## STROMBERG-CARLSON

## Cable and Cable Supplies



High quality telephone cable; clay and fibre conduit; cable spinners and hangers; solder melting pots and blow torches.

## CABLE AND CABLE SUPPLIES

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## KENNECOTT PAPER INSULATED LEAD ENCASED TELEPHONE CABLE



Kennecott telephone cable is made with various electrostatic capacitances and with conductors of Nos. 19, 22 and 24 A.W.G. Each wire is insulated with one or more wraps of paper.

After insulation of the conductors they are twisted together to form pairs, each wire of the pair being wrapped with paper of a different color for tracing purposes.
The twisted pairs are cabled together in layers, each layer being one pair thick. The completed cable core is taped over with paper.
The cable is then treated under controlled high temperature and vacuum to remove moisture. It is then sheathed with lead containing one per cent antimony.

INSULATION RESISTANCE-The effect of insulation resistance under actual working conditions is not definitely known owing to the high frequencies employed. The usual practice is to specify a minimum of 500 megohm miles, which is considered sufficiently high to prevent appreciable leakage.

## CONDUCTORS

Each conductor shall be solid wire of commercially pure annealed copper, smoothly drawn, cylindrical, uniform in quality and resistance and free from scale and other defects.

## TRANSMISSION LOSS

In Dbs. per loop mile for various types of telephone cables is as follows:

| Wire <br> Size | Insulation | Mutual <br> Capacitance <br> Mfds. | Transmission loss dbs. <br> per mile at <br> 900 |  |  |
| :--- | :--- | :---: | :---: | :---: | ---: |
|  |  | 800 <br> per mile | cycles <br> cycles | 1000 <br> cycles |  |
| $\mathbf{2 4}$ | Single Paper | .09 | 2.16 | 2.29 | 2.41 |
| $\mathbf{2 2}$ | Double Paper | .08 | 1.63 | 1.72 | 1.82 |
| $\mathbf{2 2}$ | Single Paper | .09 | 1.72 | 1.82 | 1.92 |
| $\mathbf{1 9}$ | Double Paper | .08 | 1.15 | 1.22 | 1.28 |
| 19 | Single Paper | .09 | 1.22 | 1.29 | 1.36 |

No. 24 S.P.W. Lead Covered Cable, 09 M.C.

| No. of Pairs | Stock No. | Lead Thk. | O.D. | Net Wt. M. Ft. | Reel Length | Approx. Ship. Wt. per M. Ft. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | (890323) | . 060 | . 31 | 261 | 3,500 | 305 |
| 11 | (890324) | . 061 | . 35 | 320 | 3,500 | 364 |
| 16 | (890325) | . 062 | . 39 | 380 | 3,500 | 441 |
| 26 | (890326) | . 063 | . 47 | 487 | 4,500 | 577 |
| 51 | (890327) | . 066 | . 59 | 710 | 4,200 | 818 |
| 76 | (890328) | . 069 | . 70 | 923 | 3,000 | 1.074 |
| 101 | (890329) | . 071 | . 78 | 1,110 | 3,000 | 1,377 |
| 152 | (890330) | . 074 | . 92 | 1,453 | 2,800 | 1.728 |
| 202 | (890331) | . 077 | 1.04 | 1,792 | 2,200 | 2,142 |
| 303 | (890332) | . 082 | 1.24 | 2,423 | 1,600 | 2,904 |
| 404 | (890333) | . 086 | 1.41 | 3,019 | 1,400 | 3,628 |
| 505 | (890334) | . 089 | 1.57 | 3,598 | 1,300 | 4,253 |
| 606 | (890335) | . 093 | 1.71 | 4,188 | 1,100 | 4,963 |

No. 22 S.P.W. Lead Covered Cable, 09 M.C.

| No. of Pairs | Stock No. | Lead Thk. | O.D. | $\begin{aligned} & \text { Net Wt. } \\ & \text { M. Ft. } \end{aligned}$ | Reel Length | Approx. Ship. Wt. per M.Ft. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | (890352) | . 061 | . 37 | 341 | 3,500 | 402 |
| 11 | (890353) | . 063 | . 44 | 437 | 3,500 | 498 |
| 16 | (890354) | . 064 | . 47 | 490 | 3,500 | 551 |
| 26 | (890355) | . 066 | . 56 | 646 | 3,500 | 762 |
| 51 | (890356) | . 070 | . 73 | 973 | 3,000 | 1,124 |
| 76 | (890357) | . 073 | . 86 | 1.262 | 2.500 | 1,579 |
| 101 | (890358) | . 076 | . 97 | 1,549 | 2,500 | 1,857 |
| 152 | (890359) | . 080 | 1.15 | 2,057 | 1,600 | 2,538 |
| 202 | (890360) | . 084 | 1.30 | 2,557 | 1,600 | 3,089 |
| 253 | (890361) | . 087 | 1.45 | 3,044 | 1,500 | 3,612 |
| 303 | (890362) | . 090 | 1.57 | 3.496 | 1,400 | 4,105 |
| 404 | (890363) | . 095 | 1.79 | 4,393 | 1,200 | 5,308 |
| 505 | (890364) | . 099 | 1.99 | 5,262 | 1,000 | 6,360 |
| 606 | (890365) | . 104 | 2.17 | 6,156 | 900 | 7.509 |

No. 22 D.P.W. Lead Covered Cable, 08 M.C.

| No. of Pairs | Stock No. | Lead Thk. | O.D. | $\begin{aligned} & \text { Net Wt. } \\ & \text { M. Ft. } \end{aligned}$ | Reel Length | Approx. Ship. Wt. per M. Ft. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | (890338) | . 061 | . 37 | 336 | 3,500 | 397 |
| 11 | (890339) | . 063 | . 46 | 455 | 3,500 | 516 |
| 16 | (890340) | . 065 | . 52 | 556 | 3.500 | 672 |
| 26 | (890341) | . 067 | . 62 | 731 | 3,500 | 861 |
| 51 | (890342) | . 072 | . 82 | 1,123 | 3.000 | 1,379 |
| 76 | (890343) | . 076 | . 97 | 1,470 | 2,500 | 1,778 |
| 101 | (890344) | . 079 | 1.11 | 1,804 | 2.500 | 2,145 |
| 152 | (890345) | . 084 | 1.32 | 2.413 | 1,600 | 2,946 |
| 202 | (890346) | . 088 | 1.50 | 2,982 | 1,600 | 3,515 |
| 253 | (890347) | . 092 | 1.66 | 3,564 | 1,500 | 4,296 |
| 303 | (890348) | . 096 | 1.81 | 4,132 | 1,400 | 5,002 |
| 404 | (890349) | . 102 | 2.06 | 5,193 | 1,200 | