteed pairs in the history of the industry.

Below are listed sizes, prices and number of guaranteed pairs for each size. Prices furnished are F.O.B. factory and are for estimating only. For actual delivered prices, telephone your nearest Leich representative.

All cable reels are returnable to the General Cable Factory by freight collect. There is no charge for reel lags and it is not necessary to return them. Fluctuating prices make it necessary to invoice shipments at prices in effect on date of shipment.

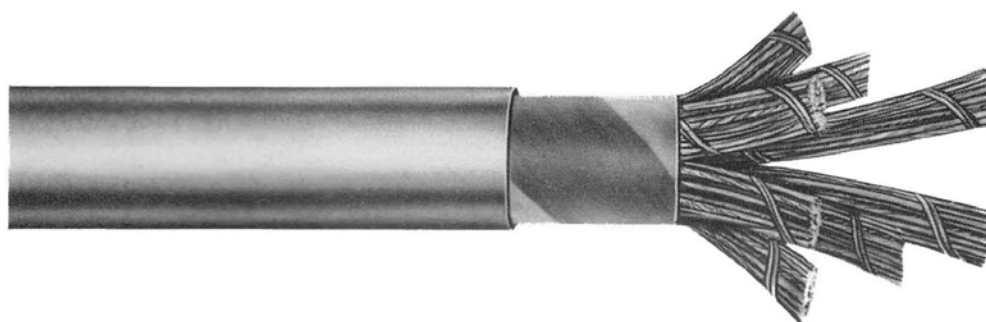
26 AWG Type 26S-85 Type 26SU-85				24 AWG Type 24S-90 Type 24SU-90				22 AWG Type 22S-90 Type 22SU-90				19 AWG Type 19S-90 Type 19SU-90			
No. of Pairs	No. of Guaranteed Pairs	Price per 1000 Feet	Ship. Wt. per 1000 Feet	No. of Guaranteed Pairs	Price per 1000 Feet	Ship. Wt. per 1000 Feet	No. of Guaranteed Pairs	Price per 1000 Feet	Ship. Wt. per 1000 Feet	No. of Guaranteed Pairs	Price per 1000 Feet	Ship. Wt. per 1000 Feet	No. of Guaranteed Pairs	Price per 1000 Feet	Ship. Wt. per 1000 Feet
6	...	...	...	11	...	...	6	...	...	6	\$186.00	500	11	252.00	675
11	10	\$126.00	340	16	\$142.00	370	11	\$181.50	480	16	252.00	675	16	321.00	835
16	15	143.50	370	26	169.00	430	16	219.50	580	26	321.00	835	26	442.50	1100
26	25	181.50	480	50	217.00	530	26	286.00	735	51	442.50	1100	51	721.00	1635
51	50	260.50	690	75	325.50	800	51	446.50	1095	76	721.00	1635	76	1029.50	2325
76	75	336.50	890	100	424.00	1020	76	607.00	1380	101	1029.50	2325	101	1304.00	2805
101	100	412.50	1080	151	522.50	1200	101	760.50	1660	152	1304.00	2805	152	1845.00	3870
152	151	569.00	1450	201	735.00	1620	152	1049.50	2320	202	1845.00	3870	202	2394.50	5040
202	201	701.50	1690	302	928.00	1950	202	1327.00	2740	303	2394.50	5040	303	3422.50	6975
303	300	988.50	2250	402	1294.50	2650	303	1887.50	3900	404	3422.50	6975	404	4465.00	9075
404	401	1225.50	2570		1648.00	3285	404	2422.50	4750						

Where pulling eyes are required they will be furnished at a charge of \$4.80 each.

All cable can be shipped under gas pressure at no extra cost.

Extruded Aluminum Sheathed Telephone Cable

With Single Wrap Paper Insulated Conductors



The same high quality paper insulated core as paper lead cable—with the same number of guaranteed pairs—is also available in an extruded seamless aluminum sheath.

Aluminum is advantageous because of its light weight, high strength and superior conductivity. It is completely impermeable, and is corrosion-resistant in normal atmospheres. In coastal areas or buried installations, a polyethylene jacket can be supplied over the aluminum sheath. Shipment of aluminum cable is subject to the same cable reel information furnished on paper lead cable.

For information on prices, installation and practices and other information, call your nearest Leich representative.

Delivery Information

Contact your nearest Leich representative. He can furnish you with deliveries on any General Cable product.

Terms: ½ of 1%, 10 Days.

Prices shown are subject to change without notice.

Direct Earth Burial Cable

Supertel 1958A Polyethylene Insulated Telephone Cable

Manufactured in accordance with REA 1958 Specification PE-23 for direct earth burial. Annealed copper conductors, polyethylene insulation, full color coding, mylar backed rubber tape, inner Polyethylene jacket, 5 mil copper tape longitudinally applied, corrugated in sizes over 25/19, 50/22, 75/24 and 100/26 to give maximum mechanical and electrical protection. A 10 mil copper shield is also available where greater mechanical protection is required. For example for use in gopher infested areas. An outer jacket of polyethylene.



DS-Alpeth

DS-Alpeth cables are designed for direct earth burial. Made up with polyethylene insulation over conductors, full color coding, conductors paired, Mylar backed rubber tape over core, inner jacket polyethylene, 8 mil aluminum shielding tape longitudinally applied, corrugated in sizes over 25/19, 50/22, 75/24 and 100/26. Outer jacket of High Molecular Weight polyethylene.



Armored Paper Insulated Telephone Cable

Any size standard paper insulated lead sheathed telephone cable can be furnished with a number of outer protective coverings designed primarily to furnish greater mechanical protection for direct earth burial. One of the most popular types is double flat steel taped armored telephone cable consisting of a layer of impregnated paper tape over the lead sheath over which is applied a bedding of impregnated jute and asphalt, two asphalt coated flat steel tapes, a layer of jute overall finished off with mica to prevent sticking. Cables with the above construction only offered with a single galvanized flat steel tape are available for areas requiring special gopher protection.



Jute Protected Paper Insulated Lead Sheathed Telephone Cable

For direct earth and duct installations where corrosive or electrolysis conditions are known paper insulated lead covered cables can be covered with an asphalt compound, two layers of impregnated paper with asphalt, two layers of impregnate jute, an asphalt compound and coating of whitening over that to prevent sticking.



Reinforced Neoprene Protection over Lead Covered Cable

On lead sheath cables up to 1.5 inch O. D. a combination of neoprene-filled and all-neoprene tapes 65 mils thick can be applied for corrosion and electrolysis protection. On cables over 1.5 inch O. D. the neoprene jacket would be 95 mils. High Molecular Weight polyethylene can be also applied as a protective covering over lead covered cables.



Miscellaneous Cable

Textile Terminating Lead Covered Tip Cable

Tip cable is used in terminating exchange area cable to the main frame. Furnished in #22 AWG solid annealed tinned copper conductors. The insulation consists of two layers cellulose acetate yarn and one layer cotton yarn lacquered to prevent fraying. A paper wrap is applied over the core with a commercially pure lead sheath overall. Available from manufacturer's stock, cut to your exact length requirements. Furnished in 51, 101, 202, 303, 404, and 606 pair.

Combination and Composite Paper Insulated Lead Covered Telephone Cables

A complete range of quadded #19 AWG cables or paired cables that can be combined into one cable with other paired conductors are offered for a variety of trunk and toll applications. Because of the variety of constructions available, information can only be furnished upon request.

Quadded Paper Insulated Lead Sheath Telephone Cable



Especially designed for use in aerial or duct installations of long distance toll lines especially where use of phantom circuits or carrier frequencies are required. Short pair twists are used in forming quads to give improved cross talk performance. Available in quads of 7, 12, 19, 27 and 37. Complete quad combinations available.

Video Cables



Video Pair Cable—Unarmored Lead Sheath



Video Pair Cable—Armored

Video pairs are wide range, balanced transmission lines which are finding ever increasing uses for high frequency applications. These especially designed pairs can be incorporated in cables containing either paper insulated or plastic insulated telephone pairs or incorporated within their own lead sheath or plastic jacket. Video pairs are in general use for remote TV pickup points such as athletic fields and convention halls. These same pairs are also suited for a variety of other high frequency applications such as closed circuit TV, telephone carrier circuits and links to microwave stations. Cables containing video pairs are suitable for aerial or duct installation or can be armored for direct burial and submarine use.

The basic video pair consists of #16 AWG solid annealed uncoated copper, insulated with foam polyethylene. These are paired with fiberglass-reinforced foam polyethylene fillers. Over this is applied a helically wrapped polyethylene tape, a parallel fold copper tape, and a helically applied copper tape. Video pairs that are used under lead sheaths will have creped Kraft paper tapes applied over the copper shielding tapes and those under plastic jackets will have a polyethylene tape applied over the copper shielding tapes. Where several video pairs are incorporated in a cable, the length of pairing lay will vary and the pairs will be arranged in the cable to minimize magnetic coupling between pairs.

Submarine Armored Paper Insulated Telephone Cables



A complete line of telephone cables for burial in water or water erosion areas are available. The cables are insulated with double wrap dry paper insulated lead sheath with either single or double wire armored shield. Where excessive flexing and movement due to rough or strong currents prevail double wire armor is offered.

The single armor construction is composed of two layers of impregnated jute filled with asphalt, layer of galvanized steel wire armor, asphalt compound over that, two layers of impregnated jute filled with asphalt coated with mica.

*We have a catalog covering specifications listing every cable manufactured by General Cable.
Write for Catalog T-8-60*

CABLE SUPPLIES

Bermico Electrical Conduit



What Is Bermico?

Bermico is a substance made by impregnating strong, tough, wood fiber tubes with coal tar pitch. The fibers possess unusual mechanical strength even before impregnation. A vacuum pressure impregnation process increases infiltration action and imparts maximum pitch content to the fiber tubes.

What Does Bermico Do?

Bermico Conduit, encased in a concrete envelope, makes a permanent installation. The smooth interior bore of the conduit allows cables to be pulled in without damage to the lead sheath. It's resistance to attack by ground waters insures a permanent, trouble-free installation.

How Is Bermico Made?

Bermico is made to precise standards as to physical and chemical properties and dimensions. The tubes are formed of fibers in moist state and then dried slowly to prevent case hardening or blistering. Made to a uniform wall thickness, free of laminations and voids. After drying, tubes are impregnated with a special pitch compound under close technical control.

General Information

Furnished in standard 8-foot lengths, including one coupling, in all sizes ranging from 2 to 6 inches. Bermico conduit and fittings are interchangeable with other makes of bituminized fiber conduit as required by Federal Specification WC581. All necessary attachments are available to meet your specific requirements.

Gas Pressure Cable Testing

For gas pressure testing of aerial or underground cables and cable splices, we offer a complete line of plugs, valves, cylinders of gas and all necessary equipment. These are shipped with complete instructions for using.

Ask for further information and prices.

Natco Standard Multiple Duct Conduit



Provides long lengths and multiplicity of duct holes; through dowel holes in all shapes permit positive means of alignment. For low tension, telephone, railway signal and other service. Scarified around outside near each end to provide anchorage for joint mortar.

Nom. Bore In.	No. of HOLES	Std. Duct In.	Dow- Lgth. In.	Ft. per Pc.	Actual Duct Size In.	Approx. Outside Dimen. In.	Made in Short Lengths In.	Min. Car-load Duct Ft.
3 1/4 Sq.	2	2	24	4	3 3/8	4 3/4 x 8 3/4	6, 8, 12	7600
3 1/4 Sq.	3	4	24	6	3 3/8	4 3/4 x 12 3/4	6, 8, 12	7500
3 1/4 Sq.	4	5	36	12	3 3/8	8 3/4 x 8 3/4	6, 9, 12	8400
3 1/4 Sq.	6	2	36	18	3 3/8	8 3/4 x 12 3/4	6, 9, 12	9000
3 1/4 Sq.	9	4	36	27	3 3/8	12 3/4 x 12 3/4	6, 9, 12	9000
3 1/2 Sq.	2	2	24	4	3 5/8	5 1/8 x 9 3/8	6, 8, 12	6400
3 1/2 Sq.	3	4	24	6	3 5/8	5 1/8 x 13 5/8	6, 8, 12	6900
3 1/2 Sq.	4	5	36	12	3 5/8	9 3/8 x 9 3/8	6, 9, 12	7500
3 1/2 Sq.	6	2	36	18	3 5/8	9 3/8 x 13 5/8	6, 9, 12	8100
4 1/4 Sq.	2	2	24	4	4 3/8	5 1/2 x 11	6, 8, 12	5200
4 1/4 Sq.	3	4	24	6	4 3/8	5 1/2 x 16 1/2	6, 8, 12	5400
4 1/4 Sq.	4	5	36	12	4 3/8	11 x 11	6, 9, 12	6000
4 1/4 Sq.	6	2	36	18	4 3/8	11 x 16 1/2	6, 9, 12	6300
4 1/4 Sq.	9	4	24	18	4 3/8	16 1/2 x 16 1/2	6, 8, 12	6300

Other short lengths made special to order.

J-M Transite Telephone Ducts

With Plastic Coupling



Transite Duct Are Installed in Direct Contact, Saving Trenching Time and Backfilling.

Made of asbestos-cement; cannot rust—resists corrosion and all normal soil stresses; immune to electrolysis.

Furnished with plastic coupling which was especially designed for telephone service. Plastic coupling permits use of pneumatic rodding instead of expensive hand rodding; cleaning is eliminated.

Advantages

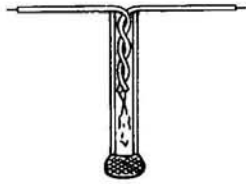
1. Narrow Trench
2. Faster Installation
3. Tight Joints
4. Cleaner Ducts
5. Smaller Construction Crews
6. Duct Flexibility
7. Pneumatic Rodding
8. Lowest Maintenance Costs

Furnished in 10-foot lengths.

Specify Transite C if ducts for direct burial or for exposed locations are desired; Transite B if concrete-encased ducts are desired.

Irvington Filled Splice Sleeves

Moisture and Corrosion Resistant



Specially formulated plastic sleeve imparts vastly improved sun and weather resistance. Filled with silicone grease with special inhibiting agent which imparts long time resistance to copper corrosion as well as an effective moisture barrier. Has constant viscosity at temperature extremes. Allows re-entry to splice as a result of non-setting properties. Each size distinctively colored for ready identification. Sleeves are 2½ inches long.

Cat. No.	Mfr. No.	Color	Size In.	No. per Box	Price per Box
L-9826	TS121	Yellow	.085	110	\$2.95
L-6802	TS122	Green	.105	110	3.35
L-6804	TS123	Clear	.125	110	3.75
L-6806	TS124	Red	.145	110	4.15
L-6808	TS125	Blue	.165	110	4.75

Irvington Open Splice Sleeves

Sleeves are 3 inches long.

Cat. No.	Mfr. No.	Gauge of Conductors	Type of Splice	Color	Inside Diam. In.	No. per Box	Price per Box
L-7038	TS-102-1	24 AWG	Straight	Green	.106	250	\$1.40
L-7054	TS-102-2	22 AWG	Straight	Black	.125	250	1.46
L-7056	TS-102-3	19 AWG	Straight	Red	.148	250	1.50
L-7056	TS-102-3	24 AWG	Bridge	Red	.148	250	1.50
L-7056	TS-102-3	22 AWG	Bridge	Red	.148	250	1.50
L-7058	TS-102-4	19 AWG	Bridge	Yel.	.208	250	2.16

Hope Anhydrous Prepared Cotton Sleeves



Furnished in single wall type in a variety of sizes. Length, 3¼ inches plus or minus ¼ inch. Approximate melting point of treatment, 123°F.

Meets A.T. specification No. 6351.

Packed in moistureproof boxes. Inside diameters are uniform. Also available in double wall type.

Cat. No.	Mfr. No.	Size In.	Approx. No. per Box	Price per Ctn.
L-6902	20	3/32	900	\$1.63
L-6896	21	1/8	700	1.27
L-6898	22	5/32	400	1.06
L-6900	23	1/4	200	.95
L-6904	24	3/8	100	1.25



Hammond Drierite Desiccant

An improved method of drying out cable splices. A granulated compound, it is placed in among conductors after wires have been spliced. Wrapping with muslin and covering with lead sleeve is then done in the usual manner.

Cat. No.	Mfr. No.	Description	Price Each
L-5956	DES-18	1/8 Pt. 50 Grams	\$.13
L-5959	DES-12	1/2 Pt. 200 Grams	.26

Davison Protek-Sorb Desiccant



For drying cable splices. Eliminates hazards of boiling out cable splices with hot, melted paraffin. To dry splice, pour recommended quantity of desiccant into splice before it is closed. Protek-Sorb Desiccant is granular and chemically inert and non-corrosive. Will not dust, cake, powder or liquefy when used; has high dielectric constant. Moisture-absorbing quality is very high. Open cans only when ready to use. *Packed 12 cans to a case.*

Cat. No.	Mfr. No.	Description	Price Each
L-5957	PS-160	160 Gram Size	\$.45
L-5958	PS-650	650 Gram Size	1.38

Cable Splicers' Muslin Tape

For wrapping cable splices.

Cat. No.	Mfr. No.	Width In.	Length Roll Yards	Price per Roll
L-5370	410	4	10	\$.45



Lipp Cable Pasters

Paper gummed on one side for use in limiting the length of a wiped joint and giving it a neat and finished appearance.

Cat. No.	Mfr. No.	Width In.	Length Roll Feet	Price per Roll
L-5646	CP-100	2	100	\$.25

Fairmount Pipe Bends and Conduit Fittings



Pipe bends serve many purposes in subsidiary conduit construction and are used particularly where cable emerges from the ground at poles or at buildings. They are made of a good grade of cast iron with ends flanged as illustrated for the fittings. All bends are 90°.

The fittings are formed as shown with one end to fit under the "U" cable guard and the other end to fit the pipe bend.

Pipe Bends

Cat. No.	Inside Diam. In.	Rad. of Curve In.	Wt. Lbs.	Price Each
L-2466	2	24	27	\$9.65
L-2468	3	30	54	16.55

Pipe Caps

Cat. No.	Joins Cable Guard Cat. No.	To Pipe Bend Size, In.	Wt. Lbs.	Price Each
L-3272	L-4512	2	1 1/4	\$.55
L-3270	L-4512	2	3 1/2	.75
L-3268	L-4514	3	3 1/2	.75

U-Cable Guards Hot Dip Galvanized

Used for the protection of telephone and power cables.

Made from 14-gage sheet steel, formed into a U shape. This U shape provides the additional strength necessary against collision and the rounded surface protects the pedestrian.



Cat. No.	Mfr. No.	Lgth. Feet	Inside Width Inches	Wt. Lbs. per 100	Price per 100
L-4510	J985	5	1 1/8	540	\$179.48
L-4511	J984	8	1 1/8	600	221.09
L-4512	J987	8	2 3/16	1280	359.14
L-4531	J988	5	3 3/16	1080	351.21
L-4514	J989	8	3 3/16	1800	499.76

Mounting Straps

Made from flat steel and is shaped to fit the guard.

The Nos. L-7304 and L-7306 are fastened with 1/4-inch lag screws.

The No. L-7308 strap is lagged to the pole with 5/16-inch lag screws.

Cat. No.	Mfr. No.	Size Steel Inches	Used with Cable Guards No.	Wt. Lbs. per 100	Price per 100
L-7304	J995	1/8x3/4	L-4510	18	\$10.62
L-7306	J996	1/8x3/4	L-4512	30	13.71
L-7308	J997	3/16x1	L-4513-14	70	35.61

J-M Duxseal Plastic Compound



A non-hardening adhesive plastic compound made with an asbestos base. Used like putty, Duxseal will stick to any clean surface—will not slump, flow or harden in service. It is insoluble in water, unaffected by ordinary gases and condensates, and will not injure user's hands. Used for sealing openings of ducts, sealing terminal boxes, filling cracks in brick work, etc.

Cat. No.	Mfr. No.	Wt. Lbs.	Price per Pound
L-4095	DX-1	1	\$.54
L-4090	DX-5	5	.38

Lead Sleeving

Furnished in a wide range of lengths and diameters to meet specific requirements. Listed below are the most commonly used sizes and lengths. These sizes can also be furnished in six foot mill lengths for greater economy; other sizes available on order. Inside diameters are given below. All sleeves under three inches have a wall thickness of 1/8-inch; those with a diameter of three inches or more have a 3/16-inch wall.

Cut Lengths

Cat. No.	I.D. and Length In.	No. of Pairs	B & S Ga.	Wt. Lbs. Each
L-6819	3/4x15	6	19, 22	2.12
		11	19, 22, 24	
		16	19, 22, 24	
		26	24	
L-6820	1 x15	51	24	2.87
		26	19, 22	
L-6821	1 1/4x15	51	22	3.5
		76	24	
		51	19	
L-7059	1 1/2x15	76	22	4.00
		101	22, 24	
L-7062	1 3/4x17	76	19	5.38
		152	24	
		101	19	
L-7064	2 x17	152	22	5.81
		202	24	
L-6822	2 1/4x17	202	22	6.52
		303	24	
L-6823	2 1/4x20	152	19	7.67
		202	19	
L-6825	2 3/4x20	303	22	9.67
		404	24	
		404	22	
L-6827	3 x20	455	22, 24	15.00
		303	19	
L-6829	3 1/2x20	606	22, 24	18.00
		404	19	
L-6831	4 x20	455	19	20.83
		909	22, 24	
L-6833	4 1/2x20	1212	24	22.67

Also available in 6-foot mill lengths; prices on application.

Rubber Insulating Bandage



Used for temporary insulation to protect cable splices from moisture or as temporary insulating barrier for protecting from high-tension wires. Tests to withstand 10,000 volts.

Cat. No.	Mfr. No.	Width In.	Length Roll Feet	Wt. Oz.	Price Each
L-2343	427	4	14	12	\$1.40

Cable Wrapping Cloths



Closely woven cotton fabric impregnated with water-proofing compound. For use in temporarily closing splices and openings in sheath of aerial cables to protect them from weather.

When ordering, specify sheets or yardage; if yardage, give length desired.

Cat. No.	Description	Price
L-3708	24x40-Inch Sheet.....	\$59.34 per 100
L-3710	Yardage—Approx. Width, 39 In.....	.89 per Yd.

Johnson Cable Dressers

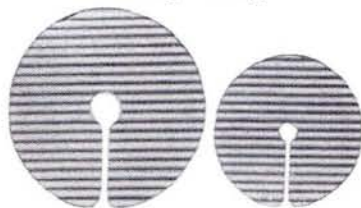


Used for dressing out dents and irregularities from lead cable sheaths, or for beating-in the ends of lead sleeves.

Cat. No.	Mfr. No.	Description	Price Each
L-3950	295	Boxwood Lead Dresser	\$1.70

Williams Vertical Joint Wiping Cloths

Ticking Facing



In four sizes to handle all sizes of cables, from the largest to the smallest. For rugged use and longer wear. Wiping surface free from stitches, seams, etc. Made of herringbone ticking.

Cat. No.	Center Opening In.	O.D. In.	Price Each
L-3743	1	9	\$1.15
L-3744	1 3/4	11	1.60
L-3745	2 3/4	12	2.00
L-3748	3 3/4	14	2.20

Williams Wiping Cloths



Cloth ticking with a curved shape to give a symmetrical wiping surface. Can be worked up to any desired flexibility by bending in the fingers. Has a slick, smooth surface to which solder cannot stick.

Formed Cloths

Cat. No.	Size, In.	Wt. Lbs. per 100	Price Each
L-3712	2 x2	6 1/4	\$.24
L-3714	2 1/2 x2 1/2	9 1/4	.32
L-3716	3 x3	12 1/2	.40
L-3718	3 1/2 x3 1/2	18 3/4	.40
L-3720	4 x4	21 3/4	.48

Catch Cloths

Flat, straight edged cloths made of ticking.

Cat. No.	Size, In.	Wt. Lbs.	Price Each
L-3736	5x 5	25	\$.64
L-3738	6x 6	31 1/4	.72
L-3740	6x 7	37 1/2	.80
L-3741	7x 8	46 3/4	.96
L-3742	8x 8	53	1.04
L-3737	8x10	69	1.28
L-3739	10x12	98	1.68

Johnson Plumbers' Scrapers or Shave Hooks



Made so that the blade may be taken off or put on by means of the set-screw.

Packed 1 dozen in a box. Approximate weight per dozen, 2 1/2 pounds.

COMP. WITH SCRAPER BLADE		SCRAPER BLADE ONLY		Description Blade	—PRICE EACH—	
Cat. No.	Mfr. No.	Cat. No.	Mfr. No.		Comp. with Blade	Blade Only
L-4863	304-1	L-2846	305-1	Oval	\$1.04	\$.44
L-4864	304-2	L-2847	305-2	Half Oval	1.04	.44
L-4862	304-3	L-2848	305-3	Triangle	1.04	.44

Klein Cable Sheath Splitting Knives



A heavy duty knife for splitting cable sheaths. Blade is finest cutlery steel shaped to a keen edge. Strong leather handle is securely riveted. Tempered blue finish.

Cat. No.	Mfr. No.	Overall Length Inches	Blade Inches	Approx. Wt., Lbs. per Doz.	Price Each
L-5082	1515-1	8 3/4	4 1/2	13	\$2.75

Fibre Test Boards

Used for classifying pairs when testing out cable. Large, easy-to-read numbers that will not wash off. Standard numbering. Weights, 6 lbs. per 100.

Cat. No.	Mfr. No.	Numbering	Price Each
L-2729	810	1- 51	\$.36
L-2730	811	51- 101	.36
L-2731	812	102- 152	.36
L-2732	813	152- 202	.36
L-2733	814	203- 253	.36
L-2734	815	253- 303	.36
L-2735	816	304- 354	.36
L-2736	817	354- 404	.36
L-2737	818	405- 455	.36
L-2738	819	455- 505	.36
L-2739	820	506- 556	.36
L-2740	821	556- 606	.36
L-2723	822	607- 657	.36
L-2724	823	657- 707	.36
L-2725	824	708- 758	.36
L-2726	825	758- 808	.36
L-2727	826	809- 859	.36
L-2723	827	859- 909	.36
L-2699	828	910- 960	.36
L-2701	829	960-1010	.36
L-2702	830	1011-1061	.36
L-2703	831	1061-1111	.36
L-2704	832	1112-1162	.36
L-2705	833	1162-1212	.36
L-2693	834	1213-1263	.36
L-2694	835	1263-1313	.36
L-2698	836	1313-1364	.36
L-2700	837	1364-1414	.36
L-2707	838	1414-1465	.36
L-2709	839	1465-1515	.36
L-2711	840	1516-1566	.36
L-2715	841	1566-1616	.36
L-2717	842	1617-1667	.36
L-2719	843	1667-1717	.36
L-2754	844	1718-1768	.36
L-2756	845	1768-1818	.36

Linen Test Boards

For use in tagging out the conductors in connection with making test splices in cables. Weight, $\frac{3}{4}$ lbs. per 100. Consists of tag-linen strips $1\frac{7}{8}$ inches wide and $10\frac{1}{8}$ inches long having numbered holes and printed in the following sets of numbers:

Cat. No.	Numbering	Price per 100
L-2741	1- 51	\$8.00
L-2742	51-101	8.00
L-2743	102-152	8.00
L-2744	152-202	8.00
L-2745	203-253	8.00
L-2746	253-303	8.00
L-2747	304-354	8.00
L-2748	354-404	8.00
L-2749	405-455	8.00
L-2750	455-505	8.00
L-2751	506-556	8.00
L-2752	556-606	8.00

Unique Pouring Ladles



A short ladle with wood handle. Air space around the shank keeps handle cool. Designed with lips lower than bowl and rounded to enable user to pour solder drop by drop or in a large stream without spilling over the edge. Handle easily attached or removed with only a screw driver.

Cat. No.	Diam. Bowl In.	Depth Bowl In.	Cap. Pt.	Wt. Oz.	Price Each
L-5170	3	$1\frac{1}{4}$	$\frac{1}{8}$	12	\$2.65
L-5172	$3\frac{1}{2}$	$1\frac{1}{2}$	$\frac{1}{4}$	16	2.85
L-5174	4	$1\frac{3}{4}$	$\frac{3}{8}$	18	2.95

Unique Grey Iron Solder Pots

Features handle clearance for removing cold metal.



Cat. No.	Size In.	Lead Cap. Lbs.	Wt. Lbs.	Price Each
L-5938	6	24	$3\frac{1}{2}$	\$1.60
L-5940	8	60	8	4.25

American Beauty Soldering Irons

110-120 Volts A.C. and D.C.



High quality soldering irons with heating element cores of solid steel rod, chrome nickel heating element, sturdy super-flexible cord and many other features. All are equipped with baffle plate construction to keep handle cool. All have special non-oxidizing tips which are easily replaced or exchanged for a different style tips. Tips are pure drawn copper rod. Irons are for 115V.

Cat. No.	Mfr. No.	Tip Diam. In.	Watts	Length In.	Wt. Lbs.	Price Each
L-4973	3128	$\frac{1}{4}$	60	$12\frac{1}{4}$	$\frac{1}{2}$	\$4.25
L-4966	3138	$\frac{3}{8}$	100	$12\frac{7}{8}$	1	6.50
L-4970	3158	$\frac{5}{8}$	200	$13\frac{5}{8}$	$1\frac{3}{4}$	7.80
L-4974	3178	$\frac{7}{8}$	300	$14\frac{3}{8}$	$2\frac{5}{8}$	10.40
L-4975	3198	$1\frac{1}{8}$	550	15	$3\frac{3}{4}$	13.00

American Beauty Tips and Elements

Replacement tips and elements are immediately available for all American Beauty Irons. Order tips and elements from following listing:

Tips			120 Volt Elements		Fits Iron	
Cat. No.	Diam. In.	Price, Ea.	Cat. No.	Price, Ea.	Cat. No.	Mfr. No.
L-5877	$\frac{1}{4}$	\$.30	L-4107	\$2.30	L-4973	3128
L-5878	$\frac{3}{8}$	.43	L-4108	2.70	L-4966	3138
L-5882	$\frac{5}{8}$	.98	L-4114	3.60	L-4970	3158
L-5880	$\frac{7}{8}$	1.95	L-4116	4.95	L-4974	3178
L-5884	$1\frac{1}{8}$	3.30	L-4118	6.80	L-4975	3198

Prices shown are subject to change without notice.

Kester Acid-Core Solder



Meets all general soldering requirements.

Easy to use. Saves time and labor. Makes long-lasting job.

40% tin; 60% lead; .125-in. diam.

Cat. No.	Mfr. No.	Size Spool Lbs.	Price per Lb.
L-7100	AC-1	1	\$1.11
L-7102	AC-5	5	1.07

Kester Plastic Rosin-Core Solder



Very efficient solder for all electrical and radio work, automotive work, etc.

It eliminates all possibility of corrosion, resistance or leakage.

Plastic rosin enables the user to solder perfectly and with ease.

40% tin; 60% lead; .092-in diam.

Cat. No.	Mfr. No.	Size Spool Lbs.	Price per Lb.
L-7092	RC-1	1	\$1.11
L-7094	RC-5	5	1.07

Kester Stearine Flux-Core Solder



Contains an organic type flux.

It is an intermediate between rosin and acid flux-core solders.

Suitable for spot or quick soldering.

40% tin; 60% lead; .125-in. diam.

Cat. No.	Mfr. No.	Size Spool Lbs.	Price per Lb.
L-7104	SC-1	1	\$1.11
L-7097	SC-5	5	1.07

Kester Solid Wire Solder



The same high quality in metals and fabrication found in Kester flux-core solders.

Every spool carries positive alloy identification.

40% tin; 60% lead; .125 in. diam.

Cat. No.	Mfr. No.	Size Spool Lbs.	Price per 100 Lbs.
L-6303	SW-1	1	\$90.55
L-6302	SW-5	5	85.03

National Bar Solder



Standard package, 100-lb. boxes.

Cat. No.	Description	Size Bar Lbs.	Price per 100 Lbs.
L-7105	34.50/64.15 Wiping Solder Arsenical....	1 1/2	\$60.84
L-7106	37/63 Wiping Solder.....	1 1/2	59.52
L-9863	40/60 Wiping Solder.....	1 1/2	60.00
L-7110	50/50 Wiping Solder.....	1 1/2	73.60
L-7126	90/Tin, 10/Zinc Alum. Tinning Solder..	1 1/2	146.96
L-7133	AT7319 Type C Sealing Solder (Replaces Type B).....	*1 1/2	212.40

*Stick

Wall "Trig-R-Heat" Soldering Guns



Revolutionary "idling" feature automatically reduces wattage when gun is not soldering. Contains no moving parts. Long six-inch reach; built-in spotlight with separate switch. Operates on AC or DC, 110-120 volts. Recommended for light maintenance and terminal work. Steel-clad 1/4-inch tips.

Cat. No.	Mfr. No.	Wattage Range	Wt. Oz.	Price Each
L-4969	214-LTN	400-150	12	\$9.97

Replacement Element and Tip Assembly

Cat. No.	Description	Wt. Lbs. per Doz.	Price Each
L-4125	Element and Tip Assembly for No. L-4969 Gun.....	3	\$3.32

Paraffin

Specification grade for boiling out paper insulated telephone cable. Should not be confused with ordinary commercial grades. Melting point, 125-127°F.

Can be supplied in any quantity desired, but is usually furnished in 11-pound cakes.

Cat. No.	Mfr. No.	Description	Price per 100
L-5626	P-211	11-Lb. Cake of Paraffin	\$15.65

Beeswax

Finest quality beeswax in 1-lb. cakes. Used for impregnating or boiling out cable forms, cores of acetate and cotton cables to render them moisture-resisting and prevent the insulation from fraying.

Cat. No.	Mfr. No.	Description	Price Each
L-2397	BW-1	1-Lb. Cake of Beeswax	\$.75

Nokorode Soldering Paste



Will flux all metals except aluminum. Takes the place of acid in all soldering work.

Absolutely non-corrosive, safe as resin and rapid as acid.

Not affected by heat and does not spatter.

The solder will not turn dark after using, and the work has high tensile strength.

Cat. No.	Description	Price Each
L-5632	2-Oz. Can.....	\$1.13

Prices shown are subject to change without notice.



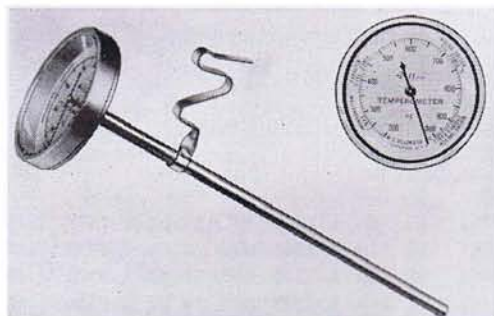
4-Inch Stearine Candles

Stearic molded (stearic acid). For application to lead sheath prior to pouring on hot lead in making splices.

Stearine candle is wickless and is sold by the pound: approximately 7 to the pound.

Cat. No.	Mfr. No.	Length Inches	Price per Pound
L-7190	SC-7	4	\$.65

Dillon Temperometers



Registers correct temperatures of paraffin, compounds, wiping solder, impregnation wax, cable damming waxes, etc.

Unbreakable metal. Head, bezel and stem of 18-8 stainless steel. Large dial; diameter, 2 1/4 inches.

Working range, 200 to 1000°F.

Cat. No.	Mfr. No.	Tube Diam. In.	Overall Length In.	Tube Length In.	Price Each
L-7464	1936	1/4	8 3/4	7 13/16	\$9.50

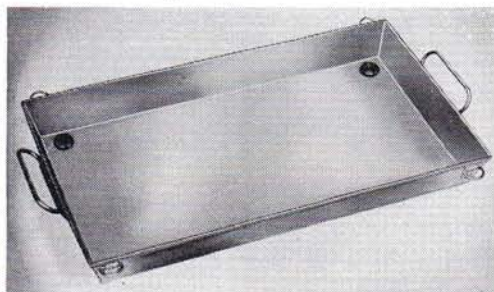
Paraffin Dippers



Drawn from 20-gage steel. Rolled bead completely around top with pouring lip on each side. Sturdy 9 3/4-inch handle securely riveted to dipper body.

Cat. No.	Mfr. No.	Cap. Qt.	Depth In.	Top Diam. In.	Btm. Diam. In.	Wt. Lbs.	Price Each
L-3940	6679	1	3 1/4	4 13/16	3 7/8	1	\$2.10

Cable Splicers' Paraffin Pans



Made from 18-gage steel. Top edges double hemmed. Corners welded and drain plug bushings brazed into bottom. Dee ring and handle straps securely riveted.

Cat. No.	Mfr. No.	Length In.	Width In.	Depth In.	Wt. Lbs.	Price Each
L-5619	6681	24	14	3 1/4	9	\$10.65

Prest-O-Lite

5-in 1 Outfit



Can be quickly converted to any one of five distinct outfits for all heating, soldering, and brazing. Attach any one of four open-flame torch or soldering iron stems to a common handle. Precision model complete with Nos. 1, 3, 4, and 5 Torch Stems, No. 8 Soldering Iron Stem. No. 401 Torch Handle, R-411MC adjustable pressure regulator for MC tank, and a 6-ft., 3/16 in. ("A" size) fitted hose assembly. Packed in green enameled, steel carrying case with pop-up tray. Order MC tank separately.

Cat. No.	Mfr. No.	Description	Wt. Lbs.	Price Each
L-7555	30x.02	Precision Model— with Regulator.....	5	\$41.00
L-7556	30x.03	Standard Model— without Regulator...	4	28.65

Clayton & Lambert Blowtorches

For Gasoline



A general utility torch. Over-size generating area plus exclusive two-piece burner results in large and powerful steady blue flame. Specially designed control needle with detachable cleaner pin permits positive flame adjustment. Heavy durable wind-shield for protecting the gas generator in cold or windy weather.

Cat. No.	Mfr. No.	Cap. Qt.	Ship. Wt. Lbs.	Price Each
L-7536	32A	1	5 1/2	\$15.70

Unique Heavy Duty Utility Furnaces

For Gasoline



Used by plumbers for melting solder, paraffin, etc. Withstands abuse of splicing service. Made for burning unleaded gasoline. Melts 50 pounds of solder in 10 minutes. Furnished with type A open hood (as illustrated) or type B soldering iron hood which accommodates irons up to 12 pounds per pair with heating time of 4 minutes and which should be specified on order. Steel tank copper brazed throughout with powerful pump. Rugged top-plate with lug support for large pots and kettles.

Cat. No.	Mfr. No.	Tank Cap. Gal.	Wt. Lbs.	Price Each
L-4262	53	1	13	\$31.20

Prices shown are subject to change without notice.

Telephone and Electrical Outfits



An especially handy outfit for telephone line crews, installers, maintenance men, etc. The lineman can take this outfit up the pole with him as a self-contained unit. Ideal for soldering lugs, ground clamps, bridle wires, and transformer leads; loosening frozen nuts on cross arm bolts and guy clamps; heating impregnating wax; many other jobs.

Type 30x35 Outfit Includes:

Cat. No.	Mfr. No.	Description	Price Each
L-4703	401	Torch Handle.....	\$7.25
L-7229	3	(Light) Torch Stem.....	2.65
L-6056	R-411	Regulator for MC Tank.....	11.85
L-4865	.....	6-Ft. Length $\frac{3}{16}$ -In. (A Size) Fitted Hose Assembly.....	1.84

NOTE: If for use without regulator, specify L-4704 Torch Handle.

Order Separately the Following Items Illustrated Above:

Cat. No.	Mfr. No.	Description	Price Each
L-7404	.....	MC Gas Tank (Filled) with L505 Key	\$14.75
L-4696	A-3321	MC Handle Assembly.....	3.15

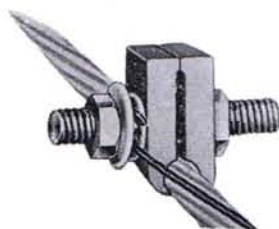
Torch Stems and Handles

Prest-O-Lite torch stems and soldering iron fit interchangeably on either of the two torch handles.

Cat. No.	Mfr. No.	Description	Wt. Lbs.	Price Each
L-7227	1	Superfine Torch Stem.....	$\frac{1}{8}$	\$2.65
L-7197	2	Fine Torch Stem.....	$\frac{1}{8}$	2.65
L-7229	3	Light Torch Stem.....	$\frac{1}{8}$	2.65
L-7233	4	Medium Torch Stem.....	$\frac{1}{8}$	2.65
L-7237	5	Heavy Torch Stem.....	$\frac{1}{8}$	2.65
L-4992	8	Soldering Iron for Most Light Soldering.....	$\frac{3}{4}$	6.30
L-4703	401	Torch Handle with Shutoff Valve and Pilot Flame Control for Use with Regulator.	$\frac{3}{4}$	7.25
L-4704	402	Torch Handle for Use without Regulator.....	$\frac{1}{2}$	4.65

Cable Lashing Clamps

Hot-Dip Galvanized



For securing cable lashing wire at end of span. Bolt end is peened over to prevent nuts running off. Can be securely attached to messenger before taking up tension on cable lashing wire. Square hole in plate and square shoulder under head of stud bolt prevent rotation of bolt while tightening clamp.

Cat. No.	Mfr. No.	Wt. Lbs. per 100	Price per 100
L-3463	900	15 $\frac{1}{2}$	\$17.94

Aerial Cable Supports



Supports cable at poles, preventing ring cut. Adjustable to any height. Supports without wires are used on spun cable, with cable spacers. "U" shaped wires are 5 inches long.

MAX. SIZE CABLE OR SLEEVE, IN.		Wt. Length Lbs.	With Wire		Without Wire	
Diam.	Cir.	In. 1000	Mfr. No.	Price per 100	Mfr. No.	Price per 100
$\frac{3}{4}$	2 $\frac{5}{16}$	10 84	L-7366	891 \$8.03	L-7377	L-891 \$7.88
1 $\frac{3}{16}$	3 $\frac{3}{8}$	16 110	L-7368	892 9.78	L-7378	L-892 9.46
2	6 $\frac{5}{16}$	22 130	L-7370	893 11.53	L-7379	L-893 11.39
2 $\frac{5}{8}$	8 $\frac{5}{16}$	28 162	L-7372	894 14.02	L-7380	L-894 13.87
3 $\frac{1}{8}$	10	34 186	L-7374	895 15.91	L-7381	L-895 15.70
5	15 $\frac{13}{16}$	50 256	L-7385	896 20.44	L-7387	L-896 20.22
6 $\frac{1}{2}$	20 $\frac{1}{2}$	64 350	L-6735	897 24.31	L-6738	L-897 24.09
6 $\frac{1}{2}$	20 $\frac{1}{2}$	64 350	*L-6737	898 28.54	.....	.....

*Has 10-inch wires.

Cable Spacers

Provides a separation between cable and strand. Upper concaved surface bears against underside of strand; lower concaved flanges fit curve of cable.

Lead Spacers

Cat. No.	Mfr. No.	Size In.	Wt., Lbs. per 100	Price per 100
L-7144	7092	$\frac{1}{4}$	12 $\frac{1}{2}$	\$6.75
L-7145	7092	$\frac{1}{2}$	20	8.75
L-7155	7092	$\frac{3}{4}$	25	11.25

Lashing Wire



For use in lashing lead sleeves and also for attaching aerial cable to supporting strand.

Consists of No. 16 B&S gage annealed tinned copper wire.

Cat. No.	Mfr. No.	Size Spool Lbs.	Std. Ctn. Lbs.	Price per 100 Lbs.
L-7810	LW-1	1	50	\$85.00

Cable Spinning Wire



All types of spinning wire are furnished with a cone-shaped hub, the standard hub on all Neale Spinning Machines. Straight hub, standard on Western Electric Pull Type Spinner, can also be furnished. Spinning wire packed 6 coils per carton. In figuring the amount of spinning wire, add 10% to the length of the cable that is to be spun.

Cat. No.	Description	Type Hub	Price per Coil
L-7769	.045 Type 430 Stainless Steel Lashing Wire—1200 Ft. per Coil.....	Cone Hub	\$7.86
L-7770	.045 Type 430 Stainless Steel Lashing Wire—1200 Ft. per Coil.....	St. Hub	7.86
L-7783	.065 Type 430 Stainless Steel Lashing Wire—650 Ft. per Coil.....	St. Hub	8.14
L-7778	.065 Type 430 Stainless Steel Lashing Wire—650 Ft. per Coil.....	Cone Hub	8.14
L-7785	.065 Type 316 Stainless Steel Lashing Wire—650 Ft. per Coil.....	Cone Hub	13.72
L-7767	.065 Type 316 Stainless Steel Lashing Wire—650 Ft. per Coil.....	St. Hub	13.72
L-7793	.061 Galvanized Lashing Wire—650 Ft. per Coil.....	Cone Hub	2.84
L-7739	.091 Alum. Lashing Wire 325 Ft. per Coil.....	Cone Hub	2.95
L-8009	.061 Galvanized Lashing Wire—650 Ft. per Coil.....	St. Hub	2.30
L-7775	.061 Galvanized Lashing Wire—650 Ft. per Coil.....	Cone Hub	2.30
L-7791	.091 Copperweld Lashing Wire—325 Ft. per Coil.....	Cone Hub	5.48
L-7809	.091 Galvanized Lashing Wire—325 Ft. per Coil.....	St. Hub	2.67
L-7790	.091 Galvanized Lashing Wire—325 Ft. per Coil.....	Cone Hub	2.67

Special Note: Please Specify Type of Hub Required When Ordering This Material.

Lashing Wire Clamps



Positive action clamp to keep spinning wire from stacking off when terminating at pole.

Made of bronze alloy with cadmium-plated screw.

Cat. No.	Mfr. No.	LENGTH INCHES		Wt. Lbs.	Price Each
		Closed	Open		
L-3430	LC-5	3¾	4½	1	\$6.49

Pull-Type Spinners



The Model "S" Spinner was designed for spinning small cables. It will spin cable from the smallest to approximately 1 inch diameter. Easy to use as there are no settings or adjustments to be made. Simply place the spinner on the strand and cable, thread the spinning wire in the machine and it is ready to operate. Forms a spiral approximately 12 inches long with the correct tension.

Length, 15 inches. Height 7 inches.

Cat. No.	Mfr. No.	Wt., Lbs.	Price Each
Model "S"	Model "S"	13	\$149.75

Little Giant Slack Pullers



With Slide Handle



With Ratchet Handle

Length, 15 inches. Height, 13 inches. Rollers, lifting ring and screw are cadmium-plated steel with cast bronze alloy nut and foot. Yoke is painted steel.

Cat. No.	Mfr. No.	Description	Wt. Lbs.	Price Each
L-6009	LG-1	With Slide Handle.....	15	\$33.28
L-6010	LG-12	With Ratchet Handle.....	15	39.82

Double Eye Platform Hooks



For use on splicer's platform ropes which are not adjustable. By threading supporting ropes through double eye, platform ropes are easily adjusted. Made of cadmium-plated steel.

Cat. No.	Mfr. No.	Length Inches	Wt. Lbs.	Price Each
L-4856	DPH19	8½	1	\$5.31

Handline Blocks



Aids splicer in lifting tools and material from ground to platform.

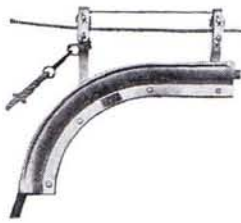
Will not slip on a grade or damage spun cable. Swivel neck allows use of tool from any position on ground.

Made of cast bronze alloy and cadmium-plated screw.

No wrench is needed.

Cat. No.	Mfr. No.	Length Inches	Wt. Lbs.	Price Each
L-2581	HB3	10	3½	\$21.70

Cable Placing Shoes



Used ahead of spinner when placing and spinning cable in one operation. Helps lift cable from reel to strand; may also be used for pulling in cable. Cast aluminum shoe with steel arms and rollers. Lock pins prevent rollers from coming off strand.

Cat. No.	Mfr. No.	Length Inches	Height Inches	Wt. Lbs.	Price Each
L-3347	CS8	18	18	6	\$26.41

Diamond Manhole Cover Hooks



For quick and easy removal of heavy manhole covers. It cannot break or bend, since it is made of a high quality electric tool steel which has been suitably heat-treated.

Cat. No.	Mfr. No.	Overall Length Inches	Price Each
L-4828	860	26½	\$2.50

Needle-Point Test Picks

For identifying wires in making test splices. Brass sleeve covers a brass shell with a brass nipple holding a number of sewing needles screwed in one end.

Cat. No.	Mfr. No.	Description	Price Each
L-7482	6491-1	Test Point Complete....	\$1.54
L-7489	6491-2	Extra Needle Point Only	.52

Drift Plugs



Made of hard maple, sanded smooth and sized to prevent wood from checking. Tapered one third of plug length.

Cat. No.	Diam. In.	Wt. Lbs.	Price Each
L-5848	1	1/8	\$.71
L-5849	1¼	1/8	.95
L-5850	1½	1/4	1.04
L-5851	1¾	1/4	1.12
L-5852	2	3/8	1.44
L-5853	2¼	3/4	1.84
L-5854	2½	7/8	2.01
L-5846	2¾	1 1/8	2.47
L-5856	3	1 3/8	2.96

Larger sizes available; order by diameter.

Diamond Steel Conduit and Cable Clamps

1-Hole Standard Type Hot Dip Galvanized



Made of rolled steel. Hot dip galvanized after fabrication. Available in other finishes and metals.

Cat. No.	Mfr. No.	DIMENSIONS, INCHES—			Std. Pkg.	Approx. Ship. Wt., Lbs. per 100	Price per 100
		Size Cable	Size Pipe	Thinwall Conduit			
L-3456	L-3	3/16	...	...	500	1	\$.60
L-3466	L-4	1/4	...	...	500	1	.75
L-3468	L-5	5/16	...	...	500	1	.85
L-3472	L-6	3/8	1/8	...	500	1	.95
L-3474	L-7	7/16	...	...	500	1.1	1.05
L-3476	L-8	1/2	1/4	3/8	500	1.2	1.15
L-3477	L-9	9/16	...	...	500	1.2	1.20
L-3478	L-10	5/8	...	...	500	1.3	1.25
L-3479	L-11	11/16	3/8	1/2	500	4	2.25
L-3480	L-12	3/4	1/2	...	500	4.5	2.85
L-3481	L-14	7/8	...	3/4	500	5.0	3.00
L-3482	L-16	1	3/4	...	250	7.0	3.45
L-3485	L-20	1¼	1	...	100	15	4.95

Enameled One-Hole Cable Clamps

Offset Type



Similar to the one-hole steel clamp except that it is finished in brown or ivory enamel for interior work. Order color from listing below.

Cat. No.	Mfr. No.	Color	CABLE SIZE, IN.—		Screw Mtg. Hole	Wt. per 100	Price per 100
			Min.	Max.			
L-3499	13	Brown	3/16	to 1/4	8	3/8	\$.44
L-3457	13	Ivory	3/16	to 1/4	8	3/8	.44
L-3500	15	Brown	1/4	to 5/16	8	1/2	.50
L-3458	15	Ivory	1/4	to 5/16	8	1/2	.50
L-3501	16	Brown	5/16	to 7/16	12	7/8	.75
L-3459	16	Ivory	5/16	to 7/16	12	7/8	.75
L-3502	18	Brown	7/16	to 5/8	12	1 1/4	.81
L-3460	18	Ivory	7/16	to 5/8	12	1 1/4	.81
L-3491	112	Brown	5/8	to 7/8	12	2	1.88
L-3493	112	Ivory	5/8	to 7/8	12	2	1.88

Lead Serving Tape



Used with grade clamps to protect cable sheath.

Standard 1-lb. rolls of six ft. Width, 1½ in. Thick., 1/32 in. Can be furnished in other sizes.

Cat. No.	Mfr. No.	Price per Lb.
L-7444	LST	\$.33

Bonding Ribbon



Consists of spools of 3/8x.051-inch copper strips used for bonding cable.

Furnished in 5-pound spools.

Approximately 18½ feet to the pound.

Cat. No.	Mfr. No.	Price per 100 Lbs.
L-6062	BR5	\$94.50

Alphaduct Copperweld Drop Wire



Drop wires have size 18 AWG lead-alloy coated, high-strength Copperweld conductors. Twisted-pair conductors are individually insulated with rubber insulation, and individually jacketed with Neoprene. Highly resistant to weather, abrasion, sunlight, oils and greases, acids, alkalis and flame.

In parallel constructions, polarity identification is provided by two longitudinal ridges molded into one side of the over-all Neoprene jacket. In twisted pair

constructions, identification is provided by two longitudinal ridges molded in the Neoprene jacket of one conductor.

Furnished in standard 1000-foot cartons except that approximately 10 per cent of an order may contain paper-wrapped coils, not less than 200 feet long. Actual length in each carton or coil is clearly indicated. Minimum eye of coil is 15½ inches.

Size 18 AWG Copperweld Conductors

Minimum breaking strength per conductor before insulating, 200 lbs. Max. 22 ohms per 1000 ft. at 68 degrees F.

Cat. No.	Mfr. No.	Size AWG.	Conductor Assembly	Diameter over Jacket, Inches	Wt., Lbs. per 1000 Ft.	*Price per 1000 Ft.
L-7817	N-182-PDCW	18	Parallel	.175x.280	35	\$31.30
L-7816	N-182-TDCW	18	Twisted Pair	.155	35	35.25
L-7902	†NR-182-PDCW	18	Parallel Reinforced	.193x.298	39	37.85
L-7811	NE-182-PDCW	18	Parallel Figure 8	.155x.310	34	30.50

Alphaduct Bronze Drop Wire



Conductors of bronze drop wires are made of solid lead alloy coated, hard drawn Signal grade bronze, in size 17 AWG. Wires are available in two standard types—twisted pair and parallel.

Size 17 AWG Bronze Conductors

Minimum breaking strength per conductor before insulating, 170 lbs. Max. 17 ohms per 1000 ft., at 68 degrees F.

Cat. No.	Mfr. No.	Size AWG.	Conductor Assembly	Diameter over Jacket, Inches	Wt., Lbs. per 1000 Ft.	*Price per 1000 Ft.
L-7906	N-172-PD	17	Parallel	.180x.290	40	\$39.85
L-7904	N-172-TD	17	Twisted Pair	.160	40	42.10

*Prices shown are for standard package to 24,999 feet.
†REA Listed.

Prices shown are subject to change without notice.

Neoprene Jacketed Bridle Wire



Conductors of Bridle Wire are soft-drawn copper, tinned or lead-alloy coated. Rubber insulation jacketed with Neoprene. Identification is provided by longitudinal ridges molded in the neoprene covering of one or two conductors. Std. ctn., 500 ft. (except L-7835, which is 750 ft.).

Cat. No.	Mfr. No.	Size AWG	Conductor Assembly	Diam. over Jacket In.	Wt., Lbs. /1000 Ft.	*Price per 1000 Ft.
L-7829	N-202-TCB	20	Twisted Pair	.125	25	\$30.90
L-7831	N-203-TCB	20	Triplex	.125	38	46.35
L-7832	N-182-TCB	18	Twisted Pair	.145	31	35.50
L-7833	N-183-TCB	18	Triplex	.145	47	53.25
L-7835	N-142-TCB	14	Twisted Pair	.226	78	76.20

Alphaduct Interior Wire



Furnished in twisted pair, triplex and quadded constructions. Conductors are made of solid, annealed, uncoated copper having a tough thermoplastic covering. Ridge tracers on conductors provide positive identification. In addition, colored

rayon markers threads laid parallel to the conductor under the insulation: 2-conductor-red and green rayon, 3-conductor-red, green and yellow rayon, 4-conductor-red, green, yellow and black rayon. Std. ctn., 500 feet.

Cat. No.	Mfr. No.	Size AWG	Conductor Assembly	Color	Diam. over Insul., In.	Wt., Lbs. /1000 Ft.	*Price per 1000 Ft.
L-7942	VL-222-TC	22	Twisted Pair	Ivory	.076	9	\$13.10
L-7943	VL-223-TC	22	Triple	Ivory	.076	14	19.65
L-7945	VL-222-TC	22	Twisted Pair	Brown	.076	9	13.10
L-7946	VL-223-TC	22	Triple	Brown	.076	14	19.65
L-7954	VL-224-TC	22	Quad	Brown	.076	18	26.20
L-7928	VL-222-TC	22	Twisted Pair	Beige	.076	9	13.10
L-7930	VL-223-TC	22	Triple	Beige	.076	14	19.65
L-7933	VL-224-TC	22	Quad	Beige	.076	18	26.20
L-7955	VL-192-TC	19	Twisted Pair	Brown	.086	15	18.70
L-7956	VL-193-TC	19	Triple	Brown	.086	23	28.05

Alphaduct Plastic-Jacketed Inside-Outside Station Wire



No. 22, for wiring from outside protector or terminal to instrument. Insulated with plastic, color-coded. Paper separator between conductors and jacket facilitates stripping.

Plastic jacket protects conductors from mechanical injury, dampness. Single unit construction permits installation with staples. Std. ctn., 500 ft.

Cat. No.	Mfr. No.	Size AWG	No. Cond.	Jacket Color	Outside Diam. In.	Wt., Lbs. /1000 Ft.	*Price per 1000 Ft.
L-7911	J-222-PW	22	2	Brown	.168	18	\$25.30
L-7915	J-223-PW	22	3	Brown	.175	19	27.50
L-7921	J-224-PW	22	4	Brown	.185	24	32.95
L-7913	J-222-PW	22	2	Ivory	.168	18	25.30
L-7917	J-223-PW	22	3	Ivory	.175	19	27.50
L-7929	J-224-PW	22	4	Ivory	.185	24	32.95
L-7899	J-222-PW	22	2	Beige	.168	18	25.30
L-7892	J-223-PW	22	3	Beige	.175	19	27.50
L-7901	J-224-PW	22	4	Beige	.185	24	32.95

REA Approved Inside-Outside Station Wire

Specify outside color—brown, ivory or beige.

Cat. No.	Mfr. No.	Size AWG	No. Cond.	Outside Diam., In.	Coil Length Ft.	*Price Per 1000 Ft.
REA-J-222	REA-J-222	22	2	.150	300	\$29.20
REA-J-223	REA-J-223	22	3	.160	300	32.75
REA-J-224	REA-J-224	22	4	.175	300	40.35

Alphaduct Conduit or Duct Wire



No. 22 solid, annealed, tinned-copper conductor, insulated with a semi-rigid thermoplastic. Highly resistant to abrasion and extreme moisture. Strips easily and clean. Conductors are color-coded to provide quick identification. Std. ctn., 500 feet.

Cat. No.	Mfr. No.	Size AWG	Conductor Assembly	Color	Diam. Over Insul., In.	Wt., Lbs. /1000 Ft.	*Price per 1000 Ft.
L-7940	VL-222-TC	22	Twisted Pair	Red & Black	.076	9	\$13.10
L-7944	VL-223-TC	22	Triplex	Red-Ivory-Black	.076	14	19.65

*Prices are for standard package to 24,999 feet.

Prices shown are subject to change without notice.

Alphaduct Jumper Wire



Annealed tinned copper conductors insulated with a semi-rigid thermoplastic. Clear, bright colors on conductors, high dielectric strength, and marked resistance to deformation, abrasion, flame, moisture and chemicals. Standard carton, 1000 feet.

Cat. No.	Mfr. No.	Size AWG	No. of Cond.	Color	Diam. over Insul., In.	Wt., Lbs. /1000 Ft.	*Price per 1000 Ft.
L-7938	VS-222-TC	22	Twisted Pair	Red & White	.056	7	\$12.20
L-7939	VS-223-TC	22	Triplex	Red-White-Blue	.056	11	18.30
L-7941	VS-222-TC	22	Twisted Pair	Red & Black	.056	7	12.20
L-8076	VS-222-TC	22	Twisted Pair	Black & White	.056	7	12.20
L-7993	VS-223-TC	22	Triplex	Red-White-Black	.056	11	18.30

Alphaduct Ground Wire



A single, plain, soft-drawn copper conductor, insulated with thermoplastic, for grounding protectors and terminals. Standard carton, 500 feet.

Cat. No.	Mfr. No.	Size AWG	Color	Diam. over Insul., In.	Wt., Lbs. /1000 Ft.	*Price per 1000 Ft.
L-7834	†V-141-CT Solid	14	White	.130	19	\$22.60
L-7836	†V-141-CT Solid	14	Black	.130	19	22.60
L-7897	†V-141-CT Solid	14	Beige	.130	19	22.60
L-7840	V-121-CT Solid	12	Black	.147	28	34.25
L-7842	†V-61-CT Solid	6	Black	.291	112	142.20
L-7844	V-61-CT Stranded	6	Black	.312	119	163.80
L-7900	†V-61-CT Solid	6	Beige	.291	112	142.20

Armored Underground Distribution and Service Wire



Nos. VA-192-PBC and VA-162-PBC direct burial. All thermoplastic construction. The conductors are soft annealed copper one being bare and one tin coated for polarity identification, both are insulated with black high dielectric strength polyethylene of a grade chosen for suitability underground as well as for long exposure to sunlight, low temperature and the elements. Over the parallel insulated conductors are applied steel strips .009 inch thick. These steel strips provide a high degree of mechanical protection to the wire for increased service life. In addition to mechanical protection, this armor provides electrical shielding. A flooding compound is

applied to the steel strip covered core before jacketing to block water passage between jacket and core should rodents chew through the jacket. It also protects the steel armor from rusting. An outer jacket of high grade polyvinyl chloride is then applied.

The surface is permanently marked by imprinting Alphaduct's name, catalog number, date, and is also sequentially footage marked every two feet, so the user can readily determine the length.

Standard length: 5000 ft., non-returnable reel for 16-gage; 6000 ft., non-returnable reel for 19 gage.

Cat. No.	Mfr. No.	Size AWG
L-7934	†VA-162-PBC	16
L-7937	†VA-192-PBC	19

Overall Size, In.	Wt., Lbs. /1000 Ft.	Price per 1000 Ft.
.255x.380	76	\$78.00
.225x.310	59	51.25

Twisted Pair Outside and Direct Burial Distributing Wires



Copper conductors, rubber-insulated, jacketed with Neoprene. Longitudinal ridge indicates polarity. L-7869 and L-7891 for aerial and on-the-ground emergency use; others for burial. Standard coil is 750 ft. (except L-7869, which is 1000 ft.).

Cat. No.	Mfr. No.	Wire Size AWG	Wt., Lbs. per 1000 Ft.	*Price per 1000 Ft.
L-7869	N-162-TOC	16	52	\$54.45
L-7871	N-162-TOC-DB	16	56	64.95
L-7891	N-142-TOC	14	73	76.20
L-7894	N-142-TOC-DB	14	79	86.20
L-7895	N-122-TOC-DB	12	112	126.30

*Prices are for standard package to 24,999 feet.
†REA Listed.

Alpha-C Polyethylene-Insulated Line Wire



A new design, single-pair, self-supporting line wire, for economical rural service. Recommended for laterals branching from open wire or through trees. Its parallel, extra-high-strength conductors are insulated with outdoor-grade polyethylene. Excellent weather and moisture-resistance, low capacitance and attenuation permits long spans. Standard lengths, 5,000-ft. or 15,000-ft.; non-returnable reels.

Cat. No.	Mfr. No.	Size AWG	No. Cond.	Load, Lbs.	Breaking per 1000 Ft.	Price per 1000 Ft.
L-7839	P-142-PLCW	14 Copperweld	2	1100	39	\$33.30
L-7847	P-122-PLCW	12 Copperweld	2	1800	55	45.60
P-122-PLS	P-122-PLS	.083" Steel	2	1600	55	31.50

Prices shown are subject to change without notice.

Thermoplastic Self-Supporting Distribution Wire



Rural Distribution Wire, No. RDT-19 (No. 19 AWG), is recommended for use where subscriber stations are a long distance from the central office. Twisted pairs, No. 19 AWG paired and cabled around a steel wire. Each conductor solid, annealed, uncoated copper; .020 inch black polyethylene insulation, .010 inch tough, color-coded Gencaseal jacket; conductors paired with staggered lays. Support wire, .109 inch galvanized, solid, steel, insulated with .025 inch high-molecular-weight black polyethylene.

Suburban Distribution Wire, No. SDT-22 (No. 22 AWG), is designed for intermediate distances between the central office and subscriber area. Twisted pairs, No. 22 AWG paired and cabled around a steel wire. Each conductor solid, annealed, uncoated copper; .015 inch black polyethylene insulation; .010 inch tough, color-coded Gencaseal jacket, conductors paired with

staggered lays. Support wire, .109 inch galvanized, solid, steel, insulated with .025 inch high-molecular-weight black polyethylene.

Urban Distribution Wire, No. UDT-24 (No. 24 AWG), was developed for use in areas where relatively short distances are to be covered. Twisted pairs, No. 24 AWG solid, annealed, uncoated copper; .020 inch color-coded Gencaseal insulation; conductors paired with staggered lays. Support wire, .109 inch galvanized, solid steel, insulated with .025 inch high-molecular-weight black polyethylene. Paired conductors assembled into 4 groups of 4 pairs each and cabled around insulated support wire in one layer; binder of Nylon or Orlon overall.

Distribution wire furnished on 2000 or 4000 ft. non-returnable reels.

19 AWG Soft Copper Conductors

Cat. No.	Mfr. No.	Total Pairs	Approx. O.D. Inches	Approx. Net Wt., Lbs. per 1000 Ft.	Price per 1000 Ft.
1-RDT-19	1-RDT-19	1	.55	51	\$39.00
2-RDT-19	2-RDT-19	2	.55	65	52.00
3-RDT-19	3-RDT-19	3	.55	79	68.00
4-RDT-19	4-RDT-19	4	.55	93	85.00
5-RDT-19	5-RDT-19	5	.55	107	96.50
6-RDT-19	6-RDT-19	6	.55	121	107.50
12-RDT-19	12-RDT-19	12	.94	203	188.50
12-RTD-19-LS	12-RDT-19-LS	12	.97	211	195.00
16-RDT-19	16-RDT-19	16	.94	261	239.00
18-RTD-19	18-RDT-19	18	.80	287	264.00

22 AWG Soft Copper Conductors

Cat. No.	Mfr. No.	Total Pairs	Approx. O.D. Inches	Approx. Net Wt., Lbs. per 1000 Ft.	Price per 1000 Ft.
6-SDT-22	6-SDT-22	6	.46	85	\$81.60
12-SDT-22	12-SDT-22	12	.68	126	144.00
16-SDT-22	16-SDT-22	16	.68	167	188.50
18-SDT-22	18-SDT-22	18	.68	177	211.50
18-SDT-22-LS	18-SDT-22-LS	18	.71	187	218.00

24 AWG Soft Copper Conductors

Cat. No.	Mfr. No.	Total Pairs	Approx. O.D. Inches	Approx. Net Wt., Lbs. per 1000 Ft.	Price per 1000 Ft.
16-UDT-24	16-UDT-24	16	.61	139	\$151.50
18-UDT-24	18-UDT-24	18	.61	137	169.50

Color Code

Pair No.	Color Code	Pair No.	Color Code	Pair No.	Color Code
1	White	7	Red	13	Black
2	White	8	Red	14	Black
3	White	9	Red	15	Black
4	White	10	Red	16	Yellow
5	White	11	Black	17	Yellow
6	Red	12	Black	18	Yellow
					Green
					Brown
					Slate
					Blue
					Orange
					Green

Plastic Underground Service Wire



No. VA-204-TSCW wire consists of four No. 20 AWG 40 per cent conductivity annealed copper-steel conductors insulated with heat stabilized primary dielectric grade polyethylene. Colors of insulation are red, green, black, and yellow.

The four wires are carefully cabled together in a star quad. Over the assembled conductors is applied an inner jacket of brown polyvinyl chloride chosen for excellent electrical and mechanical properties as well as

moisture resistance. A soft temper aluminum tape is helically wrapped over the inner jacket and a tough outer black polyvinyl chloride jacket of excellent electrical, mechanical and weathering qualities is applied over the aluminum shield.

This wire is used in direct burial service from the pole to subscribers' premises.

Standard length: 5000 feet, non-returnable wooden reel.

Cat. No.	Mfr. No.	Size AWG	Overall Size Inches	Wt., Lbs. per 1000 Ft.	Price per 1000 Ft.
L-7947	VA-204-TSCW	20	.150	41	\$82.50

TERMS: 1/2 of 1% 10 days, net 30 days.

Prices shown are subject to change without notice.

Crapo Galvanized Telephone Wire and Strand

Crapo Galvanized Telephone Wire



No. 12 BWG (.109-In. Dia.)—Approx. Wt. per Mile, 170 Pounds

Cat. No.	Grade	Min. Breaking Strength Lbs.	Resistance per Mile Ohms	Approx. Wt. per Coil Lbs.	Approx. Length per Coil	Price per 100 Lbs.
L-7800	BB	476	34.12	85	1/2 Mile	\$17.67
L-7802	HTL-85	793	34.12	85	1/2 Mile	18.47
L-7806	HTL-135	1213	38.23	150	4659 Ft.	19.49
L-7807	HTL-195	1800	38.80	160	4970 Ft.	23.50

No. 14 BWG (.083-In. Dia.)—Approx. Wt. per Mile, 99 Pounds

L-7804	BB	277	58.59	50	1/2 Mile	\$19.00
L-7803	HTL-85	460	58.59	50	1/2 Mile	19.87

Crapo Galvanized Tie Wire

Manufactured specially to facilitate tying in telephone line wire at the supports. Galvanized by Crapo process.

.109x14-In. for use in making standard horseshoe ties.
.109x30 and .095x30-In. for use with No. L-8002 tie splint.

.095x18-In. for use with Galvanized Steel Pre-Tied Splint.

Cat. No.	Gauge	Length Inches	STANDARD (BUNDLE) Approx. No. Pieces	Wt. Lbs.	Price per 100 Lbs.
L-8015	12 BWG (.109")	14	675	25	\$21.08
L-8003	12 BWG (.109")	30	620	50	20.33
13 BWG (.095")	13 BWG (.095")	18	1390	50	22.35
13 BWG (.095")	13 BWG (.095")	30	835	50	21.30

Crapo Pre-Tied Splints



Splint, tie and insulator can be pre-assembled on the ground. Simple, easy to install. Saves time and labor. Protects line wire from abrasion. Permits re-sagging line wire without removing tie wire. Made of spring steel wire (Class B Coated) and copper covered steel.

Galvanized Pre-Tied Splints

Cat. No.	Mfr. No.	Diam. Inches	Length Inches	Wt., Lbs. per 100 Pcs.	Price per 100 Pcs.
109PT134	109PT134	.134	17 1/2	8	\$12.00

Copper/Steel Pre-Tied Splints

080PT114	080PT114	.114	16 1/2	6	\$12.00
102PT128	102PT128	.128	17 1/2	8	14.00

Crapo Galvanized Steel Strand Specification Grade (AT&T) 7-Wire Strand Class A Coating



On 2500 and 5000-Foot Reels

When ordering, be sure to specify reel size.

Cat. No.	Nom. Diam. Inches	Min. Strength Lbs.	Wt., Lbs. per 1000 Ft.	Price per 1000 Feet
L-7219	3/16 (2200)	2,400	80.3	\$28.30
L-7230	5/16 (6000)	6,000	225.0	56.35
L-7234	3/8 (10000)	11,500	273.0	69.73

On 500-Foot Coils

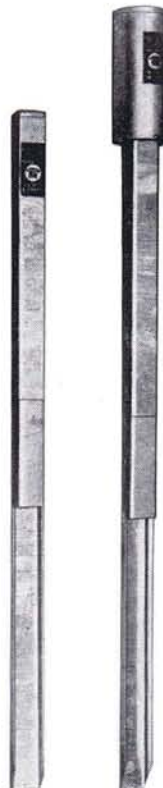
L-6366	3/16 (2200)	2,400	80.3	\$28.30
L-6367	5/16 (6000)	6,000	225.0	56.35
L-6368	3/8 (10000)	11,500	273.0	69.73

Indiana Terminal Housings

For Buried Wire and Cable

Indiana Terminal Housings embody all of the essential elements which make for ease of installation, long life, effective operation and low maintenance cost. Each unit is a quality product carefully designed and engineered to meet the requirements of the service for which it is intended.

All parts are hot-dipped galvanized after forming to provide the utmost protection against corrosion.



Pedestal Type

Cat. No.	Mfr. No.	Nom. Wt. Lbs.	PRICE EACH— 10 or More of a Size	Less than 10 of a Size
GSBD1	GSBD1	21	\$10.35	\$11.80
GSBD2	GSBD2	25	11.60	13.15
GSBD3	GSBD3	30	17.30	19.75
*GSBD4	GSBD4	56	27.25	30.85

*Similar to No. GSBD3 but larger.

Pole Mounted Type

GSBD1A	GSBD1A	13	\$10.35	\$11.80
GSBD2A	GSBD2A	13	11.60	13.15
GSBD3A	GSBD3A	21	17.30	19.75
GSBD4A	GSBD4A	40	27.25	30.85

Pedestal Type Illustrated
No. GSBD1 or GSBD2 at Left
No. GSBD3 at Right

Prices shown are subject to change without notice.

Copperweld Line Wire



Copperweld line wire consists of an outer layer of copper, molten-welded to an inner core of steel. In this way it provides the strength of steel with the high conductance and rust resisting properties of copper. Light in weight, pliable and easy to string—Copperweld has that high degree of strength necessary for safe, long-span construction as well as the ruggedness needed to withstand sleet, ice and high winds. In addition to long-life protection against corrosion, Copperweld line wire provides much better transmission characteristics for voice and high frequency circuits.

Cat. No.	Diam. Inches	Type Steel	Feet per Lb.	Breaking Load Lbs.	RESISTANCE —OHMS—		Wt., Lbs. per 1000 Ft.	Price per 100 Lbs.
					per 1000 Ft.	per Mile		
.....	.128	HS 40%	21.99	1,647	1.614	8.52	45.47	\$45.75
L-7799	.104	HS 40%	33.32	1,177	2.445	12.91	30.01	45.90
.....	.104	HS 30%	33.32	1,283	3.260	17.21	30.01	41.55
.....	.102	EHS 30%	34.71	1,460	3.396	17.93	28.81	43.25
L-7797	.080	HS 40%	56.30	770	4.133	21.82	17.76	46.00
L-7792	.080	EHS 30%	56.30	900	5.539	29.09	17.76	41.65

F.O.B.—Glassport, Pa.

Terms— $\frac{1}{2}$ of 1%, 10 Days, 30 Days Net

Type M Copperweld Guy and Messenger Strand



Copperweld Type M Strands are especially designed for guy and messenger applications on overhead lines. The high strength of the strands together with their light weight and non-rusting properties, makes them particularly well suited for low-cost, long-lasting installations.

All sizes available on 5,000-foot reels when specified.

Cat. No.	Mfr. No.	Rated Strength Lbs.	Nom. Strand Diam. In.	STANDARD —PACKAGE—	
				Coil Length Feet	Approx. Wt. Lbs.
2.2M	2.2M	2,200	.157	1000	45
4M	4M	4,000	.209	2—500	80
6M	6M	6,000	.237	500	65
8M	8M	8,000	.276	500	85
10M	10M	10,000	.303	500	100
12.5M	12.5M	12,500	.345	*250	65
16M	16M	16,000	.386	*250	80

*Available in 500-foot coils when specified.

Copperweld Engineering data on Guy and Messenger Strand, and Sag Data for installing light weight cables are available upon request.

Prices on Application

Copperweld Grip-Flex Ties

The recommended tie for Copperweld telephone conductors. Provides an improved method for securing solid conductors to side-tie insulators. Simple in design, easy to apply and has high strength. Holds conductor secure to insulator and also reinforces conductor over whole length of tie. Especially developed for solid wire conductors.

Securing of conductor to insulator is made with a simple binding of annealed Copperweld wire. Grip-Flex tie is based on having reinforcing portion of tie placed on conductor as a separate unit from binding to the insulator. Reinforcing portion is made from hard-drawn wire and extends over full length of tie. It is preformed to a helical shape so as to make a tight, snug fit on conductor.

Cat. No.	Mfr. No.	Line Wire Size, In.	Price per 100 Units
L-7514	GFC-78	.128	\$11.71
L-7504	GFC-910	.104 or .102	8.69
L-7503	GFC-1012	.080	8.13

F.O.B.—Glassport, Pa. or Oswego, N. Y.

Terms— $\frac{1}{2}$ of 1%, 10 Days, 30 Days Net

Copper Tie Wire

Made of pure copper annealed wire. Tie wire is sold by the pound. Standard bundle, 25 pounds.

When ordering, specify Cat. No. and size.

Cat. No.	Gauge	Length Inches	Wt., Lbs. per 100 Pcs.	Price per Lb. On Appl.
L-8006	10 B & S or .104	22	5 $\frac{3}{4}$	
L-8004	12 B & S or .080	21	3 $\frac{1}{2}$	

Prices shown are subject to change without notice.

INSULATORS

Hemingray Communication Insulators



No. 9
Pony



No. 12
Double Groove Pony



No. 16
Long Distance



No. 17
Toll Line



No. 42
Double Petticoat



No. 56
Point Transposition

Hemingray Glass Insulators—used by telephone companies for more than 50 years—are manufactured by the Hemingray Division of the Kimble Glass Company. They are fabricated from a colorless glass which is non-porous, of high dielectric strength, and is highly resistant to temperature changes.

Supplied in clear glass only and packed in corrugated cardboard containers with each insulator in a separate compartment.

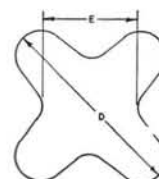
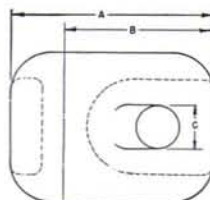
All insulators above have pin hole size of 1 inch.

Cat. No.	Mfr. No.	Diam. at Base In.	Over- all Ht. In.	No. in Ctn.	Wt. Lbs. per Ctn.	Approx. Wt., Lbs. per 1000	Price per 1000
L-4910	9	2 1/4	3 3/4	50	31 1/2	630	\$89.90
L-4912	12	2 3/8	3 5/8	50	31 1/2	630	93.00
L-4915	16	2 15/16	3 3/4	50	52 1/2	1050	116.95
L-4943	17	2 13/16	3 7/8	50	52 1/2	1050	116.95
L-4916	42	3 3/4	3 15/16	40	60	1500	147.00
L-4927	56	3 7/8	3 1/4	40	59	1475	212.90

Porcelain Strain Insulators

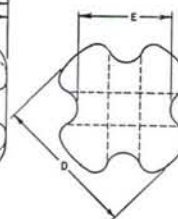
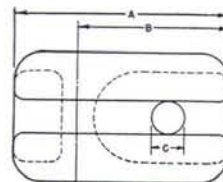
Available in wet or dry process.
Wet process will be shipped unless otherwise specified.

X Type



Cat. No.	Mfr. No.	Rated Volt. Kv.	FLASHOVER VOLT., KV.		Mechan- ical Str. Lbs.	Max. Cable Size In.	Ship. Wt. Lbs.	Price per 100
			60 Cy. Dry	60 Cy. Wet				
L-4883	287	2.2	30	14	10000	1 1/2	1 1/4	\$36.36
L-4882	284	4.4	35	18	12000	3/8	1 3/4	66.66

Standard Type



Cat. No.	Mfr. No.	Rated Volt. Kv.	FLASHOVER VOLT., KV.		Mechan- ical Str. Lbs.	Max. Cable Size In.	Ship. Wt. Lbs.	Price per 100
			60 Cy. Dry	60 Cy. Wet				
L-4932	500	2	20	..	8000	1/4	1/4	\$11.92
L-4934	502	2.2	25	12	10000	3/8	7/8	32.54
L-4936	504	4.4	30	15	12000	1/2	1 1/2	40.73
L-4938	506	6.6	35	18	20000	5/8	3 1/4	61.04

Strand Connectors



Accommodates up to 25,000-pound strand. Enlarged oval-shaped holes facilitate threading strand through connector. Large body diameter (around which strand is looped in connector) distributes pressure over more of the strand. Deep grooves follow smooth, continuous arc, forming perfect seat for strand, thus eliminating wear from vibration.

Cat. No.	Mfr. No.	Net. Wt. Lbs.	Price Each
L-3846	867	1	\$.84

Prices shown are subject to change without notice.

PROTECTION EQUIPMENT AND TERMINALS

Reliable Outdoor Station Protectors



Provides excellent protection against static and crosses with electric circuits. Neoprene base has integral wire entrance sealing slots; weathertight, insect tight cover. Molded phenolic fuse mount provides full insulation for wiring. Ceramic fuse bodies are used; it is unnecessary to remove fuses or bracket to wire and mount protector. Clearly marked binding posts are on side opposite fuses. Fuse mount reversible by removing one screw. All metal parts are nonrusting. Aluminum cover and mounting bracket. Mounting bracket has two $\frac{1}{2}$ -inch holes and 2 key-slots.

Size, 7x3 inches (3 $\frac{1}{2}$ inches with bracket).

		Fuse		Discharge		Carbon		—NET PRICE EACH—		
Cat. No.	Mfr. No.	No.	Amps.	Blocks		1 to 49	50 to 99	100 & Over		
*L-8290	2000	55L	7	P-495	P-1384	\$2.70	\$2.55	\$2.42		
*L-8292	2000C	55L	7	Type 27	P-663	2.70	2.55	2.42		
*L-8293	2000D	77L	7	10	P-663	....	....	....
*L-8294	2000H	77L	7	P-495	P-1384	2.40	2.28	2.16		
L-8296	2000F	27L	7	P-495	P-1384	2.20	2.08	1.97		

*Approved and listed by Underwriters' Laboratories.

Reliable Fuseless Station Protectors



No. 800

All units carry U.L. approval for use on circuits connected to open wire as well as with circuits from cables having metallic sheaths or shields. Basic unit consists of a molded phenolic base, silicon bronze terminal and grounding posts, and a stainless steel grounding plate mounting two No. 504 Station Protector Units. Units are self-contained, weather-proof, screw-in type consisting of a molded phenolic body with plated copper hex-screw cap. A contact molded into the body carries an external beryllium copper contact spring.

Available in three types: No. 801, for outdoor use, has weathertight neoprene snap-on cover. No. 800, also for outdoor use has a sliding aluminum cover. No. 700, with no cover, is for indoor use.



No. 801

		Ship.		—NET PRICE EACH—				
Cat. No.	Mfr. No.	Description	Std. Wt., Lbs.	Pkg. per 100	1 to 24	25 to 99	100 & Over	
L-2241	801	Outdoor	2 31		\$2.15	\$2.03	\$1.92	
L-2236	800	Outdoor	2 40		2.80	2.65	2.51	
L-2237	700	Indoor	2 27		1.90	1.82	1.72	
L-2238	504	Protector Unit	10 2 $\frac{1}{2}$		\$.65	\$.63	\$.60	

*Listed by Underwriters' Laboratories.

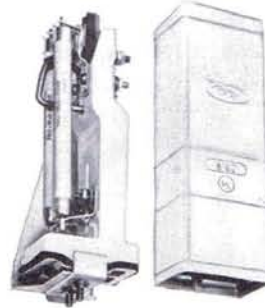
Reliable Fuseless Cable Protectors

Equipped with No. 506 Fuseless Paper Insulated Cable Protector Units

These Reliable items provide protection against lightning discharges and power faults.

		Ship.		—NET PRICE EACH—				
Cat. No.	Mfr. No.	Description	Std. Wt., Lbs.	Pkg. per 100	1 to 24	25 to 99	100 & Over	
L-2244	801A	Outdoor	2 31		\$2.15	\$2.03	\$1.92	
L-2240	800A	Outdoor	2 40		2.80	2.65	2.51	
L-2243	700A	Indoor	2 27		1.90	1.82	1.72	
L-7541	506	Protector Unit	10 2 $\frac{1}{2}$		\$.65	\$.63	\$.60	

Cook O-9u Sub-Station Protectors



A single-circuit protector for indoor and outdoor use.

The body is a single piece of heavy, white-glazed, low-absorbent porcelain. Fuse and arrester clips are of phosphor bronze. Equipped with two Tru-Gap dischargers and two A-9u 7-ampere lavite fuses. Neoprene gaskets keep out insects, dust, snow. Removable locking device on base.

Dimensions: 6 inches long, 2 $\frac{1}{4}$ inches wide, 1 $\frac{3}{4}$ inches deep.

Listed as standard by Underwriters' Laboratories.

		—NET PRICE EACH—				
Cat. No.	Mfr. No.	Description	Amps.	Wt. Lbs.	1 to 24	25 to 99 Over
L-8600	O-9u	With A-9u Lavite Fuses	7	1 $\frac{3}{4}$	\$2.40	\$2.28 \$2.16

Cook O7 and O12 Protectors

These protectors are of the same basic design as the O-9u shown above except for length and type of fuses.

		—NET PRICE EACH—				
Cat. No.	Mfr. No.	Description	Amps.	Wt. Lbs.	1 to 24	25 to 99 Over
L-2201	O7	With A-7 Wood Fuses	5	1 $\frac{3}{4}$	\$2.20	\$2.09 \$1.98
L-8532	O7	With A-7 Wood Fuses	7	1 $\frac{3}{4}$	2.20	2.09 1.98
L-2206	O12	With A-12 Lavite Fuses	5	1 $\frac{1}{2}$	2.10	1.99 1.89

Cook Interceptor Fuseless Substation Protectors



The Interceptor is a fuseless substation protector for use with drops from aerial cable where the omission of fuses is sanctioned by the National Electric Code. When used indoors it mounts directly in any convenient location, and when used outdoors it is fitted with a mounting bracket and weather tight cover for house, pole, or cross arm installation. The subscriber's circuit is protected by Minigap arresters with a gap setting of .005 inch to the ground terminal.

For indoor installation the Interceptor is furnished complete as described above but without the housing.

		—NET PRICE EACH—				
Cat. No.	Mfr. No.	Type	Description	1 to 24	25 to 99	100 & Over
*L-2231	501-150	Outdoor	With Housing	\$2.75	\$2.61	\$2.48
*L-2232	506-165	Indoor	Less Housing	1.85	1.75	1.66
L-2233	41-350	Minigap	.005-In. Gap	.65	.62	.59

*Listed by Underwriters' Laboratories.

Equipped with No. 520 Fuseless Plastic Insulated Cable and Wire Protector Units

These Reliable items provide protection against lightning discharges and power fault currents.

		Ship.		—NET PRICE EACH—				
Cat. No.	Mfr. No.	Description	Std. Wt., Lbs.	Pkg. per 100	1 to 24	25 to 99	100 & Over	
L-8283	801B	Outdoor	2 31		\$2.15	\$2.03	\$1.92	
L-8282	800B	Outdoor	2 40		2.80	2.65	2.51	
L-8281	700B	Indoor	2 27		1.90	1.82	1.72	
L-8288	520	Protector Unit	10 2 $\frac{1}{2}$		\$.65	\$.62	\$.60	

Reliable Fuse Type Indoor Station Protectors



One piece design simplifies mounting and installation. Special low absorption porcelain is used for base. Listed by Underwriters' Laboratories. Furnished with two ceramic type fuses. Binding posts are silicon bronze and are equipped with brass washers and nuts.

Reliable self-cleaning sawtooth discharge blocks are standard equipment. Static discharges or surges are instantly drained without leaving the line grounded.

Size, $3\frac{1}{2} \times 5\frac{1}{16} \times 2\frac{1}{2}$ inches.

Cat. No.	Mfr. No.	Fuse No.	Amps.	Discharge Blocks	Carbon Blocks	Ship. Wt. Lbs.	—NET PRICE EACH—		
							1 to 24	25 to 99	100 & Over
L-2216	955	55L	7	P495	P197	2	\$2.20	\$2.08	\$1.97
L-2214	955A	77L	7	P495	P197	2	2.15	2.03	1.92
L-8289	955C	55L	7	Grd.	Grd.	2	2.30	2.18	2.07

Reliable Five Pair Protectors



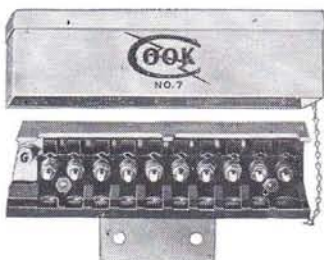
The No. 222 ten wire crossarm arrester effectively drains static from exposed lines. It is recommended for use with unprotected cable terminals where open wire or drop wire leads are too long to be left unprotected. Entrance slots at the base of this outdoor arrester permit bridle wires to loop through on the way to the terminal. These entrance slots are plugged with plastic tape which remains tight until removed.

Used at underground rural railroad crossings, also for protection of line repeating coils and similar work.

Size, $8\frac{1}{2} \times 3\frac{3}{8} \times 4\frac{1}{2}$ inches.

Cat. No.	Mfr. No.	Discharge Blocks	Carbon Blocks	Ship. Wt. Lbs.	—NET PRICE EACH—		
					1 to 24	25 to 99	100 & Over
L-2211	222	P495L	P663	4	\$6.55	\$6.22	\$5.89
L-8200	222B	WE30	P1385	$2\frac{1}{4}$	6.55	6.22	5.89
L-8201	222C	11	P663	$2\frac{1}{4}$	6.55	6.22	5.89
L-8202	222D	P495Y	P663	$2\frac{1}{4}$	6.55	6.22	5.89

Cook High Potential Protectors



Protects drop wires and cables terminating in unprotected cable terminals where constant static drain is required. Five-pair capacity.

Non-corrosive metal hood, Everdur studs, and galvanized mounting bracket. Phosphor bronze spring clips accommodate non-grounding Tru-Gap Dischargers.

Cat. No.	Mfr. No.	Description	Ship. Wt. Lbs.	—NET PRICE EACH—		
				1 to 24	25 to 99	100 & Over
L-2193	7	Complete with Dischargers	3	\$6.55	\$6.22	\$5.91

Reliable Indoor Protectors



Supplied with sawtooth discharge blocks and carbons. Air gap provides path to ground, protecting against static and lightning discharges. Threaded phenolic cap keeps the air gaps dust-free. Base is low absorption, electrical grade glazed porcelain.

Size, $3\frac{5}{8} \times 2\frac{1}{2} \times 2\frac{5}{16}$ inches.

Cat. No.	Mfr. No.	Discharge Blocks	Carbons	Ship. Wt. Lbs.	—NET PRICE EACH—		
					1 to 24	25 to 99	100 & Over
L-2223	977AA	P495	P197	1	\$1.25	\$1.20	\$1.14

Cook RDW Tap Wire Terminals

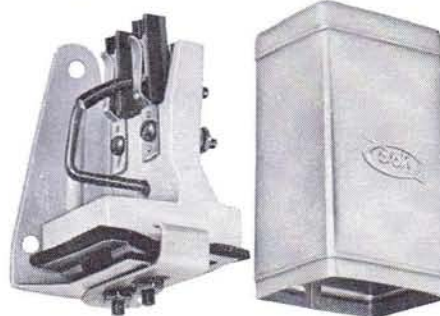


A compact wire terminal for rural distribution, having all the advantages of the Cook Stranterm cable terminal. The line wires run directly through the terminal and are terminated without cutting. This is accomplished by using a unique sliding split grommet sealing arrangement on each side of the unit. It

can be installed unprotected and later on protected on a pair-by-pair basis, using Cook 41-290 Minigap arresters.

Cat. No.	Mfr. No.	Description	6 Pair		D	Net Wt. Lbs.	—NET PRICE EACH—		
			L	W			1 to 24	25 to 99	100 & Over
352-1610	352-1610	Less Arrester	9	In.	2 $\frac{7}{8}$	2 $\frac{1}{4}$	\$9.95	\$9.45	\$8.98
352-1611	352-1611	With Arrester	9	4	2 $\frac{7}{8}$	2 $\frac{1}{2}$	14.95	14.20	13.49
11 Pair									
352-1615	352-1615	Less Arrester	16	4	2 $\frac{7}{8}$	2 $\frac{1}{2}$	13.00	12.35	11.73
352-1616	352-1616	With Arrester	16	4	2 $\frac{7}{8}$	3	20.95	19.90	18.90
16 Pair									
352-1620	352-1620	Less Arrester	16	4	2 $\frac{7}{8}$	3 $\frac{3}{4}$	15.50	14.73	13.99
352-1621	352-1621	With Arrester	16	4	2 $\frac{7}{8}$	4 $\frac{1}{2}$	26.75	25.41	24.13

Cook High Potential Lightning Arresters



This arrester was developed for station protection and static drain on rural circuits where lightning is the principal hazard.

The unit employs the Cook Tru-Gap dischargers with carbon blocks mounted on a porcelain block assembled to formed aluminum mounting bracket protected with zinc hood. A neoprene gasket seals the wire entrances. The hood is secured by a removable locking device.

Size $3\frac{1}{2} \times 2\frac{1}{2} \times 2\frac{1}{2}$ inches.

Cat. No.	Mfr. No.	Description	Net Wt. Lbs.	—NET PRICE EACH—		
				1 to 24	25 to 99	100 & Over
L-2188	1	With $7\frac{1}{2}$ Mil Gap	$\frac{3}{4}$	\$1.70	\$1.61	\$1.53

Reliable Ceramic Fuses

Cat. No.	Mfr. No.	Rating Amps.	Length to Shoulder Inches	NET PRICE PER 100	
				1 to 499	500 & Over
L-4340	27L	5	$4\frac{3}{4}$	\$18.00	\$16.19
L-4342	27L	7	$4\frac{3}{4}$	18.00	16.19
L-4378	77L	5	$4\frac{3}{4}$	25.60	23.06
L-4379	77L	7	$4\frac{3}{4}$	25.60	23.06
L-4370	55L	5	$4\frac{1}{16}$	33.00	31.34
L-4372	55L	7	$4\frac{1}{16}$	33.00	31.34

Cook Precision Rated Fuses

Cat. No.	Mfr. No.	Type	Rating Amps.	—NET PRICE PER 100—	
				1 to 499	500 & Over
L-4330	A7	Wood	5	\$13.85	\$13.16
L-4331	A7	Wood	7	13.85	13.16
L-4334	A9	Lavite	5	18.00	17.10
L-4311	A9U	Lavite	7	23.75	22.56
L-4336	A12	Lavite	5	16.60	15.77
L-4360	A45	Lavite	1	18.00	17.10
L-4315	A52	Fibre	7	33.00	31.35

Prices shown are subject to change without notice.

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Cook Testerm Drop Wire Connectors

An inexpensive, safe way to make drop wire connections to open line wire. Mount the Testerm on the crossarm. Attach tie wires to the open line wires with split sleeves and terminate them on the two studs. Drop wires attach to the same studs. No soldering or taping. To test, just lift the one-piece rust-proof cover.

Cat. No.	Mfr. No.	NET PRICE EACH		
		1 to 24	25 to 99	100 & Over
L-3799	563-30	\$1.25	\$1.19	\$1.13

Reliable Single Pair Protectors



Designed to drain lightning and static voltages from open wires and long drop wires that are connected to cable. When used with a good ground, it can be depended upon to reduce these voltages at the cable-open wire junction, thereby reducing cable trouble. Equipped with sawtooth discharge blocks, porcelain base, aluminum cover with stainless bead chain and cover locking screw. Aluminum bracket has two $\frac{1}{2}$ -in. round holes for wood screw mounting, and one $\frac{1}{2}$ -in. square hole for carriage bolt mounting.

Cat. No.	Mfr. No.	Dis-charge Blocks	Carbon	Ship. Wt. Lbs.	NET PRICE EACH		
					1 to 24	25 to 99	100 & Over
L-8298	450	P495	P1385	1	\$1.70	\$1.61	\$1.53
L-8299	451	P495L	P1385	1	1.70	1.61	1.53
L-8278	452	P495Y	P1385	1	1.70	1.61	1.53

Reliable High Voltage Protectors



Designed to be used in conjunction with station and cable protection where communications circuits are exposed to high voltage power circuits. Equipped with heavy cylindrical carbons, aluminum cover and bracket with stainless cover locking screw. The cover can be removed for inspection or cleaning of carbons. Three polyethylene insulated No. 10 AWG copper wires are permanently attached to the carbons. Two of these wires are two feet long for line wire termination, and one is six feet long for ground termination. Bracket has two $\frac{1}{2}$ -in. round holes for wood screw mounting and one $\frac{1}{2}$ -in. square hole for carriage bolt mounting.

Cat. No.	Mfr. No.	Approx. Air Gap Breakover Volts	Ship. Wt. Lbs.	NET PRICE, EACH		
				1 to 24	25 to 99	100 & Over
L-8279	20HVP	2000	1 $\frac{1}{4}$	\$3.60	\$3.42	\$3.24
L-8280	30HVP	3000	1 $\frac{1}{4}$	3.60	3.42	3.24

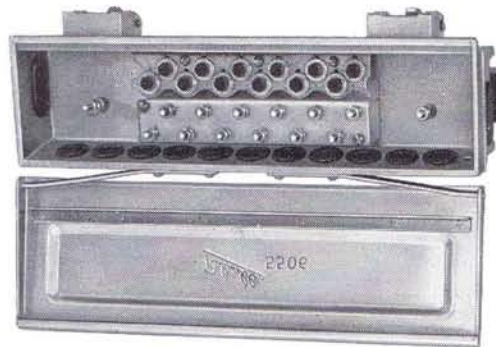
Hy-Cap Power-Cross Protectors

Dimensions: Single pair—height, 6 inches; width, 3 inches; depth, 3 inches. Five pair—height, 8 inches; width, 4 $\frac{1}{2}$ inches; depth, 4 $\frac{1}{2}$ inches.



		Single Pair			
Cat. No.	Mfr. No.	Net Wt. Lbs.	—NET PRICE, EACH—		
			1 to 24	25 to 99	100 & Over
L-8542	501-40	1	\$3.55	\$3.37	\$3.20
		Five Pair			
L-8543	501-50	4½	\$19.00	\$18.05	\$17.15

Reliable Wire Terminals Protected and Unprotected



For use with rural distribution wire and plastic cable.

Cat. No.	Mfr. No.	Type of Block	Protector Unit No.	5 Pair	Ship. —NET PRICE EACH—		
					Wt. Lbs.	1 to 19	20 to 99 & Over
*L-8336	5503	Porcelain			2	\$3.45	\$3.30
6 Pair							
†L-8337	5504	Resin Filled	504	5	\$16.00	\$15.20	\$14.40
†L-8338	5505	Resin Filled	Unprotected	4	7.80	7.40	7.05
†L-8339	5506	Resin Filled	506	5	16.00	15.20	14.40
*L-8340	5507	Resin Filled	Unprotected	2	4.25	4.05	3.85
11 Pair							
†L-8344	5524	Resin Filled	504	6	\$22.75	\$21.65	\$20.50
†L-8345	5525	Resin Filled	Unprotected	5	9.80	9.35	8.85
†L-8346	5526	Resin Filled	506	6	22.75	21.65	20.50
12 Pair							
†L-8356	5541	Resin Filled	504	7	\$26.40	\$25.10	\$23.80
†L-8357	5542	Resin Filled	Unprotected	6	10.00	9.50	9.00
†L-8358	5543	Resin Filled	506	7	26.40	25.10	23.80
16 Pair							
†L-8347	5544	Resin Filled	504	8	\$29.80	\$28.35	\$26.85
†L-8350	5545	Resin Filled	Unprotected	6	10.85	10.30	9.80
†L-8352	5546	Resin Filled	506	8	29.80	28.35	26.85
18 Pair							
*L-8359	5571	Resin Filled	504	9	\$37.15	\$35.30	\$33.45
*L-8365	5572	Resin Filled	Unprotected	8	12.55	11.95	11.30
*L-8366	5573	Resin Filled	506	9	37.15	35.30	33.45
26 Pair							
*5574	5574	Resin Filled	504	10	\$46.00	\$43.70	\$41.40
*5575	5575	Resin Filled	Unprotected	8	14.00	13.70	13.00
*5576	5576	Resin Filled	506	10	46.00	43.70	41.40

*Formed aluminum housing for pole or cross arm mounting.

†Cast aluminum housing for strand, pole or wall mounting.

Reliable Protector Units

Cat. No.	Mfr. No.	Description	Net Price Each		
			*10	50	100
L-2238	504	For Use with Fuseless Station Protectors.....	\$.65	\$.63	\$.60
L-7541	506	For Use with Strand Cable Terminals.....	.65	.63	.60

*Minimum package 10 units.

Cook Minigap Units

Cat. No.	Mfr. No.	Description	Net Price Each		
			1	20	100
L-2234	41-290	Snap in Type for Stranterm and RDW Terminals.....	\$.38	\$.36	\$.34
L-2229	41-310	For PLX and RDX Cable Terminals.....	.45	.43	.41

Cook Stranterm Cable Terminals With 24-Gauge Lead Stub



Cable stubs are soldered to heavy Everdur studs imbedded in an unsaturated Polyester thermal setting plastic with fiber-glass filler. Assures indestructible, moisture-proof, gas tight potting of terminal core.

The 11 and 16-pair cable stub and core are interchangeable in standard terminal housing. Left and right-hand cable entrance to terminal box is also possible. Alternate arrangements are accomplished by removal and reinsertion of one screw.

Drop wires are dressed and supported by 3 corrosion resistant steel wire retaining loops.

Other features are the quick opening cover lock and weatherproof cover design, embossed Mini-Gap snap-in sockets, spring bronze ground strip, and Neoprene self adhering drop wire entrance seal.

11, 16 and 26-pair terminals with protectors are available with 5½-foot lead stubs.

Cat. No.	Mfr. No.	Description	6 Pair Net Wt. Lbs.	NET PRICE EACH		
				1 to 19	20 to 99	100 & Over
L-8660	352-1600	With 3½-Ft. Stub less Protectors.....	2¼	\$13.25	\$12.58	\$11.95
L-8661	352-1601	With 3½-Ft. Stub with Protectors.....	2¾	17.80	16.91	16.06
11 Pair						
L-8662	352-1211	With 3½-Ft. Stub less Protectors.....	4½	\$15.70	\$14.91	\$14.16
L-8663	352-1240	With 3½-Ft. Stub with Protectors.....	4¾	25.80	24.51	23.28
16 Pair						
L-8664	352-1216	With 3½-Ft. Stub less Protectors.....	4¾	\$18.85	\$17.91	\$17.01
L-8665	352-1241	With 3½-Ft. Stub with Protectors.....	5½	32.95	31.30	29.73
26 Pair						
L-8666	352-1360	With 3½-Ft. Stub less Protectors.....	6¾	\$29.75	\$28.26	\$26.85
L-8667	352-1361	With 3½-Ft. Stub with Protectors.....	7½	53.55	50.87	48.33

Reliable RU Unprotected Cable Terminals

A reversible unprotected terminal equipped with a detachable, mounting bracket for easy installation to prevent harming the box when driving lag screws. Jumper wires enter through guide rings at base and are fanned to terminal binding posts over a flat surface. Gravity catches on fanning plate will hold cover in a raised position; also secured with a chain so it cannot be dropped. Insulation is molded bakelite and terminal binding posts are sealed in back to prevent turning. Binding posts are treated for protection against season cracking. Beveled washers simplify the placing of jumpers.

Cat. No.	Mfr. No.	Description	6 Pair O/A Ht. In.	Net Wt. Lbs.	NET PRICE EACH		
					1 to 19	20 to 99	100 & Over
L-8310	RU- 6	Less Stub.....	11	5	\$8.40	\$7.98	\$7.56
L-8311	RU- 6	With 6-Ft. Stub.....	11	9	11.45	10.88	10.31
11 Pair							
L-8312	RU-11	Less Stub.....	11	6	\$10.00	\$9.49	\$8.99
L-8313	RU-11	With 6-Ft. Stub.....	11	10	15.10	14.35	13.59
16 Pair							
L-8314	RU-16	Less Stub.....	12½	7	\$11.90	\$11.30	\$10.71
L-8315	RU-16	With 6-Ft. Stub.....	12½	11	18.00	17.10	16.20
26 Pair							
L-8316	RU-26	Less Stub.....	17	11	\$17.00	\$16.16	\$15.31
L-8317	RU-26	With 6-Ft. Stub.....	17	17	24.85	23.62	22.38



Reliable Strand Cable Terminals

For strand, pole and surface mounting. Uses reinforced cast resin binding post terminal blocks with a choice of lead or plastic cable stubs. Suitable for use in cable systems maintained under gas pressure. Cast aluminum housings are equipped with stub cable entrance holes at opposite ends for reversal of stubs. Stub entrance is sealed with ring grommet; the opposite entrance with a solid grommet. The two entrances also provide means for connecting a plastic and a lead cable, where direct splicing is not desirable. The 26 pair terminal housing and stub are reversible without changing the terminal block. The 11 and 16 pair terminals can be strand mounted while the 26 cannot.



*Protected Cable Terminals with No. 506 Protector

Cat. No.	Mfr. No.	Lgth. Std. Stub Ft.	Ship. Wt. Lbs.	NET PRICE EACH		
				1 to 19	20 to 99	100 & Over
L-8322	ST- 6P	4½	7	\$17.80	\$16.91	\$16.06
11 Pair						
L-8323	ST-11P	4½	8	\$25.80	\$24.51	\$23.28
16 Pair						
L-8324	ST-16P	4½	10	\$32.95	\$31.30	\$29.73
26 Pair						
†L-8325	ST-26P	7	13	\$53.55	\$50.87	\$48.33

Unprotected Cable Terminals

Cat. No.	Mfr. No.	Lgth. Std. Stub Ft.	Ship. Wt. Lbs.	NET PRICE EACH		
				1 to 19	20 to 99	100 & Over
L-8318	ST- 6	4½	6	\$13.25	\$12.58	\$11.95
11 Pair						
L-8319	ST-11	4½	6½	\$15.70	\$14.91	\$14.16
16 Pair						
L-8320	ST-16	4½	8	\$18.85	\$17.91	\$17.01
26 Pair						
†L-8321	ST-26	7	10½	\$29.75	\$28.26	\$26.85
51 Pair						
ST-51	ST-51	7	18	\$50.10	\$47.64	\$45.13

*No. 504 Protector Unit also available; specify whether No. 504 or No. 506 is desired.

†For pole and wall mounting only.

PLASTIC CABLE STUBS: No additional charge, 24-gauge polyethylene sheathed will be supplied when plastic stubs are specified. Polyvinyl chloride sheathed stubs are available. Specify plastic when placing order.

Prices shown are subject to change without notice.



Cook XB Unprotected Cable Terminals

Terminal cable box and bracket are formed of heavy rust-resisting iron, riveted together and hot galvanized. Hood is formed of heavy sheet zinc. A galvanized steel chain is attached to the hood. The terminal may be mounted with cable stub carried out of either top or bottom.

Cable enters through a well in steel box in which solder is puddled so that tight connection is made. Face plate and fanning strips are made of a single piece of moulded bakelite. The 12/24 studs are set in face plate so they cannot turn.

Cat. No.	Mfr. No.	Description	XB-6, 6 Pair		O/A Ht. In.	Net Wt. Lbs.	NET PRICE EACH		
							1 to 19	20 to 99	100 & Over
L-8740	452-3502	Less Stub.....	9	4	9	4	\$8.40	\$7.98	\$7.58
L-7441	452-3506	With 5½-Ft. Stub.....	9	7	9	7	11.45	10.88	10.33
XB-11, 11 Pair									
L-7475	452-3503	Less Stub.....	12½	6	12½	6	\$10.00	\$9.50	\$9.02
L-7476	452-3509	With 5½-Ft. Stub.....	12½	14½	12½	14½	15.10	14.34	13.62
XB-16, 16 Pair									
L-7477	452-3504	Less Stub.....	12½	6½	12½	6½	\$11.90	\$11.30	\$10.73
L-7479	452-3512	With 5½-Ft. Stub.....	12½	15	12½	15	17.90	17.00	16.15
XB-26, 26 Pair									
L-7480	452-3505	Less Stub.....	15¼	10	15¼	10	\$17.00	\$16.15	\$15.34
L-7481	452-3515	With 5½-Ft. Stub.....	15¼	21	15¼	21	24.85	23.61	22.43

Reliable Type "B" Protected Cable Terminals

Square weather-tight aluminum alloy cover holds securely in any raised position and cannot be tilted into contact with live parts.

Heavy silicone bronze binding posts are at the front, accessible without removing fuses or reaching around the terminal. Binding post insulation is high-grade molded phenolic.

Discharge blocks are held by individual springs and cannot be accidentally loosened or crossed.

Easily accessible at sides of terminal. The detachable bracket is mounted without gaining the pole.

Heavy binding posts are treated to prevent season cracking. All metal parts are rounded for safety to linemen. Beveled washers on binding posts make it easy for linemen to insert wires.

Type B Cable Terminals are equipped with No. 27L 5-ampere ceramic fuses. No. P495L saw-tooth discharge blocks and No. P1384 carbons.

Cat. No.	Mfr. No.	Description	6 Pair		O/A Ht. In.	Net Wt. Lbs.	NET PRICE EACH		
							1 to 19	20 to 99	100 & Over
L-8349	B27-6	Less Stub.....	14½	10	14½	10	\$21.35	\$20.30	\$19.23
L-8351	B27-6	With 7-Ft. Stub.....	14½	16	14½	16	24.00	23.20	21.98
11 Pair									
L-8300	B27-11	Less Stub.....	14½	11	14½	11	\$28.90	\$27.45	\$26.01
L-8301	B27-11	With 7-Ft. Stub.....	14½	17	14½	17	37.20	35.32	33.46
16 Pair									
L-8302	B27-16	Less Stub.....	17½	13	17½	13	\$41.20	\$39.15	\$37.09
L-8303	B27-16	With 7-Ft. Stub.....	17½	19½	17½	19½	50.70	48.16	45.63
26 Pair									
L-8304	B27-26	Less Stub.....	23¾	21	23¾	21	\$56.50	\$53.65	\$50.83
L-8305	B27-26	With 7-Ft. Stub.....	23¾	27	23¾	27	68.45	65.04	61.62

*Plastic cable stubs at no extra cost. 24-gauge (PE) Polyethylene color coded plastic stub will be supplied when specified.

Extra length stubs and special 24-gauge polyethylene or polyvinyl chloride sheathed stubs are available when specified.

Cook UX Unprotected Underground Cable Terminals



Designed to facilitate installation and service in manhole termination and distribution of underground cable systems.

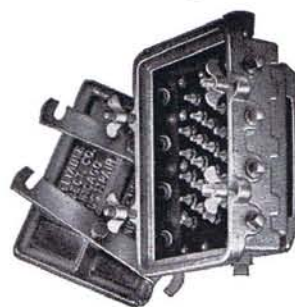
Body and cover of cast, non-porous red brass; locking screw and hinge pins of brass. Silicone bronze mounting bracket.

Cable enters through a well in a cable chamber in which solder is puddled for a tight connection. Terminal may be mounted with cable stud out of top or bottom.

Service outlets are provided in sides of terminal and are sealed with a ⅜-in. brass pipe plug. Lead sheath of instrument distribution cables are terminated in heavy brass stuffing boxes set in service outlets.

Cat. No.	Mfr. No.	Description	6 Pair		O/A Ht. In.	Net Wt. Lbs.	Net Price Each
L-8750	512-3702	Less Stub.....	7¾	11	7¾	11	\$21.25
L-8751	512-3703	W/5-Ft. Stub...	7¾	18	7¾	18	26.25
11 Pair							
L-8752	512-3700	Less Stub.....	11½	18	11½	18	\$30.30
L-8753	512-3701	W/5½-Ft. Stub...	11½	27	11½	27	38.10
16 Pair							
L-8754	512-3705	Less Stub.....	11½	20	11½	20	\$41.95
L-8755	512-3706	W/5½-Ft. Stub...	11½	29	11½	29	50.65
L-8756	506-548	Stuffing Box Complete....					1.90

Reliable Type RUG Unprotected Underground Cable Terminals



Designed for use in manholes for the termination and distribution of underground cable systems.

Silicon bronze binding posts set in a phenolic face plate; provided with bevelled washers to facilitate wiring. A gravity catch in terminal proper slips over top of hot-dip galvanized bracket and is bolted into position at bottom. Brackets are detachable and reversible. Removable brass plugs close box entrances until solder-dipped brass stuffing boxes to accommodate entering instrument cables are installed. No. 24 AWG stub is standard.

Cat. No.	Mfr. No.	Description	6 Pair		O/A Ht. In.	Net Wt. Lbs.	NET PRICE EACH		
							1 to 19	20 to 99	100 & Over
RUG-6	RUG-6	W/6-Ft. Stub....	8¼	25	8¼	25	\$26.25	\$24.96	\$23.65
RUG-6	RUG-6	W/15-Ft. Stub...	8¼	31	8¼	31	28.45	27.03	25.61
11 Pair									
L-8360	RUG-11	W/6-Ft. Stub....	8¼	26	8¼	26	\$38.10	\$36.20	\$34.29
L-8361	RUG-11	W/15-Ft. Stub...	8¼	32	8¼	32	41.00	38.95	36.90
16 Pair									
L-8362	RUG-16	W/6-Ft. Stub....	10½	32	10½	32	\$50.65	\$48.11	\$45.58
L-8363	RUG-16	W/15-Ft. Stub...	10½	37	10½	37	54.95	52.20	49.45
L-8364	P-3757	Stuffing Box Comp.	¾		¾		.95	.90	.85

Reliable Wire Terminal Blocks

1 1/8 Inches Deep



No. L-8210



No. L-8211

Terminal blocks used in the wire terminals are sold separately for use in building boxes or similar housings. Blocks with No. 506 protector units are for cable protection; blocks with No. 504 protector units are for station protection.

			6 Pair	—NET PRICE EACH—		
Cat. No.	Mfr. No.	Type of Block	Protector Unit No.	1 to 19	20 to 99	100 & Over
L-8210	5514	Resin Filled	504	\$10.05	\$9.55	\$9.05
L-8211	5515	Resin Filled	Unprotected	1.85	1.75	1.65
L-8212	5516	Resin Filled	506	10.05	9.55	9.05
L-8213	5561	Resin Filled	Unprotected	1.78	1.70	1.60
			11 Pair			
L-8214	5554	Resin Filled	504	\$16.50	\$15.70	\$14.85
L-8215	5555	Resin Filled	Unprotected	3.55	3.40	3.20
L-8216	5556	Resin Filled	506	16.50	15.70	14.85
			16 Pair			
L-8217	5564	Resin Filled	504	\$23.50	\$22.35	\$21.15
L-8218	5565	Resin Filled	Unprotected	4.55	4.35	4.10
L-8219	5566	Resin Filled	506	23.50	22.35	21.15
			26 Pair			
5584	5584	Resin Filled	504	\$39.00	\$37.05	\$35.10
5585	5585	Resin Filled	Unprotected	7.40	7.05	6.70
5586	5586	Resin Filled	506	39.00	37.05	35.10

Reliable Neoprene Splicing Sleeves



For housing straight-through type or terminal type splices where plastic jacketed, plastic insulated cable is used. One series of sleeves has a built-in watertight ground post for connecting the shield of the plastic cable to an external ground. A second series has an air valve for pressure testing. Sleeves are simple to install, can be tested for air tightness (air valve type) after installation and are easily accessible. Instructions packed with each kit.

Sleeve with Valve (No Ground Post)

Cat. No.	Mfr. No.	Main Cable O.D. In.	Ship. Wt. Lbs.	NET PRICE EACH—		
				1 to 19	20 to 99	& over
L-8390	5400	3/4 to 1 1/16	2 3/4	\$9.45	\$8.95	\$8.50
L-8391	5401	5/8 to 3/4	2 3/4	9.45	8.95	8.50
L-8392	5402	1/16 to 5/8	2 3/4	9.45	8.95	8.50

Sleeve with Ground Post (No Valve)

L-8393	5406	3/4 to 1 1/16	2 3/4	\$9.45	\$8.95	\$8.50
L-8394	5407	5/8 to 3/4	2 3/4	9.45	8.95	8.50
L-8395	5408	1/16 to 5/8	2 3/4	9.45	8.95	8.50

Also available with ground posts and valves.

NOTE: All sleeves are supplied with the 5/8-inch entrance hole closed with a removable plug. Leave the plug in for straight through splices.

Reliable Unprotected Single Pair Watchcase Terminals



Two post wire terminal simplifies unprotected single pair connections between drop or bridge wire and RD or Urban Distribution Wire. It is a compact unit, comprised of a molded phenolic body with molded-in binding and mounting post. Flexible, snap-on neoprene cover. Measures only 3/4 inches in diameter.

Cat. No.	Mfr. No.	Type Block	Ship. Wt. Lbs.	NET PRICE EACH—		
				1 to 19	20 to 99	100 & Over
L-3796	5500	Molded Plastic	1/2	\$.90	\$.85	\$.80

Reliable Ready Access Series Cable Terminals and Closures



This easily installed and easily maintained terminal and splicing facility is designed for use with plastic jacketed, plastic insulated conductor. Up to four 6-pair Reliable No. 105 Terminal Blocks can be added, or the space can be used for loading coils. The flexible neoprene cover is conveniently folded back while internal wiring is altered to meet changing requirements. Series 300 and 400 provide four entrance nozzles for branch splicing, terminal and loading facilities. Terminal blocks are not supplied in Ready Access units. They must be ordered separately.

For Straight Splices and Terminals

Cat. No.	Mfr. No.	Cable, O.D.	Ship. Wt. Lbs.	NET PRICE EACH—		
				1 to 19	20 to 99	100 & Over
L-8370	100-A-0	Up to 1.0 Inch.	3	\$6.50	\$6.20	\$5.90
L-8396	200-0	1.0 to 2.2 Inches	5 3/4	15.00	14.25	13.50

For Branch Splices and Terminals

300-0	300-0	Up to 1.0 Inch.	6	\$14.10	\$13.40	\$12.70
400-0	400-0	1.0 to 2.2 Inches	11	21.00	19.95	18.90

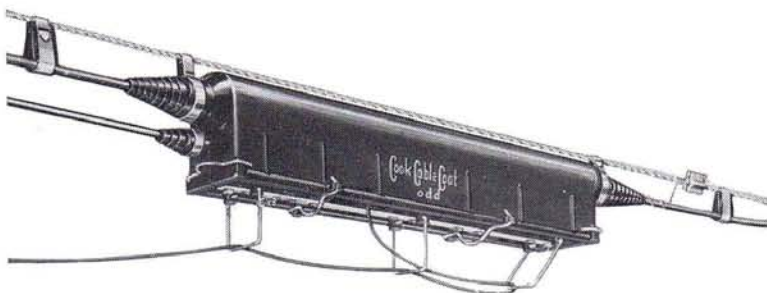
Reliable Terminal Blocks

For Use in Ready Access Series Cable Terminals

Must be ordered separately. Not included in cable terminals as shipped from factory. All wires (color-coded) and binding posts are imbedded in thermosetting reinforced polyester resin. Two brass washers and one 3/8-inch hex brass nut furnished for each binding post. Protected and unprotected units available.

Cat. No.	Mfr. No.	Description	NET PRICE EACH—		
			1 to 19	20 to 99	100 & Over
L-8375	105	6-Pair Block, Unprotected	\$2.75	\$2.62	\$2.50
L-8234	105-P	6-Pair Block, Protected...	3.35	3.20	3.00

Cook Cable Coat For Plastic Cable Only



Designed for independent telephone installation as a splice maker, protected or unprotected cable terminal, (optional) wye branch splice, test point.

Cat. No.	Mfr. No.	Description	Unprotected	NET PRICE EACH—		
				1 to 19	20 to 99	100 & Over
81-99	81-99	No Terminal Block.....		\$7.30	\$6.95	\$6.60
81-100	81-100	One 6-Pr. Block.....		10.90	10.40	9.85
81-312	81-312	Two 6-Pr. Blocks.....		14.50	13.85	13.10
81-318	81-318	Three 6-Pr. Blocks.....		18.10	17.30	16.35
81-324	81-324	Four 6-Pr. Blocks.....		21.70	20.75	19.60

Also available completely protected with or without No. 41-274 Minigap arrester in 6, 12 or 16 pairs. Larger sizes also available.

Complete information available on request.

STORAGE BATTERIES

Storage Batteries

In selecting the proper battery for telephone installation, purchaser should consider requirements of his particular exchange and ratio of cost to potential life of battery which will meet these requirements.

Generally, life of a battery is determined by two factors: type of plates and method of charging.

There are two general types of plates: Planté and Faure. Both types have been proved in telephone work; however, long life is generally conceded to Planté type, while Faure type usually has lower unit capacity cost.

Planté plates are formed from lead with active material electrochemically deposited on ribbons or grooved strips. Faure (or pasted) plate is formed by mechanical pasting of active material into open spaces of grid-shaped lead-antimony sheet. This construction is used by virtually all manufacturers of Faure cells.

Storage batteries are available in lead antimony and lead calcium types. All-steel battery racks for the various types and sizes of batteries are available as well as maintenance equipment such as thermometers and hydrometer syringes.

Exide Batteries

Assembled in heat-resistant and shock-absorbing polystyrene jar and cover. The cover is permanently sealed to the jar against leakage. Molded glass jar type also available.

Can be furnished in single, two and three-cell units.

Exide-Manchex (Planté) Type

Positive plates of heavily corrugated pure lead strips rolled into spiral buttons and forced under pressure into a heavy Silvium alloy grid (lead, antimony, silver and other elements patented by Exide). Negative plates are designed to match the positive plates. Elements are hung from ledges molded into jar ends.

Capacities from 8 to 960 amp.-hr. are available. Batteries with elements suspended from cover also available.

Exide-Tytex (Pasted-Plate) Type

A superior type of flat plate battery. The active material of both positive and negative plates is pasted into the Silvium grid of framework of interlocking rib and bar design and locked in place by the horizontal bars. Plates are separated by microporous separators combined with Vitrex retainers.

Capacities from 10 to 1680 amp.-hr. are available.

Exide Lead-Calcium Type

Positive and negative plates of lead-calcium.

Capacities from 50 to 1680 amp.-hr. are available.



Manchex Type



Tytex Pasted-Plate Types

Gould Batteries

All posts have bolt holes in two directions that permit assembling cells end-to-end or side-to-side. Assembled in acrylonitrile styrene co-polymer clear plastic jar with leak proof plastic cover. A molded ledge on each end of the jar supports elements.

Gould Planté (Pure Lead) Type

Positive plates of pure lead are scored to raise many evenly spaced ridges on both sides of plate. Negative plates are balanced to match positive plates. Durable rubber separators.

Capacities from 8 to 960 amp.-hr. are available.

Gould Kathanode Lead Antimony Type

Positive plates consist of Diamond Z grid (heavy diagonal members of solid lead beveled to wedge active material in place), Durapor separators, spun glass retainer mats and plastic unit-seal perforated envelope. Negative plates are balanced to match positive plates.

Capacities from 10 to 7000 amp.-hr. are available.

Gould Lead-Calcium Type

Positive plates consist of Diamond Z grid—heavy diagonal members of solid lead beveled to wedge active material in place, Durapor separators, spun glass retainer mats, and plastic unit-seal perforated envelope. Negative plates are balanced to match positive plates.

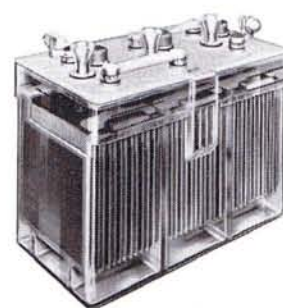
Capacities from 50 to 1680 amp.-hr. are available.



Planté Type



Kathanode Lead-Antimony Type



Lead-Calcium Type

C & D Batteries

Plates have triple insulation consisting of thick fiberglass mat, microporous separators, and perforated plastic retainer. Plates are extra thick (.266 inch) and are both suspended and supported so as to allow normal plate growth. Cells are assembled in a clear polystyrene container with a Hi-Impac cover. Cells have a Saffee-Vent which guards against the danger of accidental explosion. Sparks or flames cannot enter cell, yet, gasses may pass through freely. Vent also acts as a funnel to simplify water additions and hydrometer readings. Cell sizes up to 660 ampere hours have a Plastite post seal. Sizes 720 to 1680 ampere-hours have a lead insert in cover welded to the post. Both types of construction eliminate acid creepage.

C & D PlastiCal Lead-Calcium Type

Positive and negative plates of lead-calcium. Capacities from 50 to 1680 amp.-hr. are available.

C & D PlastiCell Lead Antimony Type

Positive and negative plates of lead antimony. Capacities from 10 to 1680 amp.-hr. are available.



PlastiCal Lead-Calcium Type



PlastiCell Lead Antimony Types

POWER AND TEST EQUIPMENT

Lorain Flotrol Battery Chargers



An automatic charger of the floating charge type. Its regulation is controlled by saturable magnetic reactors. Rectification is accomplished by the use of long-life selenium rectifiers. The operation of this charger does not depend on the use of tubes, relays, motors or other expendable equipment.

Unless otherwise specified, the output voltage is maintained constant within plus or minus 1 per cent, from 10 per cent load to 100 per cent load.

On overload, the charger is automatically protected against damage by changing from a constant voltage type charger to a constant current type charger. Compensation for variation in input voltage is automatic and almost instantaneous.

Operates from 115 and 230-volt, 60-cycle, a.c. input, with various output range of d.c. voltages and amperes.

Warren Transistor Float Rectifiers



A solid state, constant voltage, fully automatic battery charger. Employ silicon rectifiers with a transistor-magnetic amplifier control circuit to obtain line-load regulation of $\pm \frac{1}{2}$ per cent from 0 load to 125 per cent load. Include no moving parts, no aging adjustments are required.

Operates from 115 and 230-volt, 60 cycle a.c. input, with various output range of d.c. voltages and amperes.

Raytheon Rectichargers



A constant-voltage battery charger designed primarily for the float-charging of telephone batteries.

Magnetic amplifier automatically compensates for variations in output caused by aging of the selenium rectifiers.

Maintains the battery at full charge under all normal load conditions, and at the same time supplies full power requirements of the load. Battery furnishes power only when an overload occurs or when the input power to the Recticharger fails.

The constant voltage output of the unit regulated to within ± 1 per cent by a magnetic amplifier control circuit, prevents battery gassing and water loss caused by overcharging and undercharging.

Operates from 115/230-volt, ± 10 per cent, 60-cycle, a.c. input with various d.c. voltage and ampere outputs.

Schauer Electrox Battery Eliminators

For Single-Phase Operation

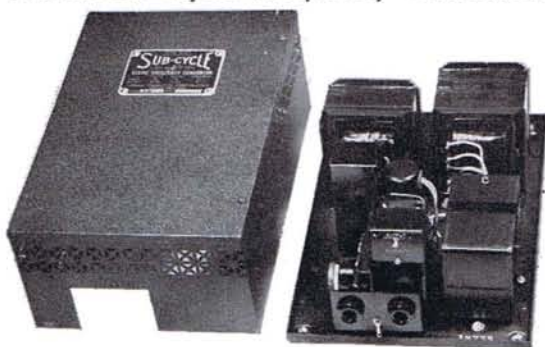


For operator's circuit on magneto switchboards. Delivers constant, hum-free direct current. With power-off relay for automatically transferring power to standby dry cells in the event of a.c. power failure.

Component parts consist of a transformer, full-wave copper-oxide rectifier, filter choke and condenser.

Operates from 115-volt, 60-cycle a.c. input with output of 4 volts, d.c. at .5 ampere.

Lorain Sub-Cycle Frequency Converters



Supplies an output frequency which is one-third the input frequency. The converter supplies 20-cycle ringing current when supplied from a 60-cycle line or 16 $\frac{2}{3}$ -cycle ringing current when supplied from a 50-cycle line.

The frequency conversion is accomplished through the action of an inductance containing a saturable magnetic core, and a capacitor connected in a circuit with the inductance. These circuit elements are static, and do not make use of any mechanical movements, therefore they do not wear out or change their characteristics, even after prolonged use.

Lorain K-5 Sub-Cycle Ringing Converters For Decimonic Ringing Systems



The Decimonic Ringing System used with the Sub-Cycle Converter provides a reliable selective ringing system using tuned bells. Has 10-cycle spacing between ringing frequencies which are 20, 30, 40, 50 and 60 cycles.

Features freedom from cross ring and elimination of frequency drift. The ringing frequencies are positively locked with the 60-cycle supply frequency so that the bells when once set to the proper frequency are always operated at their peak efficiency.

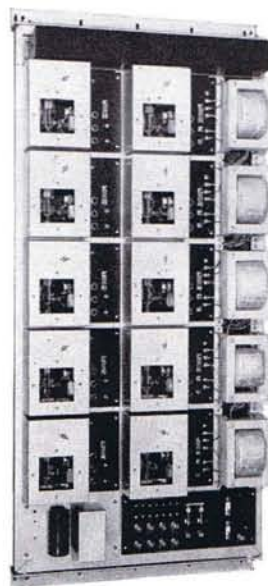
Lorain Transistor Sub-Cycles For All Ringing Frequencies



Each output frequency generator is individually controlled with a screwdriver operated frequency adjustment accessible through the front panel. Once the frequency is set it is not subject to significant variation.

Operates directly from 50-volt exchange battery. D.C. operation eliminates switching in case of a.c. power failure. Rated output current is .20 amperes per frequency, and full load can be carried on all five frequencies simultaneously. When using commutated ringing current distribution, this provides adequate capacity for 4000 lines or more.

Leich Ringing Converters



Converter is vibrator type unit which converts a d.c. battery supply to an a.c. or pulsating current of wave form suitable for operating any of commercial telephone ringers tuned to proper frequency.

Vibrator consists of reliable tuned reed driven by motor coils energized from same battery supply. The tuned reed is adjustable to proper frequency by means of weights, and maintains its set frequency within close limits over long periods of time. However, frequency is somewhat dependent upon stable battery voltage.

Converters furnished for operation on either 24 or 48-volt battery supply. The regular telephone system battery is normally used. A self-regulated battery charging unit is recommended.

Code No.	Stock List No.	D.C. Operating Volt.	Description	Price Each
40	08996	24	20 Cycle, 1 Vibrator	\$121.60
50-A	015138-A	48	20 Cycle, 1 Vibrator	113.50
50-B	015138-B	48	20 Cycle, 1 Vibrator Superimposed	116.90
50-C	015138-C	48	20 Cycle, 1 Vibrator Pulsating	114.00
50-D	015138-D	48	30 Cycle, 1 Vibrator	100.00
50-E	015277	48	60 Cycle, 1 Vibrator	218.40
328	012185	24	5 Frequency Synchronic, Single Vibrators	469.40
329	012186	24	5 Frequency Harmonic, Single Vibrators	513.50
428	012189	24	5 Frequency Synchronic, Twin Vibrators	653.40
429	012190	24	5 Frequency Harmonic, Twin Vibrators	668.20
875	013621	48	5 Frequency Decimonic, Twin Vibrators Start & Transfer Circuit	760.00
878	013343	48	5 Frequency Synchronic, Twin Vibrators Start & Transfer Circuit	707.00
879	013344	48	5 Frequency Harmonic, Twin Vibrators Start & Transfer Circuit	749.00
935	013603	48	5 Frequency Decimonic, Single Vibrators	474.80
938	013606	48	5 Frequency Synchronic, Single Vibrators	502.00
939	013607	48	5 Frequency Harmonic, Single Vibrators	482.00
945	014218	48	*5 Frequency Decimonic, Single Vibrators Start & Transfer Circuit	615.80
948	015802	48	*5 Frequency Synchronic, Single Vibrators Start & Transfer Circuit	632.00
949	015803	48	*5 Frequency Harmonic, Single Vibrators Start & Transfer Circuit	639.50

*Arranged to transfer from primary source on power failure and frequency failure.

Lorain Sub-Cycle RT, T and BC Units For PBX and Small Switchboards



Provide ringing and talking power in one compact cabinet.

Operate from 117 \pm 5 volts a.c., and has additional transformer taps for 111 or 123 volts input.

Frequency changing circuits deliver dependable 20-cycle or 30-cycle ringing current with excellent voltage regulation.

Stewart Linemen's Test Sets



A highly accurate fault-locating instrument that quickly locates shorts, crosses, grounds, and wet spots—to the *inch!* Contains an exploring coil which is neutral to the tone on the sheath and messenger; the tone heard in the head phone is only that of a pair which is at fault. Unit is also useful for locating high-resistance water leaks. Furnished complete with fishtail pickup coil and head phones. Operates on two No. 6 dry cells (order batteries separately).

Cat. No.	Dimensions, In.	Wt. Lbs.	Price Each
L-6774	11 $\frac{3}{4}$ x 10 $\frac{1}{2}$ x 4	10	\$83.00

Stewart Cable Testers and Locators



Combines all the outstanding features of the Cable Tester with a special Depth Coil that quickly locates and tells the depth of buried pipe and cable.

The unit will save its cost many times in locating and determining the depth of old cable and conduit, the exact location of which is not known, or for

which records have been lost. It will end many hours of fruitless search, and possibility of accidentally injuring buried cable.

The Stewart Cable Tester and Locator uses four No. 6 dry cells and is equipped complete with fish-tail and depth coils, head phone and cord. All are self-contained in one sturdy carrying case. Order batteries separately.

Cat. No.	Dimensions, In.	Wt., Lbs.	Price Each
L-6773	11 x 12 $\frac{1}{2}$ x 7 $\frac{1}{4}$	17	\$112.00

Stewart Exploring-Coil Amplifiers



This dependable amplifier unit acts as a booster for cable testers and locators when low-resistance faults, noisy locations, and windy days make it difficult to get a clear signal. It increases the strength of the pickup tone. This handy, pocket-sized unit is ready for work by connecting the pickup coil to the input posts, and the head phone to the output posts.

The voltage or signal strength gain of the amplifier is approximately 50 times. Operates on A and B batteries with panel-mounted volume control. Order batteries separately. Uses one each L-2381—1 $\frac{1}{2}$ Volt A and L-2383—45 Volt B batteries.

Cat. No.	Dimensions, In.	Wt., Lbs.	Price Each
L-6771	5 x 3 x 2	1 $\frac{1}{2}$	\$65.00

Matthews Woodpecker Telefaults



A simple self-contained instrument that will accurately locate water in cables, shorts of all kinds in cables, crosses, grounds, split pairs, etc. It uses only one dry cell. Its tone is like that of a woodpecker on a pole and cannot be confused with other noises. Can be used for locating trouble on open wire circuits as well as on cable circuits. (Furnished without batteries.)

Cat. No.	Wt. Lbs.	Price Each
L-6777	15	\$86.00

Weston Circuit Testers



A small, portable instrument, especially designed for the resistance and continuity method of checking circuits. The Type 1-E scale is calibrated with a double range, with resistance readings from 0-5000 ohms and 0-50,000 ohms. The Type 1-F has ranges 10 and 1000 ohms. A 1 $\frac{1}{2}$ volt, No. 2 unit-cell battery is mounted inside the case, and adjustments for variation in battery voltage are made through a magnetic shunt available for adjustment outside of the case—a method that insures high accuracy at all times, as it in no way alters the internal resistance of the instrument.

Furnished with battery and test leads. Dimensions are 5 in. x 2 $\frac{7}{8}$ in. x 1 $\frac{7}{8}$ in.

Cat. No.	Mfr. No.	Wt. Lbs.	Price Each
L-5580	689-1E	1	\$33.25
L-5582	689-1F	1	33.25

Leather Cases

Cat. No.	Wt. Lbs.	Price Each
L-3300	$\frac{1}{4}$	\$11.00

Prices shown are subject to change without notice.

Triplett Volt-Ohm-Milliammeters



Pocket-size portable tester for a.c. and d.c. voltage, direct current and resistance analyses to 3 megohms. Unit construction of tester eliminates chance for shorts; resistors, shunts, rectifier, batteries are housed in a molded base, with direct connections made without cabling. Enclosed selector switch keeps dirt out, retains contact alignment permanently, eliminates loss between contacts. Only one switch adjustment is needed to select the range for any a.c. or d.c. voltage up to 5000, at 1000 ohms per volt; direct current from 0 to 100 ma. and 1 amp. Greater accuracy assured by precision film or wire-wound resistors—each in its own compartment. Black molded case is completely insulated, $3\frac{1}{16} \times 5\frac{7}{8} \times 2\frac{9}{16}$ inches. Three $1\frac{1}{2}$ volt, plug-in type self-contained batteries. 50-inch test leads with clips and plugs. Ranges are:

D-C Volts 0-10-50-250-1000-5000, at 1000 Ohms/Volt.
A-C Volts 0-10-50-250-1000-5000, at 1000 Ohms/Volt.
D-C Milliamperes: 0-10-100, at 250 M.V.
D-C Amperes: 0-1, at 250 M.V.
Ohms: 0-3000-300,000 (20-2000 at center scale)
Megohms: 0-3 (20,000 Ohms center scale)

Cat. No.	Mfr. No.	Description	Price Each
L-7690	666-R	Meter	\$29.50
L-3537	666-RL	Black Leather Case and Strap	6.60

Paragon Battery Boxes



A compact, convenient box for subscribers telephone batteries.

Made of sheet steel.

Insulator lined. Punched top and side for wire.

Black lacquer finish.

Cat. No.	Description	Price Each
L-3007	For Two No. 6 Dry Cells	\$1.40
L-3008	For Three No. 6 Dry Cells	1.65

Sterling Pocket Meters



Ammeter



Voltmeter

These pocket ammeters and voltmeters are built in a wide range of capacities to cover every current measuring requirement. All these meters have correct scale calibrations, are durable, have clearly marked dials, and nickel finish.

Ammeters

For testing dry cells. Reading from 0 to 35 amperes.

Cat. No.	Mfr. No.	Diameter Inches	Wt. Lbs.	Price Each
L-2003	24	$2\frac{1}{4}$	$\frac{1}{4}$	\$2.10

Voltmeters

For D.C. voltage and testing dry cells or storage batteries. Reading 0 to 35 amperes and 0 to 10 volts.

Cat. No.	Mfr. No.	Diameter Inches	Wt. Lbs.	Price Each
L-7680	44	$2\frac{1}{4}$	$\frac{1}{4}$	\$2.63

Telohms



For testing and locating telephone and switchboard trouble, shorts, grounds, high resistance, and open circuits in coils of all kinds, also partially shorted coils, high resistance transmitters, cutouts in receiver, desk stand and switchboard cords, hook-switch contacts, etc.

Equipped with a Weston 0-3 Volt Direct Reading Ohmmeter, 0-10,000 ohm scale, with glass protector mounted in a solid black walnut case that fits the pocket. Employs two standard flashlight type dry cells. The binding posts are arranged for loop, spade or straight tips.

Furnished complete with battery, "on-and-off" battery switch, cords and test clips.

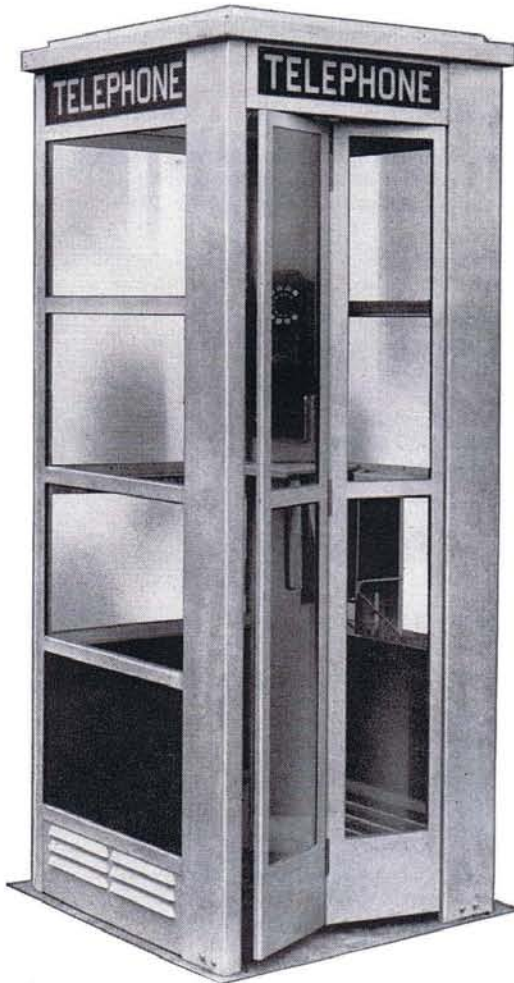
Cat. No.	Dimensions, In.	Wt. Lbs.	Price Each
L-7460	$1\frac{3}{8} \times 3\frac{1}{2} \times 6$	$1\frac{1}{4}$	\$17.50

Telohm Carrying Cases

L-3297		$\frac{1}{2}$	\$6.35
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BOOTHS AND PAYSTATIONS

Alcoa Outdoor Telephone Booths



An outdoor, twenty-four hour Alcoa aluminum booth provides a tremendous potential source of revenue.

Constructed of high strength heat-treated Alcoa aluminum extruded shapes. Six interchangeable subassemblies interlock into a solid structure. If one side of the booth is damaged, it can be easily replaced. Alumilite finish is very hard and abrasion resistant; pencil marks and grease smudges can be easily removed by washing.

Full length backboard of heavy aluminum alloy plate with eight threaded inserts to accommodate coin collector. Available with aluminum directory rack and porcelain enameled steel shelf or aluminum continuous shelf without directory rack.

Equal leaf folding doors with integral kick plates. Closing mechanism automatically returns the door to the partially closed position after use. Hardware is Alumilite finished aluminum and stainless steel.

Standard floor is concrete which must be furnished by customer. A heavy aluminum alloy floor plate with diamond thread surfaces and Alumilite finish is optional at extra cost.

Air circulation is obtained through stack-effect of louvers at bottom and concealed opening all around the roof.

Hamilton Temper-Tuf glass panels are used throughout. Temper-Tuf glass is 5 times stronger than ordinary glass and thus resists damage from vandalism. There are no sharp edges if broken; will not shatter. Red is standard color; blue and green are optional. Four glass telephone sign panels with white letters on colored background. Fluorescent lamps provide illumination through the four glass telephone signs and the one-piece light and ceiling assembly.

Booths are also available in tandem assembly which eliminates the gap created when two or more single booths are placed together.

Overall dimensions of a single booth: width, 33½ inches; depth, 33½ inches; height, 86½ inches. Weight erected, 360 pounds.

Unassembled Booths

Provided with 3-115-2 red panels less glass panels, telephone sign panel, and fluorescent lamps. See glass panels and accessories listed below.

Mfr. No.	Description	Each
AL1-55020B-KD	Outdoor Booth with Continuous Shelf.....	\$360.00
AL2-55020B-KD	Outdoor Booth with Directory Rack.....	365.00

Standard Temper Tuf Glass Panels and Accessories

Please specify color of panels and telephone signs.

Cat. No.	Mfr. No.	Description	Each
L-9654	17	½x15½x25½-Inch Side Panels..... (9 per Booth)	\$1.94
L-9655	18	½x9½x32½-Inch Door Panels..... (4 per Booth)	1.50
L-9659	22	4½x22½-Inch Telephone Front Panel..... (1 per Booth)	1.06
L-9658	32	5½x25½-Inch Telephone Side Panels..... (3 per Booth)	1.20
L-5197	FC16T10/CW/RS	40-Watt White Circline Fluorescent Lamps. (2 per Booth)	3.15
Optional Accessories			
135	135	Apparatus Blank.....	\$1.79
140	140	Aluminum Floor Plate.....	18.00
PRO-3	PRO-3	Protect-O-Lite (See Pg. 66 for Ordering Information).....	.....

Soundcraft-Acoustacolor Phone Booths

A welcomed addition to your paystation program. Available in a range of colors to blend with the decor of hotel lobbies, department stores, restaurants, specialty shops, office building lobbies, auditoriums, airport terminals and all places where the ability to hear and be heard on the telephone are a convenience and necessity.

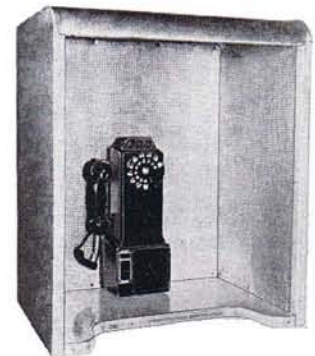
A neat appearing unit, sturdily constructed; requires little maintenance. The most economical of its type... compare and see. Constructed of durable metal and fiber glass with hardwood inserts. Exterior is an embossed aluminum; inside is perforated aluminum. The top of the shelf is stainless steel. Between the layers is inch-thick fiberglass insulation, which supplements acoustical properties of perforated interior. Finish colors are hard-baked over special primer.

Mfr. No.	Color	Each	Mfr. No.	Color	Each	Mfr. No.	Color	Each
61	Turquoise Green...	\$66.50	63	Sand Beige.....	\$66.50	65	Sea Green.....	\$66.50
62	FMN Blue.....	66.50	64	Jet Black.....	66.50	66	Powder Blue.....	66.50

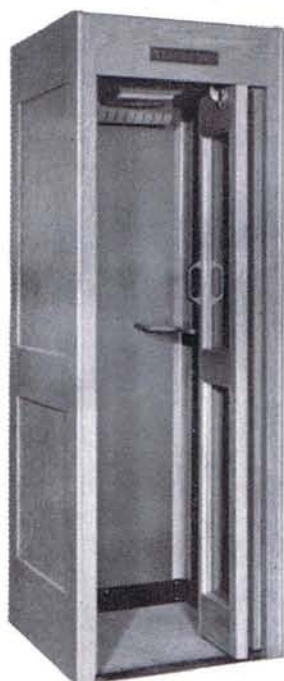
Other decorator colors are available at small additional cost.



Booths in Tandem Assembly



Prices shown are subject to change without notice.



Churchill Indoor Booths

Here is one of the finest Indoor Booths made. It features better lighting with automatic door switch, new electric ventilator and all metal lining. Wood writing shelf included. A seat may be ordered separately. Booth does not have floor.

Available in Medium Oak Finish and Medium Mahogany Finish.

The overall dimensions are 30½ in. wide, 30½ in. deep and 89¾ in. high.

Shipped knocked down, weight 400 lbs.

Mfr. No.	Description	Price Each
100A	Medium Oak Finish, Complete, less Seat.....	\$310.00
100B	Medium Mahogany Finish, Complete, less Seat.....	310.00
.....	Seat for Nos. 100A or 100B, Finished.....	7.50
.....	Fan Unit and Motor.....	42.50

TBM Service Entrance Masts

Simple installation takes only 30 minutes.

Furnished complete with insulators, wire holders and entrance devices. Rust-O-Leum finish will not rust.

Cat. No.	Mfr. No.	Description	Wt. Lbs.	Price Each
L-5303	TBM-12	12-Foot Mast with 2 Conduits	45	\$44.90
L-5305	TBM-12-S	12-Foot Mast with Meter Socket and Breaker Box...	75	71.95
L-5307	TBM-12-SL	12-Foot Mast with Meter Socket, Breaker Box, 2 Floodlights and Time Switch.....	90	94.00
L-5304	TBM-14	14-Foot Mast with 2 Conduits	50	46.90
L-5306	TBM-14-S	14-Foot Mast with Meter Socket and Breaker Box...	80	74.00
L-5308	TBM-14-SL	14-Foot Mast with Meter Socket, Breaker Box, 2 Floodlights and Time Switch.....	95	97.00

Ad-Pact Illuminated Signs



Plexiglas face on two sides, with aluminum case. Large white letters, blue background. Four 58-watt incandescent lamps.

Cat. No.	Description	Wt. Lbs.	Price Each
L-6792	Illuminated Sign, with Flashers.....	25	\$53.80
L-6793	Illuminated Sign, without Flashers..	25	45.90

Burgess-Manning Acousti Booths



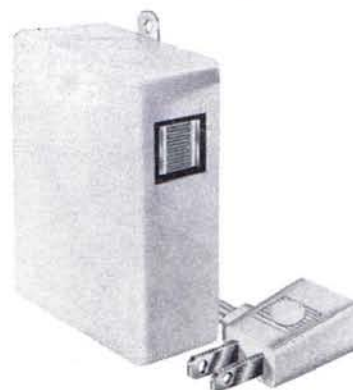
Rigid, all-steel construction with handsome, durable, gray wrinkle finish adds distinction to booth wherever it is installed. Telephone users enjoy a comparative "zone of quiet" regardless of the noise and confusion nearby. Thick walls of sound-absorbing material soak up both direct and reflected noises. Heavy-gauge perforated steel sheets protect this acoustic material.

The No. 601 is a similar type booth but of reinforced plywood construction with rich walnut stain exterior finish.

Outside dimensions of both models are 28 inches wide x 26 inches deep x 32 inches high. Shipped fully assembled.

Mfr. No.	Description	Price Each
602	Wall Model—Gray Wrinkle Steel.....	\$90.00
601	Wall Model—Walnut Stain Wood.....	110.00

Protect-O-Lite



This is an important telephone booth accessory. Automatically turns lights on at night and off at dawn.

Just plug Protect-O-Lite into wall socket... plug in the light cord... face the photo electric eye towards the outside natural light. At night a delayed action prevents car lights or flashlights from turning off the lights.

For 110-125 volts, A.C. Up to 600 watts—Rated at 6 amps.

Furnished with 6 feet of cord with plug.

Size, 3x2½x1 inches. Shipping weight, 12 oz.

Mfr. No.	PRICE EACH		
	1 to 19	20 to 49	50 & Over
PRO-3	\$10.47	\$9.71	\$8.97

Small Telephone Signs



A complete selection of small telephone signs are available for both indoor and outdoor use.

Complete information and prices will be furnished upon application.

Autelco Paystations

Self-Contained "80" and "LP90" Series

Both the "80" and "LP90" series of paystations include assemblies to meet every requirement of central-battery paystation service.

The "80" series paystations offers the talking circuit provided by the Automatic Electric Type 80 Monophone; the new "LP90" series has a talking circuit having high gain circuit comparable to the Western Electric 500 Telephone.

The "80" series paystations may be ordered in the following colors: Sand Beige, Dawn Grey, Sunlight Yellow, Turquoise, Jade Green, Garnet Red, Classic Ivory, Gardenia White, Camellia Pink and Forget-Me-Not Blue. Prices shown are for black paystations; for full color, add \$6.20; for two-tone color (with black handsets and dials), add \$4.00. Black supplied unless otherwise specified.

Paystations of either series are regularly equipped with complete telephone transmission equipment including handsets and dials as specified, but no ringers. If it is desired to permit incoming calls, these paystations can be used with ringer boxes.

Shipping weights, approximately 32 pounds.

Local Prepay

These paystations combine advantages of pre-pay service on local calls and semi-postpay service on toll calls. Central office equipment is simpler and less costly than required for regular prepay paystations. They can be used with any automatic exchange which provides reverse battery for collecting initial deposit when called party answers and requires only 60-volt booster battery for refund.

Mfr. No.	Description	Price Each
89	Automatic Electric Circuit Components	\$146.00
89-55	Like Above, but for 10-Cent Local Service . . .	163.50

Prepay—Manual or Automatic

These paystations provide prepay service with automatic or manual central offices which have 110-volt facilities to operate coin-control. Coins are deposited before connection is made and can be refunded if call is not completed.

Mfr. No.	Description	Price Each
82	*Automatic Electric Circuit Components . . .	\$134.05
82-55	Like Above, but for 10-Cent Service	151.55
LP92	*Western Electric Circuit	134.05
LP92-55	Like Above, but for 10-Cent Service	151.55

*Dial supplied unless manual is specified. For manual service, specify "without dial," and deduct \$7.80.

Semi-Postpay (Reverse-Battery)

These paystations permit collection of charges for local paystation service without the aid of an operator. They can be used in any automatic exchange which provides for reversal of transmission battery when the called party answers. They do not provide for ready conversion to prepay operation.

Mfr. No.	Description	Price Each
86	Automatic Electric Circuit Components . . .	\$143.95
86-10	Like Above, but for 10-Cent Service	157.95
LP96	Western Electric Circuit	143.95
LP96-10	Like Above, but for 10-Cent Service	157.95



Postpay Manual (Convertible to Prepay)

No control equipment required at central office. Used in manual exchanges where operator supervises coin deposits. Can be used in automatic exchanges only if free local service is provided. By adding a coin-control relay and hopper assembly, these paystations can be converted to prepay manual and then to prepay dial service if desired.

Mfr. No.	Description	Price Each
84	Automatic Electric Circuit Components . . .	\$110.15
LP94	Western Electric Circuit	110.15

Postpay Manual (Convertible to Semi-Postpay)

Operation is the same as for Types 64 and 94 above except convertible to semi-postpay service instead of prepay.

Mfr. No.	Description	Price Each
88	Automatic Electric Circuit Components . . .	\$114.75
LP98	Western Electric Circuit	114.75

Prices shown are subject to change without notice.

Type 11J Paystation for Handset Telephones



This is a complete unit equipped with a coin-signal transmitter and a "universal" mounting plate. It can be used with either desk or wall-type handset telephones—magneto or central battery. It does not require mechanical connection with the telephone; just connect the paystation signal transmitter into the telephone transmitter circuit, at the telephone or at the ringer box. Cash compartment has approximate capacity of \$10.00. Type 11 AJ has larger cash compartment with capacity of \$13.50.

The Type 11 paystation is for use with wall sets having hand receivers. Mounting plate extends behind telephone and conducts coin signals to transmitter. Cash compartment holds approximately \$10.00. Type 11A holds about \$13.50.

Mfr. No.	Dimensions, In.	Wt. Lbs.	Price Each
11J	4½x3x 9	16	\$36.40
11AJ	4½x3x11	16	37.50
11	4½x3x 9	13	29.90
11A	4½x3x11	13	31.00

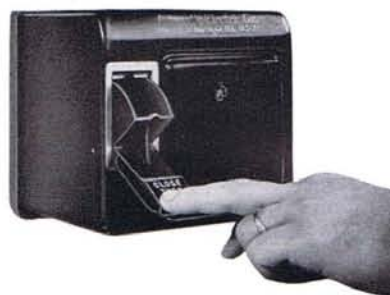
Type 23J Handset Paystations



Has cradle hook and wiring for connecting handset (not included unless specified). Can be used with any standard ringer box containing induction coil, condensers, etc. Paystation has coin-signal transmitter and "universal" mounting plate for mounting on wall or shelf. Cash compartment has capacity of approximately \$20.00. When ordering, please specify type of handset and ringer box which will be used.

Mfr. No.	Dimensions, In.	Wt. Lbs.	Price Each
23J	6x4½x10½	18	\$51.30

Anti-Stuffing Coin Returns



With this Anti-Stuffing Coin Return, your customers get their coins—and you avoid complaints. It makes the blocking of coin return chutes impossible. When the coin return is closed, nothing can be inserted. When opened to remove refunded coins, access to chute is blocked.

The anti-stuffing device is recommended for prepay and local prepay service because all coins are refunded if the called party does not answer. It is not essential for semi-post pay service because no coin refund is made. This anti-stuffing device is available as an accessory at \$2.00 per unit when ordering an 80 or LP90 paystation.

How to Order

1. Specify type of service and Series (80 or LP90) that is desired. (See table below).
2. Specify type of extended dial number plate desired; otherwise blank dial number plate and a metropolitan extended dial number plate are furnished.
3. Specify one of the following types of dials when ordering LP90 Paystation:
A.E. Co. Dial
Kellogg Dial
Stromberg Carlson Dial
4. Specify one of the following handsets when ordering LP90 Paystation:
Leich Electric Co. Handset
Stromberg Carlson 26C Handset
North Electric Co. Handset
Kellogg Handset
Stromberg Carlson 27C Handset
5. Specify self-locking coin receptacle, if open type is not desired.
6. Specify anti-stuffing coin return if desired.

Coin signal transmitter, locks and regular card holder, etc. will be furnished where required and need not be specified.

Service	Operation	The "80" Series	The "LP90" Series
Prepay	{ Automatic	82	LP92
	{ Manual	82	LP92
Prepay—Ten Cents	Automatic	82-55	LP92-55
Postpay	Manual	84	LP94
Semi-Postpay (Reverse-Battery)	Automatic	86	LP96
Semi-Postpay—Ten Cents	Automatic	86-10	LP96-10
Postpay Convertible to Semi-Postpay (Reverse-Battery)	{ Manual	88	LP98

Prices shown are subject to change without notice.

Paystation Accessories

Coin Receptacles

Non-locking, for collecting coins in standard Autelco paystations. Approximately \$30.00 capacity. Furnished as standard unless other type receptacle is specified.

Cat. No.	Mfr. No.	Price Each
L-9198	2A	\$1.05

Self-Locking Coin Receptacles

To save the collector's time, and his handling of money, "self-locking" receptacles can be supplied. They are equipped with a shutter over the coin opening, which admits coins as the receptacle is inserted, but closes and locks as the receptacle is withdrawn. The collector neither sees nor handles any money—as the receptacle is opened at the office, by breaking a lead seal. Receptacle, cover, and rail included. Coin capacity, approximately \$30.00. When ordering extra self-locking receptacles, please specify "without rails."

Cat. No.	Mfr. No.	Price Each
L-9174	P6001B	\$4.50

Receptacle Carrying Cases

This handy collector's case holds 9 self-locking coin receptacles. Sturdy fibre material and equipped with a hasp so it may be sealed for shipment. Supplied with "snap-on" handle, if requested.

Cat. No.	Mfr. No.	Price Each
L-5651	P51513	\$16.25

Corner Brackets

Bracket for mounting all paystations (except attachment and compact types) in corner of telephone booth or other confined space. Cast iron, finished in black japan. Provision is made for line wires. Shipping weight, 18 lbs.

Cat. No.	Mfr. No.	Price Each
L-9313	153A	\$6.25

Shelf Brackets

For mounting all paystations (except attachment and compact types) on a horizontal surface such as a shelf or counter. Attractively designed and finished in black japan to match the paystation. An opening is provided for line wires. Shipping weight, 15 lbs.

Cat. No.	Mfr. No.	Price Each
L-9314	139A	\$6.80

Wood Backboards

For mounting paystation and ringer box.

Cat. No.	Mfr. No.	Price Each
L-5650	P51351	\$4.80

Lead Seals

Package of 100. For self-locking coin receptacles.

Cat. No.	Mfr. No.	Price per 1000
L-5648	P50197	\$6.00

Sealing Tools

For self-locking coin receptacles where lead seals are used. Can be supplied engraved with company designation when specified.

Cat. No.	Mfr. No.	Price Each
L-5649	P50649	\$7.50

Over-Sized Card Holders

Over-sized card holder for supplementary information and instructions for the subscriber. Furnished with mounting material.

Cat. No.	Mfr. No.	Price Each
L-9312	1-C	\$1.50

Popper Card Holders

For the Coin Collector Telephone

Telephone information provided at a glance on 4 1/4 x 6 1/4-inch cards.

Mounts in existing holes on top of phone box with non-breakable shield.

Black enamel finish on metal.

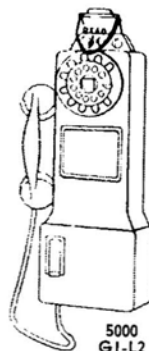


5000-H1

Cat. No.	Mfr. No.	Description	Price Each
L-9799	5000-H1	Card Holder	\$2.50

Popper Coin Gage Guards For the Coin Collector Telephone

Prevents insertion of coin before following special instructions. Mounts on top of phone box in existing holes. Plastic "Read" sign hinges on black enamel finish metal.



5000-G1-L2

Cat. No.	Mfr. No.	Style No.	Price Each
L-9794	5000-G1	1-1	\$1.45
L-9792	5000-G1	1-2	1.45

Popper Hanging Style Book Holders



3000-W5



3000-W1



3000-Z
Slide Type



3000-W14

Chain made of brass. Swivels avoid chain entanglement. Mounting screws included. Bronze-style plated finish protected with clear lacquer.

Cat. No.	Mfr. No.	Description	Price Each
L-9795	3000-W5	With Rubber Guard Swivel & Clevis for Light Books with Punched Hole	\$1.45
L-9796	3000-W1	With Swivel for Special Mounting Binders, Etc.	.80
L-9797	3000-Z	Slide Type	.80
L-9798	3000-W14	With Swivel for Special Mounting Binders, Etc. and Formed Bracket with Built-In Shock Absorber	1.61

Prices shown are subject to change without notice.



ELECTRONIC SECRETARY® MODEL DCR-1

... Automatic Telephone
Answering and
Recording Unit

- EASY TO INSTALL
- SIMPLE TO OPERATE
- LOW MAINTENANCE
- COMPACT
- ATTRACTIVELY DESIGNED

The Model DCR-1 is used in conjunction with regular business or home telephones. In your absence, you can have the convenience of a professional private secretary ... automatically.

When necessary to leave your telephone unattended, the Electronic Secretary telephone answering and recording unit automatically answers your phone by means of a record player. A recorded voice on a record disk relays a message and asks the caller to leave a message. The incoming message is recorded on wire. Upon your return, all messages can be played back by flicking a single switch. As many as 240 fifteen-second messages can be recorded.

No interference with normal telephone operations. The Model DCR-1 incorporates all of the features desired for convenience, dependability and ease of operation.

Headphone connection ... for privacy when playing back recorded messages.

Automatic "erase" in re-wind ... a switch will erase all recorded messages from the wire spool at your option.

Automatic "stop" switch ... guards recording wire from traveling off spools in both forward and rewind settings.

Specifications:

A.C. voltage: 117.

Weight: 55 pounds.

Size: 13x17x9 inches.

Finish: Rhinohide gray.

Model DCR-1 each \$415.00

Tape Adapter



The record player on Model DCR-1 Electronic Secretary automatic telephone answering and recording unit may be changed to a tape adapter. It is then possible to record your own answering messages and to change them whenever desirable.

Tape Adapter
TA-2E each \$190.00

Foot Control



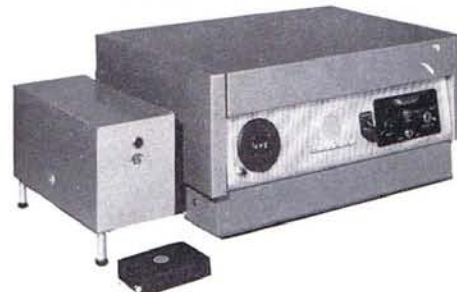
The foot control adapter used in conjunction with the automatic telephone answering and recording unit was designed to facilitate transcribing the recorded messages from the wire recorder.

The foot control device enables the transcriber to "stop," "start," and "re-wind" the wire recorder with the foot, leaving the hands free for typing.

Foot Control each \$31.63

Electronic Secretary® Model DCR-1-CB

Automatic Telephone Answering and Recording
Unit with Remote Callback



The Remote Callback enables the subscriber to receive messages recorded on his answering unit from any distant point by telephone. By calling number being answered by the DCR-1-CB, a signal from a small tone oscillator starts the unit in operation for playback to you of all recordings left on the unit.

Model DCR-1-CB each \$630.00
Tone Oscillator (15-710) each 22.50



Electronic Secretary® Model T-R

Automatic Telephone Answering Unit

Designed to automatically answer your telephone and deliver your recorded message to the caller by means of a standard 45-rpm. record.

Especially suited for business intercepts and vacations where your recorded message to callers does not change frequently.

This is an answering only device. There is no provision for recording the incoming message. Model T-R, each \$175.00



Electronic Secretary® Model TT-2

Automatic Telephone Answering Unit

Designed to automatically answer your telephone with a recorded message that can be changed as frequently as desired.

Offers you the mechanical facilities to record various types of messages. A provided microphone permits you to record your message on a small tape cartridge. A new message can be recorded as often as you wish as old messages are automatically erased.

Has no provision for taking incoming messages.

Model TT-2, each \$275.00

Monitor Recorder Model MR-1



The MR-1 is a specialized type of tape recorder designed primarily for the telephone industry to be used in any application where the monitoring of telephone calls is desired.

The unit is provided with:

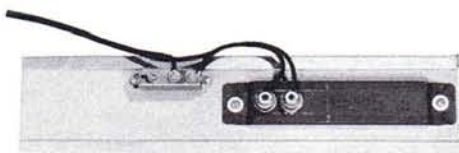
A supervisory and ringing circuit which will automatically start the tape recorder and keep it running whenever the local telephone line is loaded.

A beep tone which will transmit to the telephone line every 15 seconds.

A ceramic microphone for making manual recordings.

Monitor Recorder MR-1, each \$260.00

"Thermo" Heating Panel



Special adapter for the Electronic Secretary automatic telephone answering and recording unit where conditions of extreme temperatures prevail. Thermostatically controlled.

"Thermo" Heating Panel 1-1675, each \$24.00

ELECTRONIC SENTRY®

Automatic Warning Device



Your Round-The-Clock Watchman!

Model W-30 Electronic Sentry automatic warning unit notifies by telephone a responsible person whenever a hazardous condition arises such as fire, loss of pressure, water levels, temperature, theft, or malfunctioning of machinery or processes.

The W-30 is connected to the telephone line and a primary detecting device is connected to the W-30. The detector may be a thermostat, pressure control, water level indicator, photocell or any control capable of closing a switching circuit. Detecting device not furnished by manufacturer.

When the detection device activates the Electronic Sentry warning device, a predetermined telephone number is dialed and the warning message is repeated several times. The warning message is cut into a regular 6" phonograph record. At the end of the first call the W-30 disconnects itself from the telephone line, but it will dial the number again and again until the unit is disabled or the reported condition is corrected.

NOTE: To avoid tying up a line by repeated calls, the W-30 is provided with a stepper timing relay which will place the warning call at time intervals determined by the subscriber.

Specifications:

A.C. voltage: 110.

Weight: 18 pounds.

Size: 8x8 1/4 x 11 1/4 inches.

Finish: Rhinohide gray.

Model W-30, each \$250.00

Prices shown are subject to change without notice.

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ELECTRONIC SECRETARY® MODEL BPR-1

Low-Cost Telephone Answering and Recording Unit

• IDEAL FOR HOMES . . . SMALL BUSINESS



The Model BPR-1 automatic telephone answering and recording unit is a low cost, dependable unit designed specifically for home or small business use.

Both the outgoing and the incoming messages are recorded on tape making it possible for the subscriber to change his message at any time.

As many as 12 thirteen-second incoming calls may be recorded.

Features simple operation, low maintenance, dependability, and most of all, convenience.

Other features:

Beep tone . . . to indicate start and end of incoming recording time.

Electric channel selector . . . for playback.

Automatically disabled . . . after 12th call.

Specifications:

Voltage: 110.

Weight: 28 pounds.

Size: 11x14x6 inches.

Finish: Rhinohide gray.

Model BPR-1 each **\$220.00**

Intercept Recorder Model INT-2A



A rack-mounted, completely transistorized magnetic recorder which can be adapted to a variety of intercept applications.

A microphone is provided so that the message on the twelve-second tape loop may be changed whenever desired.

In its basic form, power available at the output of the unit will be ample for 5 trunks. This can be modified so that more lines can be handled if necessary.

Model INT-2A each **\$250.00**

Teletrainer



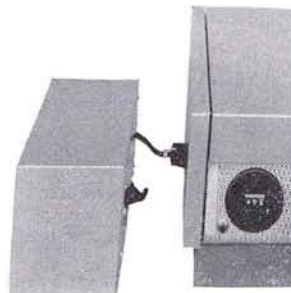
An electronic device for training students or subscribers in the proper use of the telephone. Useful for demonstrations when converting to dial.

Provides a means for communicating between two dial telephones for individually ringing either phone, and for introducing dial tone and busy tone into telephones. A loudspeaker permits others to hear conversations.

Also demonstrates special purpose telephones and Electronic Secretary answering equipment.

Teletrainer each **\$185.00**
Carrying Case . . . each **12.00**

Voice Control Attachment VC-4



The VC-4, attached to the standard DCR-1, allows the answering and recording machine to accept calls up to one full hour or any shorter time depending on the type of information being called in. Thus, the machine is available for long order lists or lengthy reports.

Voice Control Adapter
VC-4 each **\$51.25**

Test Tone and Continuity Tester



Rugged line checker for tone and d.c. continuity tests, tracing dead drops, blocks, and for key system wiring. Features slip-out type all-metal container for durability, printed circuitry for low maintenance and alligator clips for best conductivity.

Shipped complete with 4½-volt "A" battery.

Test Tone and Continuity Tester
15-731 each **\$15.00**
Canvas Bag
(43-2944) each **3.00**

"ELECTRONIC SECRETARY" and "ELECTRONIC SENTRY" are registered trademarks of Electronic Secretary Industries, Inc.

MISCELLANEOUS

No. TK-18 Neuses Tool Kits for Adjusting Relays

A set of tools exactly suited for any job of adjusting, checking, trouble shooting, etc. for all types of relays. Every type of tool required to perform a fast, efficient job is included in this kit.

Furnished with a vinyl plastic case with pockets to hold tools.

Contents

Z Type Wrench with oblique slots .120 in. wide x .047 in. deep.
Z Type Wrench with oblique slots .098 in. wide x .047 in. deep.
Z Type Wrench with 3 oblique slots .1094 in. wide x .047 in. deep.
Reverse Curve Type Wrench with .064-in. slots stepped down to .032-in. each end.
Spring Adjuster, offset with .018-in. lengthwise slots.
Spring Adjuster, offset with .032-in. lengthwise slots.
Screwdriver, precision, No. 1 for Phillips head screws.
Screwdriver, 3 in. long, precision, screw holding type for slotted screws.

Two Offset Screwdrivers for mounted relay screws and general use.
 Flat Nose Precision Pliers, 3 in. long.
 Adjuster Tool .040 and .028-in. slots crosswise.
 Inspection Mirror, magnifying.
 Box Wrench, 2 $\frac{3}{8}$ in. long, offset, $\frac{1}{4}$ and $\frac{3}{16}$ -in. hex. openings.
 Open End Wrench, 3 in. long, $\frac{1}{4}$ -in. opening at 15° end, $\frac{1}{32}$ -in. opening at 60° end.
 Contact Burnisher with 6 non-residual blades, pocket type.
 Spring Tension Gauge 50-0-50 gram range in 5-gram steps.
 Thickness Gauge Set, 13 leaves on ring, 3 in. long, offset.

Tool Kit Complete.....price each **\$34.00**



Leich Operators' Chairs



All metal parts are covered with $\frac{1}{32}$ -in. Marvinol Plastic. Also features Follow-Flex backrest, improved spindle and bearing, larger glides and oval footing with extra-heavy coating of Marvinol. Choice of cane or aircell seat. Aircell seat is covered with tan Saran fabric.

With Cane Seats

Cat. No.	Mfr. No.	Seat Ht. Adj. In.	Price Each
L-3521	GT-40	18 to 22	\$59.40
L-3525	GT-80	20 to 24	57.11
L-3529	GT-100	24 to 28	57.97
L-3531	GT-120	28 to 32	59.26

With Aircell Seat

Cat. No.	Mfr. No.	Seat Ht. Adj. In.	Price Each
L-3519	GT-30	18 to 24	\$51.18
L-3523	GT-70	20 to 24	48.89
L-3527	GT-90	24 to 28	49.74
L-3657	GT-110	28 to 32	51.03

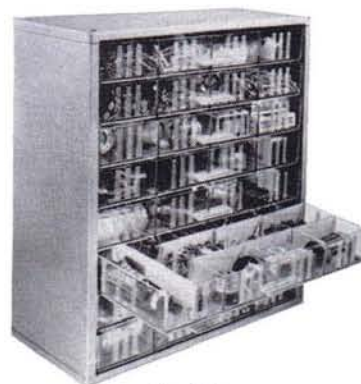
E-Z Find Full-Vue Cabinets



No. 12V



No. 16V



No. 32V

Welded steel cabinet with clear plastic drawers. Features 4-in-1 drawer which is equivalent to 4 drawers each 1 $\frac{1}{16}$ in. high x 2 $\frac{7}{8}$ in. wide x 5 $\frac{1}{8}$ in. deep. Each drawer may be divided into 2 or 3 lengthwise or crosswise compartments by inserting metal dividers which lock firmly in tapered grooves. Safety catch keeps drawers from spilling when pulled all the way out, yet drawer can be removed completely if desired.

Cabinet stands, stacks or hangs on wall.

Mfr. No.	No. of Drawers	No. of Compartments	Ht. In.	Width In.	Depth In.	Ship. Wt., Lbs.	Price Each
12V	12	36	6	12 $\frac{1}{2}$	6	6	\$3.10
16V	16	48	7 $\frac{1}{2}$	12 $\frac{1}{2}$	6	7	3.75
32V	32	96	14	12 $\frac{1}{2}$	6	11	6.85

NOTE: Also available in 20, 24, 36, 48, 56, 72 and 112-drawer models.

Prices shown are subject to change without notice.

Permaceel

Permaceel #27. A tan flatback electrical thermosetting tape made from an impregnated 4 mil rope paper with thermosetting pressure-sensitive adhesive.

Permaceel #21. A glass cloth backed electric thermosetting tape for applications requiring great mechanical strength and heat resistance.

Permaceel #11. An aluminum foil shielding tape with a high strength adhesive. Designed for interference shielding and protective covering on cable splices.

Cat. No.	Mfr. No.	Width In.	Length	Price per Roll
27	27	$\frac{3}{8}$	20 Yds.	\$.56
27	27	$\frac{1}{2}$	20 Yds.	.56
21	21	$\frac{3}{4}$	10 Yds.	1.45
21	21	1	36 Yds.	4.20
11	11	2	20 Ft.	1.08
11	11	4	20 Ft.	2.15

Dutch Brand Friction Tape



Dutch brand tape is made from long warp cotton sheeting that resists raveling and is wound by a special process that eliminates the tight spots which usually cause raveling. You can depend on it for straight tearing. It provides superior insulation, lasts longer, sticks tighter. Each roll contains fully 68 feet of tape.

Cat. No.	Mfr. No.	Width In.	Description	Price per Roll
L-7431	8	$\frac{3}{4}$	$\frac{1}{2}$ -Lb. Roll	\$.42
L-7434	16	2	1-Lb. Roll	.84

Dutch Brand Rubber Tape

A long-lived rubber tape of excellent insulating qualities. Contains a large percentage of new live rubber. Will not corrode copper wire.

Cat. No.	Mfr. No.	Width In.	Description	Price per Roll
L-7433	9	$\frac{3}{4}$	$\frac{1}{2}$ -Lb. Roll	\$.44
L-7435	18	2	1-Lb. Roll	.88

Scotch Electrical Tape

With Plastic Backing



Has a stretchy, rubber-like Vinyl Plastic backing that enables it to do the work of the rubber and friction tape combination.

Cat. No.	Mfr. No.	Width In.	Thick. Mils.	Feet per Roll	Wt. Lbs.	Price per Roll
L-7432	33	$\frac{3}{4}$	.007	66	$\frac{1}{4}$	\$1.50
L-7543	22	1	.010	36	$\frac{1}{4}$	1.50

Scotch Electrical Tape

A paper tape used for repairing paper insulated cable. Natural tan color.

Cat. No.	Mfr. No.	Width In.	Yards per Roll	Wt. Lbs.	Price per Roll
L-7415	3	$\frac{1}{2}$	20	$\frac{1}{4}$	\$.56

Scotch Cold Weather Tape

Designed for extended temperature range handling. Retains excellent handling characteristics (i.e., easy unwind, good elongation, excellent pliability, and that important factor electricians call "feel") in all normal environmental conditions. $8\frac{1}{2}$ -mil caliper supersedes previous 7 and 10 mil cold weather tapes. Resistance to oil, moisture and abrasion. Black.

Cat. No.	Mfg. No.	Width In.	Feet per Roll	Wt. Lbs.	Price per Roll
L-7413	88	$\frac{3}{4}$	66	$\frac{1}{4}$	\$1.75

Elco Steel Slotted Wood Screws



Flat Head



Round Head

All types of steel wood screws normally used by telephone companies are carried in our warehouse stock. Round and flat head screws with either blue or galvanized finish, in sizes ranging from #6x $\frac{3}{8}$ " to #18x $3\frac{1}{2}$ " are available. Regularly threaded approximately two-thirds of length. Packed in 1 gross cartons.

Prices on Application

Blake Insulated Staples



No. L-7152



No. L-7150



No. L-7154



No. L-7156

Double fiber insulation protects wire from contact with metal part of staple. May be driven over several wires without danger of grounding. Nos. 1, 5 and 7 are for use with hard wood; Nos. 3 and 6 are for general use. Nos. 1 and 3 are for twisted pair and single wire; Nos. 5, 6, and 7 are for heavier wires. Packed 100 to the container—10 containers to carton. The illustrations are actual size.

Cat. No.	Mfr. No.	Size, In.	Carton Wt., Lbs.	Price per 1000
L-7152	S-1	$\frac{3}{16}$ x $\frac{1}{2}$	1 $\frac{1}{2}$	\$2.20
L-7150	S-3	$\frac{3}{16}$ x $\frac{3}{4}$	2 $\frac{1}{4}$	2.20
L-7154	S-5	$\frac{1}{4}$ x $\frac{5}{8}$	2 $\frac{1}{4}$	2.20
L-7156	S-6	$\frac{1}{4}$ x $\frac{3}{4}$	2 $\frac{1}{2}$	2.30
L-7158	S-7	$\frac{1}{4}$ x $\frac{7}{8}$	3	2.30

Milonite or Perfection Nails



For installing twisted-pair interior wire. Insulated head, waterproof, dielectric finish on shank. Packed 100 per box, 10 boxes per carton. $1\frac{3}{4}$ lbs. per carton.

Cat. No.	Size	Color	Price per 1000
L-5454	$\frac{1}{2}$	Green	\$3.00
L-5458	$\frac{1}{2}$	Brown	3.00
L-5459	$\frac{1}{2}$	Ivory	3.00
L-5462	$\frac{5}{8}$	Brown	3.00
L-5468	$\frac{5}{8}$	Green	3.00
L-5470	$\frac{5}{8}$	Ivory	3.00
L-5474	$\frac{3}{4}$	Brown	3.00
L-5478	$\frac{3}{4}$	Green	3.00
L-5479	$\frac{3}{4}$	Brown	3.00
L-5480	$\frac{7}{8}$	Ivory	3.00

Ground Wire Staples

Special galvanized staples with single shank and flat head designed for attaching ground wires.

Cat. No.	Size	Std. Pkg.	Wt., Lbs. per 1000	Price per Lb.
L-5524	$\frac{5}{8}$ "x#14	1 Lb.	2 $\frac{1}{2}$	\$.80

Big Beam Portable Lamps

With Sealed Beam Bulb
and Flashing Red Signal Beacon



The handiest portable hand lamp you've ever seen. Brilliant, smooth patterned light for all night work and emergencies. Plus, a separate switch operated flashing, red signal beacon for safety on the highway. Bulb is sealed beam so it's never dimmed by dirt, moisture. Attractively chrome-plated, with rustproof, 20 gauge steel case. Two

separate switches—one for headlight, one for 2-position flashing beacon. Uses standard, 6-volt lantern battery. At this price it will pay you to equip every truck and service car with one.

Cat. No.	Mfr. No.	Description	Price Each
L-5259	164	Big Beam Beacon Lamp (less Battery)	\$8.40

Other models of Big Beam Lamps are also available. These include the new transistor-type heavy duty barricade flash with two-directional head, tamper-proof concealed switch, in amber or red. Model 410T has 4-in. head, 417T has 7-in. head. Price on application.



Eveready Lantern Batteries

This six-volt battery will fit in Big Beam Lamp, emergency truck signals and other electric lanterns. Small, compact and powerful to give you long service.

Cat. No.	Mfr. No.	Description	Price Each
L-2382	509	Six-Volt Lantern Battery	\$.79

Batteries



If you have dated your batteries for a period of years, you know that the finest telephone batteries you can buy are the most economical in the long run. The two batteries pictured here—Columbia Gray Label and Ray-O-Vac—have been the standards of the industry for many years. We



guarantee them to be the finest telephone batteries available, and we know that your own comparative tests will back up this claim.

A minimum quantity of 48 or 50 should always be ordered since freight is prepaid on this quantity or over. Batteries are always furnished with spring terminals unless screw terminals are specifically ordered.

Cat. No.	Mfr. No.	Description	Price Each
L-2373	6-CGL	48 Gray Label Batteries (4 Cartons)	\$40.32
L-2374	6-Ray	50 Ray-O-Vac Batteries (2 Cartons)	42.00

Terms: 2% 10 Days, Net 30 Days.

Eveready Industrial Flashlights

2-Cell—Prefocused



General purpose type made with sturdy brass inner flashlight and an outer casing of rubber and che nigm.

Specially insulated to resist water, oil, grease, gasoline, alcohol and acid. Equipped with ring hanger for carrying and hanging.

Cat. No.	Mfr. No.	Description	Price Each
L-4228	1251-A	Uses Two No. 950 Batteries and No. PR-6 Lamp	\$1.67



Flashlight Batteries

Leak-proof flashlight batteries designed for general industrial use. Standard size, known for long life. They will give dependable service under all average conditions.

Cat. No.	Mfr. No.	Size, In.	Wt. Lbs.	Price per 100
L-2389	2LP	2 ⁷ / ₁₆ x 1 ¹ / ₁₆	1/4	\$13.00

Flexiduct

Flexiduct is a superior floor duct made of rubber in two sizes. It is quickly and easily applied in any desired length, simply by cementing to the floor—thus eliminating noisy and expensive installations. Wiring in Flexiduct is completely protected from all usual hazards; brooms, sweepers and mops can be used with safety, and typewriters and other equipment on casters can be rolled over it without damage.

Smaller Size No. 1 is 2³/₄ inches at the base—only 7/16 inches high. Wire chase is 1/2 inch by 1/4 inch and will accommodate from two to eight conductors. Larger Size No. 2 will carry inside wire cable as well as switchboard cable up to a maximum of 1/2 inch. "L" and "T" fittings and risers are also made of rubber and are designed for easy installation with either size duct. When used with Size No. 2, cut lip from fitting and butt squarely to end of duct.

Cat. No.	Description	Unit Wt. Lbs.	PRICE PER FT.	
			Under 100 Ft.	Over 100 Ft.
L-4084	No. 1, 10 Ft. Length	4	\$.37	\$.35
L-4085	No. 2, 5 Ft. Length	4	.58	.55

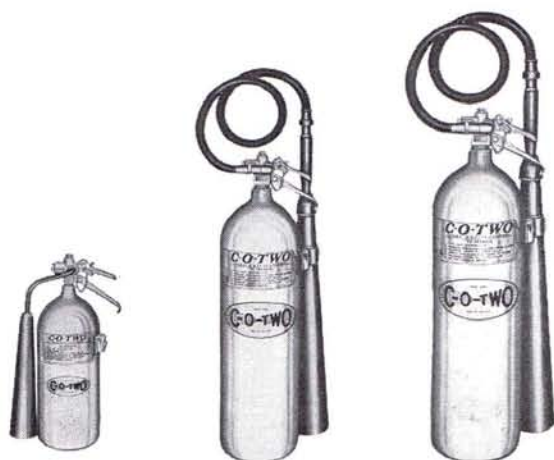
Accessories

Cat. No.	Description	Wt. Oz.	Price Each
L-4081	"L" Fitting	4	\$.55
L-4082	"T" Fitting	4	.55
L-4079	Riser	4	.55
L-4083	Cement, 5 Oz. Tube for Approx. 30 Ft. of Size No. 1 Duct, or 18 Ft. of Size No. 2 Duct	6	.55

Prices shown are subject to change without notice.

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C-O-Two Fire Extinguishers



These extinguishers are especially valuable in telephone exchanges because they snuff out fire at the squeeze of the handle without leaving any harmful residue on telephone equipment.

C-O-Two is a dry inert gas stored in the cylinder under pressure. When released it expands to about 450 times its volume, chokes up the fire-feeding oxygen in the air and instantly puts out the fire. It disappears without leaving any odor, stain, or damage. It will not freeze. Each cylinder is equipped with a squeeze grip, automatic shut-off valve, discharge hose and horn, and a wall hook for mounting.

Larger wheeled portables up to 100 lb. capacity shipped from factory on order.

Cat. No.	Cap. Lbs.	Wt. Lbs.	Price Each
L-4153	5	16½	\$40.70
L-4154	10	34	64.65
L-4155	15	42	72.90

Standard Pyrene Fire Extinguishers



Effective fire extinguishers for telephone offices. The liquid is non-conductive and will not injure equipment. Easy to operate—women can handle them easily. Double-acting pump with patented rotating pick-up, discharges a steady continuous stream 20 to 30 feet. Smothers all classes of fire in incipient stages. Approved by Underwriters' Laboratories. For fighting fires in oils, paints, gasoline, shellac or any other highly inflammable substance.

Furnished with wall bracket. Ordinarily supplied in polished brass finish.

Cat. No.	Mfr. No.	Capacity Quarts	Wt. Lbs.	Price Each
L-4156	C-21	1	7	\$13.70
L-4141	C-31T	1½	10½	16.65
L-4140	C-21T	1	7¼	14.45
L-4158	C-31	1½	10¾	16.65

NOTE: Letter T after Mfr. No. means for truck mounting.

Pyrene Fire Extinguisher Liquid



The refill or charge for "Pyrene" extinguishers. Anti-freezing and non-corroding. Safe on electrical fires and will not injure telephone equipment. Furnished as follows:

Cat. No.	Mfr. No.	Quantity	Wt. Lbs.	Price Each
L-5270	CR-2	1 Quart	3¼	\$1.56
L-5274	CR-4	1 Gallon	14½	5.09

MScO First Aid Kits

No plant or truck should be without them. First Aid Kits can be made up to fit individual requirements. More than 100 different types of medications, dressings and other first aid essentials are available in standardized unit cartons containing one or more individual treatments.

Cellophane wrapped units are all 2½ inches wide and 4 inches long. The majority of the units are ⅝ inch thick. Some units requiring larger quantities of medication, dressings, etc. are double or triple in thickness. Kit is constructed of 20-gauge steel with round safety corners; completely dustproof, weatherproof and moisture proof.



No. 550SA, 16-Unit Kit

Assortments Consist of:

Unit No.	Description	QUANTITY—		
		No. 500SA	No. 550SA	
100AW	1-Inch Waterproof Adhesive Bandages (16 per Unit).....	2	2	
101A	Tan-A-Burn (Burn Treatment) (Six ¼-Oz. Tubes per Unit).....	1	1	
102A	Poison Ivy Treatment (6 per Unit).....	1	1	
104A	Ammonia Inhalants (10 per Unit).....	1	1	
105A	Iodine Swabs (10 per Unit).....	1	1	
106A	Eye Dressing Packet (3 per Unit).....	1	1	
107A	4-Inch by 6 Yards Gauze Bandage (1 per Unit).....	1	1	
108A	2-Inch Bandage Compress (4 per Unit).....	2	2	
109A	4-Inch Bandage Compress (1 per Unit).....	1	2	
110A	Ammonia, Aromatic Spirits, 2cc Ampoules with Drinking Cups (4 per Unit).....	1	1	
115A	40-Inch Triangular Bandage (1 per Unit).....	1	1	
111AA	Army Tourniquet and Forcep.....	1	1	
Cat. No.	Mfr. No.	No. of Units	Overall Size, In.	Price Each
L-5040	500SA	10	8½x5½x2½	\$8.42
L-5039	550SA	16	9½x7x2½	12.05

Prices shown are subject to change without notice.

Scotchlite Signs



Effective as bumper stickers. Aid employee and community relations. 3" diameter.



Good safety reminder to employees. Acts as delineator when used in dark areas inside plants.



This warning sign can be seen at 1,000 feet.

These Scotchlite signs give years of service. Colors are fast. They work 24 hours a day. They're 250 times brighter than gloss white paint.

Can be applied to any smooth, non-porous surface.

Write for additional information and prices.

Road Safety Signs

Sign is plainly visible from afar, commands attention of oncoming motorists. All-steel sign, hot-dip galvanized frame with two flag sockets. Well braced, folds compactly, is easily set up or moved. Sways with the wind to prevent tipping. Sign itself is double-faced with big 5-inch letters. Mounted on frame, it stands 30 in. high.



Cat. No.	Sign Size In.	Sign Title	Wt., Lbs.	Price Each
L-6916	18x18	"Men Working".....	23	\$14.70
L-7006	20x24	"Men and Equipment Working"...	23	17.85

Danger Flags



No. L-4227. Made of 3-oz. muslin, 12x14 inches. Staff is 7/8x18 inches with tapered end.

No. L-4210. Similar to No. L-4227, but with 30-inch staff for use with No. L-4207 flag base. (Base is bowl-shaped and made of cast iron.) Shape of base makes flag difficult to knock over, and will roll back flag to upright position if tipped.

No. L-4232. A.T.&T. nylon Saflag that always stands erect. Bright red color can be easily seen from a distance. Size, 16-inch square.

Cat. No.	Description	Price Each
L-4227	Muslin Flag with 18-Inch Staff.....	\$.42
L-4210	Muslin Flag with 30-Inch Staff.....	.45
L-4232	Nylon Flag with 27-Inch Staff.....	1.25
L-4207	Flag Base for Use with No. L-4210 Flag.....	1.09

Lacing Twine or Lockstitch

Furnished in 1-pound balls, 6 to standard package.

Cat. No.	No. Plies	Price per Lb.	Cat. No.	No. Plies	Price per Lb.
L-7632	6	\$2.80	L-7638	11	\$2.80
L-7634	8	2.80	L-7640	12	2.80
L-7636	9	2.80	.....	..	....

Telephone Jacks and Plugs

Jacks and plugs for use in portable telephone installations. All items are 4 conductor. Flush type furnished with brackets and plates.



Cat. No.	Type	Color	Price Each
L-5019	Jack, Surface Type	Ivory	\$.92
L-5003	Jack, Surface Type	Brown	.92
L-5017	Jack, Flush Type	Ivory	1.70
L-5018	Jack, Flush Type	Brown	1.70
L-5881	Plug	Ivory	1.00
L-5911	Plug	Brown	1.00

Murdock Interlocking Connecting Blocks

Partitions between each pair of connections prevent shorts.

Base and cover are molded bakelite.

Mount with No. 8x3/4 in. F.H. wood screw.

The M-53 has screw in center of block.

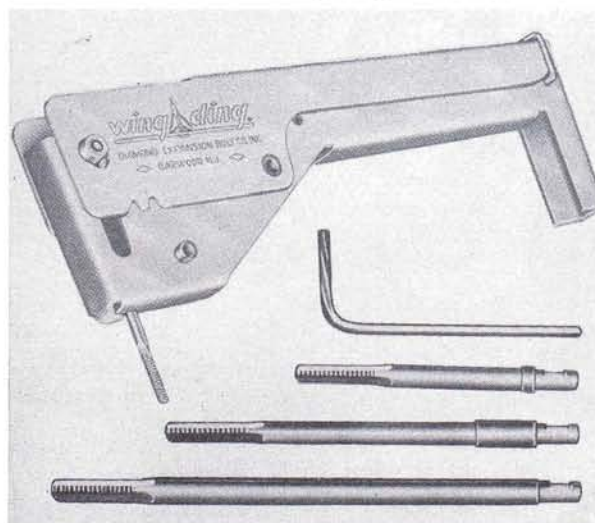
Cat. No.	Mfr. No.	Color	Price Each
L-2598	41 (2-Point)	Black	\$.21
L-2585	42 (3-Point)	Black	.27
L-2586	43 (4-Point)	Black	.33
L-2866	M-53 (3-Point)	Black	.40
L-2764	M-53 (3-Point)	Ivory	.40
L-2765	M-53 (3-Point)	Brown	.40

Diamond Wing-Ding Wall Anchors

An ideal wall anchor for securing telephone equipment to all types of hollow walls. Also handy for hanging mirrors, fans and other electrical fixtures.

Cat. No.	Mfr. No.	Description	Price per 100
L-2156	7922	Dry Wall Fastener	\$5.33
L-2169	7923	Plaster Wall Fastener	8.00

Diamond Wing-Ding Guns For Installation of Wing-Ding Wall Anchors



When Wing-Ding gun is used, Wing-Ding anchors can be furnished less screws or with screws of varying length, and with special heads, unassembled; prices on application.

Complete unit consists of Wing-Ding Gun; one No. 4SS arbor; two No. 4SL arbors; one No. 5SL arbor; and one Allen wrench.

Arbors are hardened tool steel. All points of wear are case-hardened. Galvanized finish.

Cat. No.	Mfr. No.	Description	Wt., Lbs.	Price per Box.	Each
7925	7925	Complete Unit in Metaledge Box...	1/8	\$5.00	

Prices shown are subject to change without notice.

Edwards Bells and Buzzers

Fully adjustable, completely covered with chromium plated covers. Equipped with phosphor bronze springs, silver contacts; arranged for surface or concealed wiring with insulated and concealed binding posts.

Buzzer is $1\frac{3}{4} \times 2\frac{3}{4}$ inches. Bell is larger. For standard 6-8 volt, 60 cycle A.C. or 3-6 volt D.C. circuits. Std. pkg., 12.



Cat. No.	Mfr. No.	Type	Wt. Oz.	Price Each
L-2402	720	Bell	8	\$.95
L-3228	725	Buzzer	3	.81

Jefferson Bell Ringing Transformers



For use with bells and buzzers.

Transformer reduces 110 A.C. voltage to 6-10 volts.

Cat. No.	Mfr. No.	Size, In.	Wt. Lbs.	Price Each
L-7566	230-201	$2\frac{1}{2} \times 1\frac{7}{8} \times 2$	$\frac{3}{4}$	\$2.00

Edwards Push Buttons

Cat. No.	Mfr. No.	Description	Wt., Lbs. per Doz.	Price Each
L-3224	603	Round Brass Button	$\frac{3}{4}$	\$.23
L-3223	620	Flush Type Mounting	$2\frac{1}{2}$	.33

Faraday Marlo Small Bells Double Magnet—Adjustable

6-8 Volts, 60 Cycles, A.C.—3-6 Volts, D.C.

Has pivoted armature and double lock spring tension adjustment. Mechanism fully insulated from frame. Built for hard service. Black case and gong.



Cat. No.	Mfr. No.	Size Bell Inches	Price Each
L-2399	571	$2\frac{1}{2}$	\$2.10
L-2400	572	3	2.30
L-2403	573	4	2.80

Special windings are available to 48 volts, a.c. or d.c.

Faraday Marlo Buzzers Double Magnet—Adjustable

6-8 Volts, 60 Cycles, A.C.—3-6 Volts, D.C.

Has pivoted armature and double lock spring tension adjustment. Mechanism fully insulated from frame. Black case.



Cat. No.	Mfr. No.	Price Each
L-3213	570	\$2.10

Special windings are available to 48 volts, a.c. or d.c.

Benjamin Weatherproof Howlers



No. L-4874

Heavy weatherproof construction with cast aluminum threaded ring and joint sealed by live rubber gasket. Standard finish is baked battleship gray enamel. Howlers have no contacts. The vibrations follow A.C. cycles and the pitch is double the frequency used.

Cat. No.	Mfr. No.	Description	Wt. Lbs.	Price Each
L-4874	8546	$7\frac{1}{2}$ -In., 110-Volt, 60-Cycle Bell Type Projector.....	$5\frac{1}{4}$	\$15.85
L-4875	8590	$19\frac{1}{2}$ -In., 110-Volt, 60-Cycle Double-Bell Type Projector.....	$9\frac{1}{4}$	21.05

Benjamin Non-Weatherproof Howlers

Cat. No.	Mfr. No.	Description	Wt. Lbs.	Price Each
L-4876	8755	$7\frac{1}{2}$ -In., 110-Volt, 60-Cycle* Bell Type Projector.....	$2\frac{3}{4}$	\$13.15
L-4877	8795	$19\frac{1}{2}$ -In., 110-Volt, 60-Cycle Double-Bell Type Projector.....	7	18.25

*25-cycle furnished on special order.

Note: All above available on order in 12, 24, and 220-volt, 60-cycles AC and 6, 110, 220, 250 volts D.C.

Benjamin Telecode Relays



Designed for activating loud-sounding signal extensions of telephone ringing circuits. Widely used wherever noise makes it difficult to hear ordinary telephone bell. Does not affect talking or ringing efficiency of telephone system.

Furnished with 1000-ohm windings, for use on open circuits. Closed and locking circuits and other resistances are available on special order.

For Panel Mounting

Cat. No.	Mfr. No.	Type	Price Each
L-6060	8313-P	.....	\$12.65
L-6097	8313-P	To Operate with High Impedance Ringer.....	13.13

With Pressed Steel Box

L-6077	8315-P	.....	\$12.65
L-6099	8315-P	To Operate with High Impedance Ringer.....	13.13
L-6061	8316-P	With Condenser.....	15.80
L-6101	8316-P	With Condenser to Operate with High Impedance Ringer.....	16.28

AUTOMOTIVE EQUIPMENT

Why not get acquainted now with Leich's new Motor Vehicle Department! We are now in a position to furnish the Independent Telephone Industry with many of their vehicle requirements . . . such as utility compartment units, installer's truck bodies, construction and maintenance bodies, various styles of pole and cable trailers, and even the Cushman Motor Scooter. Whatever your needs may be, write our Motor Vehicle Department for information. Prices for all automotive equipment shown on these pages are available on application.

Utility Compartment Sections

Any pick-up truck can be easily converted into a service truck by installing Utility Compartment Sections. Compartments of electrically welded all-steel construction require only a wrench and a drill to install.

A 48-inch parts bin with removable dividers and overhead ladder rack assembly are furnished as standard equipment; can be omitted if desired.

Each door is fitted with slam-action catches and cylinder locks which are keyed alike.

Available in 74-inch length for $\frac{1}{2}$ -ton pick-up truck; 84-inch length for $\frac{3}{4}$ -ton truck; and 104-inch length for 1-ton truck. All compartments are $15\frac{1}{4}$ inches high and $12\frac{5}{8}$ inches wide.

Painted to individual specifications.



Telephone Installation and General Service Bodies

Body is provided with specially fitted compartments for carrying a complete inventory of tools and parts. Shelves, bins and partitions are standard equipment. All-steel constructed body is electrically welded into a complete unit; can be transferred to a new chassis when necessary. Doors have slam-action catches and cylinder locks.

Available in two sizes: 74 $\frac{1}{2}$ -inch long body for mounting on standard chassis having a C.A. (back of cab to centerline of rear axle) dimension from 38 to 40 in.; 84 $\frac{1}{4}$ -inch long body for mounting on standard chassis having a C.A. dimension of approx. 48 in.

Available with prime coat only or painted to individual specifications.



Telephone Installers' Bodies

Built especially for telephone installation, maintenance, and general service work.

Rear and curbside compartments are divided by drawers, bins, trays, partitions and shelves for the orderly and readily-accessible storage of tools, parts, materials and supplies.

Each door is fitted with slam-action catches and cylinder locks which are keyed alike.

Body of all-steel construction is 76 inches long and is designed for installation on chassis having a C.A. (back of cab to centerline of rear axle) dimension of approximately 39 inches.

Available with prime coat only or painted to individual specifications.



Cushman 780 Trucksters



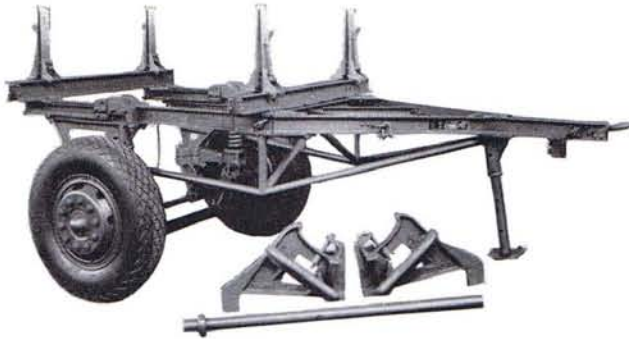
Used in the telephone industry to save time and cut overhead of installation servicemen. Complete equipment and supplies are carried in covered pick-up body.

Driven by a powerful Cushman Husky 7.95 horsepower, 4-cycle engine. Handles an 800-pound payload with ease—it can also be used for hauling supplies. The pick-up body has a tight fitting cover to protect equipment and tools. Operates at a cost less than a penny per mile; requires a minimum of maintenance expense.

Equipped with a heavy duty fiber glass cab for protection against weather. Side curtains are available. Other body styles can be ordered to fit specific requirements. Electric starter is also optional.

Width, 48 inches; length, 92 inches.

Cable Reel and Pole Trailers



Combination pole and cable reel trailer is easily convertible. Bolsters with sliding cam-locking stanchions are quickly mounted or removed as required. Cable reel saddles can be quickly attached.

Reel capacity: width, 34 to 38 in.; diameter, 84 in. Reel spindle diameter, 2½ in. Width of bolsters, 68 in. Track, 76½ in. Chrome nickel steel axle spindle, 2¾x2¾ in.

Has Budd Disc 20x7.5 wheels with pneumatic tires, 10.00/20. Other size tires available.

Electric power brakes are optional.

Boothmobiles



1. Two Outdoor Paystation Booths Are Permanently Mounted Horizontally on a Specially Built Trailer.
2. One Man Can Easily Jack the Entire Unit into Position and Get It Ready for Use.
3. The Third Wheel Acts as a Support so that Booth Cannot Be Pushed Over. A Small Front Platform Adds Stability to the Booths.
4. The Boothmobile Completely Installed and Ready for Use.

A new concept in telephone service—two outdoor paystation booths on wheels. Ideal for use at football games, carnivals and other special outdoor events. The unit can also be used in disaster areas where normal service has been interrupted and immediate temporary service is needed.

The Boothmobile can also be set up temporarily in certain areas to determine if revenue warrants installing permanent paystations.

A tandem roof by Alcoa provides a single roof cover and allows the booths to be butted together with no space between. Power and telephone wire junction boxes are mounted to be back of the booths. Station protectors are also mounted to the rear of the booth and J hooks are attached to the drawbar of the trailer which can act as a mast for both power and telephone drop-wires.

Canvas cover for the Boothmobile is optional.

LEICH'S CORDLESS PBX



The Modern Switchboard for Small Businesses

Leich's Cordless PBX is a big improvement over conventional cordless switchboards. It's a simpler, more compact PBX for small businesses, or any business with a maximum of 20 inside telephones.

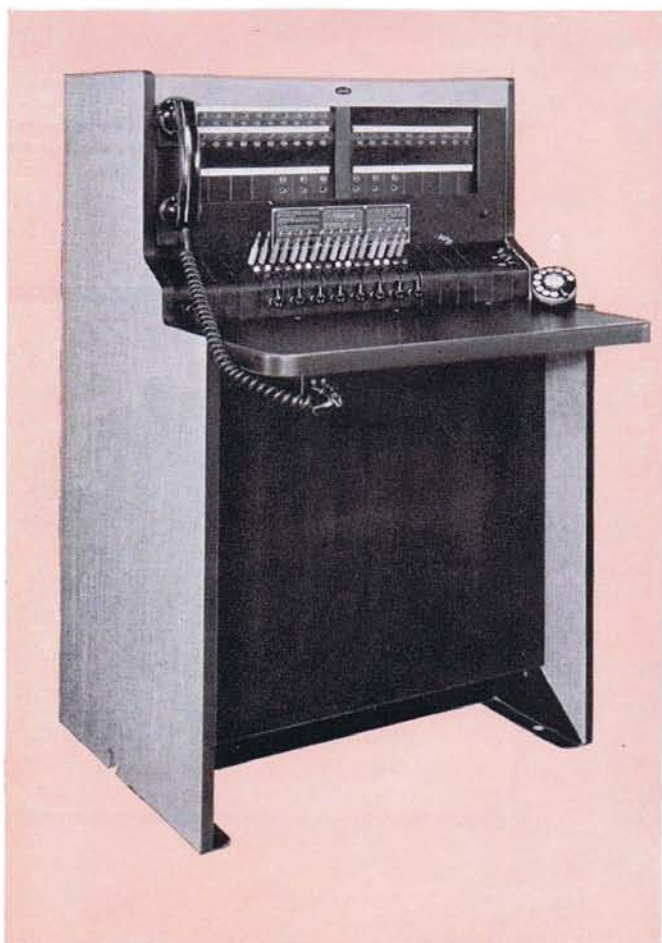
The one-way keys are easy to use and trouble-free. An ingenious arrangement of working parts eliminates possible sources of trouble, too.

Its keyboard assures greater visibility because keys are color-coded. Odd numbered station line keys are beige, while even numbered keys are black. Trunk and operator keys are grey.

Motels, banks, schools, offices, factories, and hospitals are just a few of the businesses the Leich Cordless is designed to serve. It's available in twenty, sixteen, and twelve line capacities with 5 connecting circuits, and 5 central office trunks.

Write for Leich's Cordless PBX catalog.

LEICH'S L55 PBX



The Ideal Service for Larger Businesses

Leich's L 55 PBX can increase your PBX sales, and save you money too.

Leich's keyboard arrangement gives your larger subscribers a switchboard that's amazingly simple to operate. Foolproof pushbutton ringing keys and twist-push type talk keys are in a sloping position above the writing shelf. The attendant extends calls quickly, and there's more room on the shelf for her to perform other office duties. Talk keys also serve as night answering keys by simply pushing them in.

Attractive formica-type cabinets in standard finishes of mahogany, walnut and blond ash are unusually durable and non-flammable. An unfinished bay poplar plywood cabinet is available on request. The switchboard is 29 3/8" wide, 29 7/16" deep, and only 46 1/16" high.

Jack-in cord circuits, operator's circuit, and central office trunks let you add, remove or service equipment quickly and economically. What's more, Leich's new cord circuits allow for maximum range. There's much less need for long line relay equipment at the PBX to handle off-premises extensions.

CAPACITIES OF STANDARD MODELS

Model L 55-A3			Model L 55-B4	
Wired	Equipped		Wired	Equipped
60	30	Station Lines	80*	40
14	6	C. O. Trunks	14	8
15	8	Cords	15	10
1	1	Operator's Circuit	1	1

*Capacity: 120 Lines

Write for more information.

LEICH EQUIPMENT



THE LEICH 100

For long or short lines . . . the LEICH 100 telephone offers the finest transmission and reception available.

IN 10 CHEERY COLORS

YELLOW
GREEN
TURQUOISE
BEIGE
GRAY

RED
LIGHT BLUE
IVORY
WHITE
PINK

The Leich 100 telephone with its Leich 100 network offers the largest overall gain in transmission and reception ever made in a telephone instrument. Use this telephone on your longest lines. You—and your subscribers will be amazed. The Leich 100 is built to give you long, dependable service. The tough Tenite case and reliable, high impedance ringer mean fewer service calls than ever before. On the Leich 100, the ringing condenser is not part of the network so it can be individually replaced. *Write for circular.*



You use the same telephone for wall or desk installations

THE LEICH 900

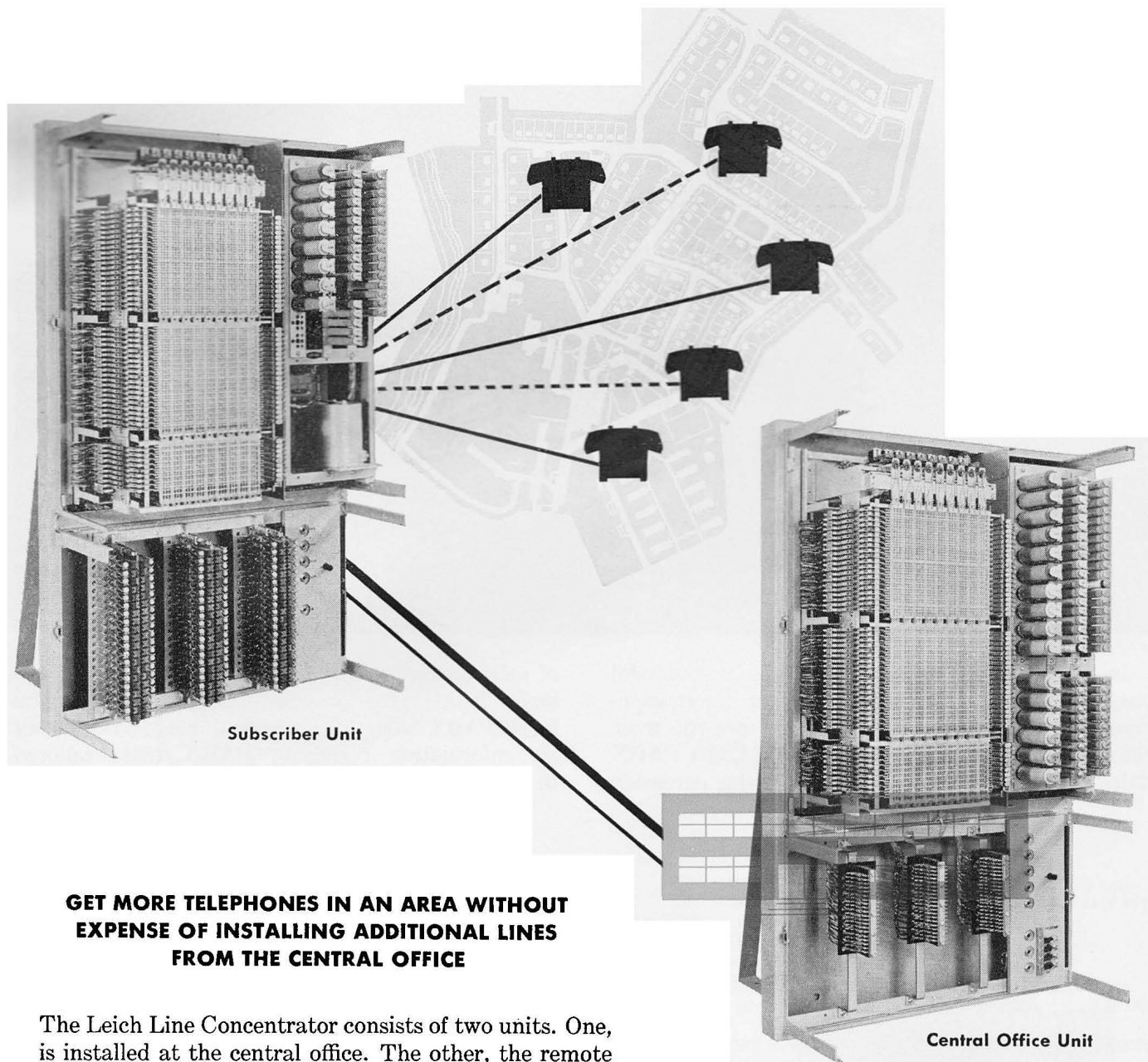
With this telephone you can give the finest magneto service available. Transmission and reception is clear and true to life. Your customers will like its modern appearance. Use it for wall or desk installation. Start now to use this practical telephone on your magneto service.

The Powerful Alnico generator

In the Leich 900 telephone you are assured of dependable signalling on heavily loaded rural lines with the reliable Alnico generator.



LEICH'S LINE CONCENTRATOR



GET MORE TELEPHONES IN AN AREA WITHOUT EXPENSE OF INSTALLING ADDITIONAL LINES FROM THE CENTRAL OFFICE

The Leich Line Concentrator consists of two units. One, is installed at the central office. The other, the remote subscriber unit, can be installed in a small steel building, or mounted on a pole in a weatherproof steel cabinet. No power is required at the remote unit. No changes necessary in the central office switchboard.

Two basic sizes will be available. The first, the 49-9-2A is equipped with 49 lines, 9 traffic trunks and 2 control trunks. It's approximately 39 $\frac{5}{8}$ " high, 23 $\frac{5}{8}$ " wide, and 9 $\frac{7}{8}$ " deep. The second, the 49-18-3A, is equipped with 49 lines, 18 traffic trunks and three control trunks. It's about 41 $\frac{3}{4}$ " high, 26 $\frac{29}{64}$ " wide and 13" deep. Partially equipped versions of each of the basic units will also be available. Write for circular.

More ways the Leich Line Concentrator Saves you money

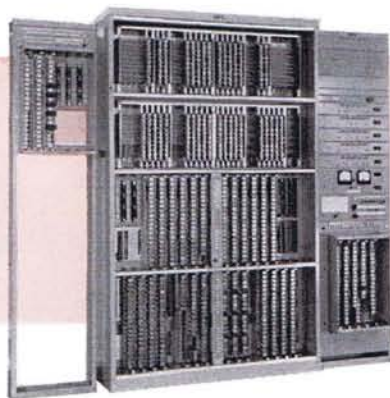
- Permits upgrading service without additional outside plant investment.
- Eliminates the need for low usage subscriber lines between an area and the central office.
- Offers ringing and service facilities identical to those of directly connected central office lines.
- Avoids intercept and number changes in multi-office areas.
- Switches identified calls to answering services.
- Allows you to concentrate extended area service trunks (EAS) to a single route into a CDO dialing area.

LEICH PABX SYSTEMS

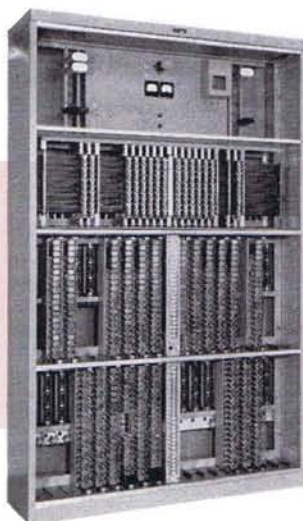


In the world of today, the key to a successful business operation lies with a modern communications system. Leich PABX Systems are the most efficient and profitable you can sell. Leich PABX units offer greater traffic capacity, faster extension

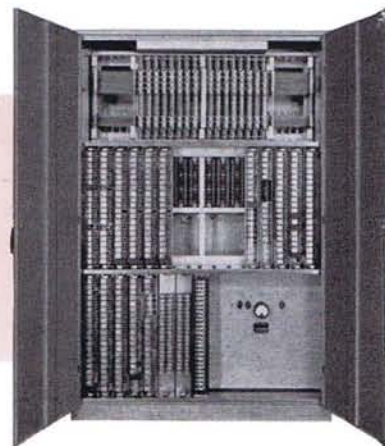
of calls and a variety of service features that will really make sense to your subscribers. Complete Leich PABX Sales Kits are available. Write today for information regarding PABX units tailored to fit your subscribers' needs.



*Dial switchboard
for 100T and 100C units.*



*Switchboard bay
for 88A and 100A units.*



40A switchboard bay.



12-trunk turret for 40A and 88A units.

40A PABX

The capacity of this unit is 40 lines, 6 links, and 10 city trunks. The switchboard unit is an all-relay Leich Dial System. Leich's 40A PABX may be used with or without a turret. The compact keyset turret lets the attendant extend incoming city trunk calls quickly by simply pressing two keyset buttons in sequence.

Standard features include:

- Two-digit dialing.
- Local links are not tied up on city trunk calls.
- Inside, outgoing, and consultation calls are made without help from the turret attendant.
- Restriction of outside calls, if desired.
- Standard Leich telephones are used.

88A PABX

The capacity of this unit is 88 lines, 9 links, and 10 city trunks. Features same keyset attendant's turret as with 40A PABX. All-relay Leich Dial System.

Standard features include:

- Three-digit local dialing.
- Local links are not tied up on city trunk calls.
- Inside, outgoing, and consultation calls are made without help from the attendant.
- Restriction of outside calls, if desired.
- Standard Leich telephones are used.

100T PABX

Each switchboard bay is wired for 100 lines and 15 links. Keyset attendant's turret is provided. All-relay Leich Dial System is expandable.

Standard features include:

- Three-digit local dialing.
- Universal or predetermined night answer.
- Inside, outgoing, and consultation calls are made without help from the attendant.
- Standard Leich telephones are used.

100A PABX

The capacity of this unit is 100 lines, 10 links and 10 city trunks. All-relay Leich Dial System. Floor type attendant's cabinet.

Standard features include:

- Three-digit local dialing.
- Single digit trunk and special service selection.
- Outgoing trunk service to central office from unrestricted lines.
- Splitting of city trunk and local stations by attendant.
- Jack ended city trunks.

100C PABX

Floor type attendant's cabinet is used. All-relay Leich Dial System is expandable. Each switchboard bay is wired for 100 lines and 15 links.

Standard features include:

- Three-digit local dialing.
- Single digit trunk and special service selection.
- Outgoing trunk service to central office from unrestricted lines.
- Splitting of city trunk and local stations by attendant.
- Jack ended city trunks.



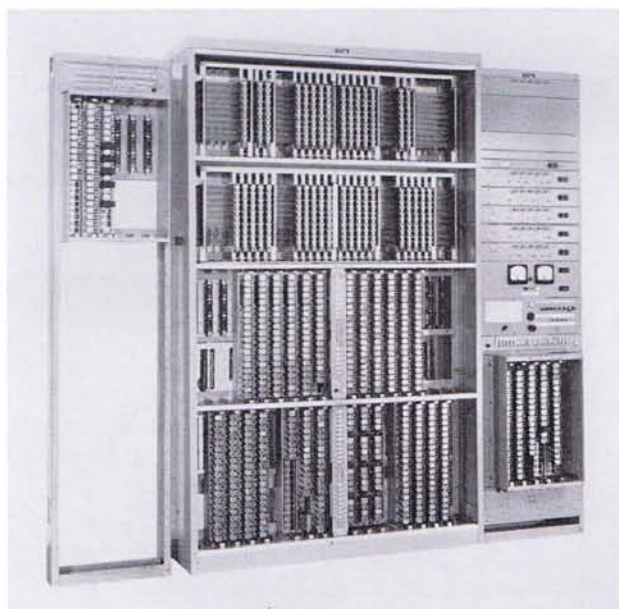
28-trunk turret for 100T unit.



Floor type attendant's cabinet for 100A and 100C units.

LEICH DIAL SYSTEMS

Terminal-Per-Line



Leich Terminal-Per-Line Dial System

Today there are over 1,000 Leich Terminal-Per-Line Dial Systems in service. Two big reasons why are Leich's economy and dependability. Leich's is the first dial switchboard to combine the dependability of all-relay operation with the advantages of jack-in equipment for quick, inexpensive additions.

Here are a few of Leich's money-saving features:

1. ALL RELAY OPERATION

All the operations are performed by full size, heavy duty relays. No moving parts to wear or require adjustment, assuring good, dependable service for long periods with only routine maintenance.

2. JACK-IN EQUIPMENT

Factory assembled and tested relay bars, each of ten line capacity, jack into fully wired bays in the switchboards. Finder, connector, and selector switches are also jacked in to eliminate soldering and make for easy installation.

3. QUICK, INEXPENSIVE EXPANSION

Add ten lines in ten minutes! Lines and links can be jacked in easily and quickly by your own staff. You're free from worry about future needs. Expansion is simple, fast and inexpensive.

4. EASY TO INSTALL

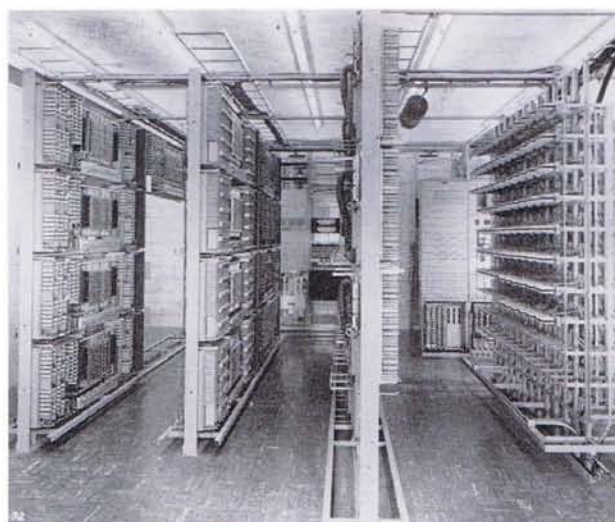
A Leich Dial System can be installed at the rate of 80 man-hours per 100 lines. Lightweight switchboard bays are shipped fully wired for 100 lines and 15 links. All relay bars and switches come factory tested, packed separately, and ready for jacking in. Less floor space is needed so new buildings can be built smaller for any given number of lines.

5. EASY MAINTENANCE

All wiring is accessible. No back to back arrangements. Plexiglas doors for easy visibility. No wearing parts. Jack-in feature permits replacement with spare parts during repair period; no long service interruptions. Maintenance men find the Leich Dial Switchboard easier to understand and work on.

If you're planning a dial conversion find out how you, too, can profit with a Leich Dial System. Write today.

Terminal-Per-Station



Leich Terminal-Per-Station Dial System

Leich's Terminal-Per-Station Switchboard is patterned after the famous Leich All-Relay Terminal-Per-Line Dial System. It retains many of the advantages of the Terminal-Per-Line system, plus many new attractive features. The well-known Leich cross-bar type relay switch and stainless steel line bar multiple are used.

A few of the new advantages it offers you are listed here:

1. UNRESTRICTED GROWTH

Growth is not restricted. Lines and connector terminals are added on a shelf basis. Each shelf provides 100 lines or 100 terminals.

2. MAXIMUM FLEXIBILITY

Maximum flexibility is permitted in station assignment and maximum use of cable pair. A subscriber moving within the exchange area may retain his original telephone number.

3. PRE-SELECTED SWITCHING PATHS

All switching paths are pre-selected. This eliminates unnecessary switching time and insures the assignment of calls in the minimum amount of time.

4. SLIP-ON PLEXIGLAS COVERS

Slip-on plexiglas covers let you view equipment without removing covers. Also, since it's possible to remove a cover from only part of a shelf, a minimum of equipment is exposed.

5. FOUR-WIRE SWITCHING

Four-wire switching provides increased economy and flexibility between circuit components.

6. LINEFINDER GROUPS

Linefinder groups are arranged so that faults in a line circuit cannot block calls from other lines.

Write today for more information.

LEICH'S 6B BREAKDOWN TRANSFORMER

Leich's 6B Breakdown Transformer clears or helps you locate cable faults quickly. It offers a series of voltages to meet your various needs.

Here's how it works. Many times you find a cable pair that's partially shorted (or grounded). In most cases a high voltage check is indicated.

When the fault is due to a small amount of moisture or some slight defect in the insulation, a flash of high voltage may clear the fault. You can apply the voltage momentarily with Leich's safer non-locking switch. Starting at 350, the voltage can be increased to 500 or 700 volts as required.

If the fault is more serious, use of the 6B set burns the cable pair to a "solid" short. Then it's easy to locate the trouble by conventional bridge methods or tone pick-up.



Cat. No.	Description	Price
017030	6B Breakdown Transformer	\$45.00

Size: 5½" high, 9⅞" long, 5¼" deep. Shipping weight, 20 pounds.

LEICH'S EXTENSION RELAY RINGING UNIT



Leich's Extension Relay Ringing Unit provides an extra ringer on lines that have reached their ringer capacity. Also operates signals, bells, gongs, horns or any device that uses 110 volt, 60 cycle alternating current and is controlled from the telephone line by ringing current.

Consists of a traffic type telephone ringer, a relay and a one-to-one isolation transformer. A metal box 12" wide, 6" long, and 2½" deep houses these components. Equipped with a cord and a plug for connection to 110 volt, 60 cycle alternating current receptacle.

Has many uses. Rural business locations on a party line often desire an Extension Loud Ringing Bell, which can be actuated by Leich Relay Ringing Unit. Also used in control of fire alarm sirens. By dialing a predetermined number, you actuate Leich's Relay Ringing Unit which operates the fire alarm equipment.

When ordering, please state quantity, order number, and ringer desired.

EXAMPLE: Quantity Cat. No. Ringer Code
 10 017022 G

Cat. No.	Description	Price Each
017022 G thru V	Extension Relay Ringing Unit, Frequency Ringer	\$34.40

RINGER CODE

G—33⅓ cycle ringer	N—42 cycle ringer
H—50 cycle ringer	P—54 cycle ringer
J—66⅔ cycle ringer	R—66 cycle ringer
K—16⅔ cycle ringer	S—16 cycle ringer
L—25 cycle ringer	T—20 cycle ringer
M—30 cycle ringer	U—60 cycle ringer
	V—40 cycle ringer

Prices shown are subject to change without notice.

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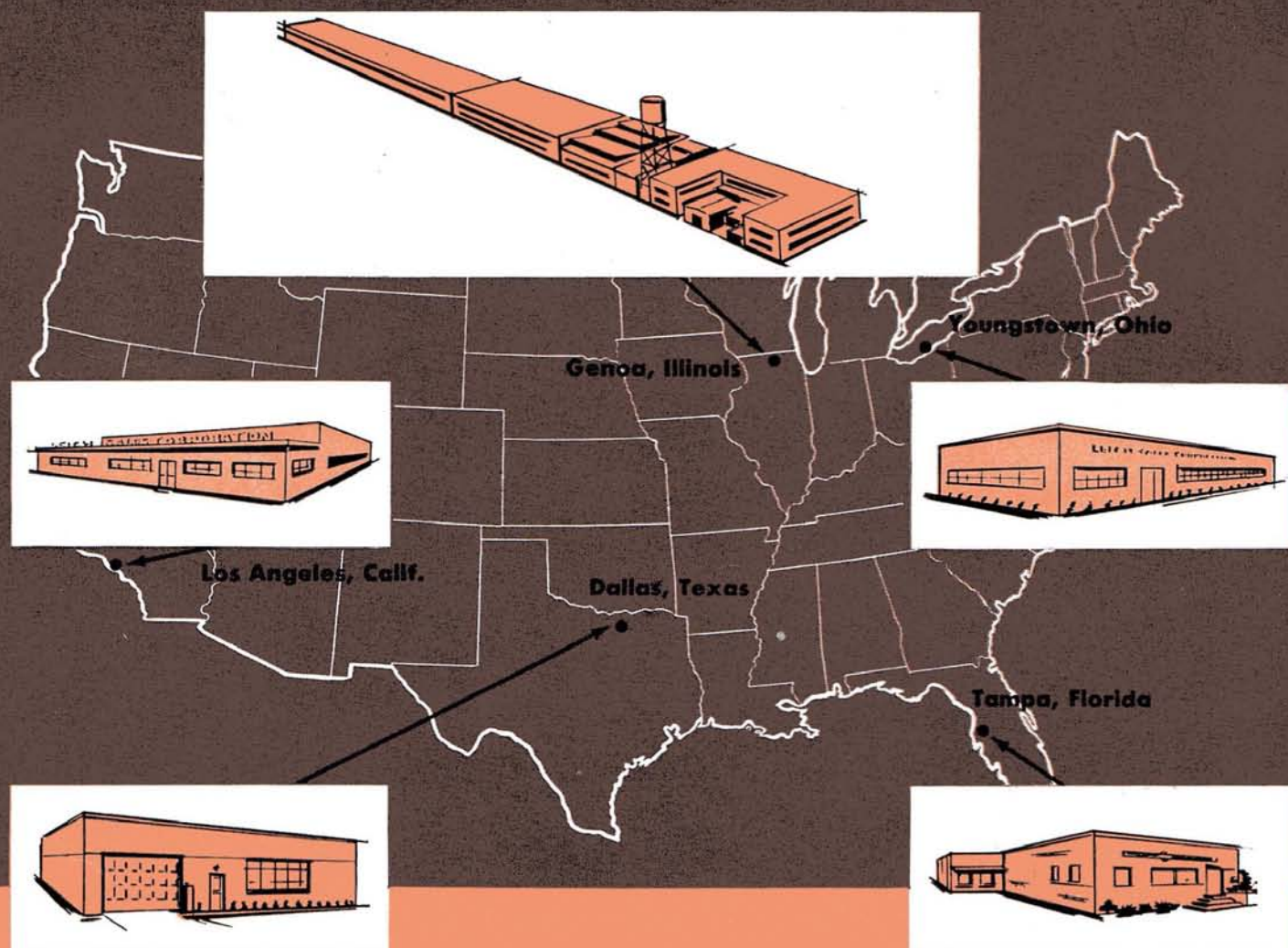
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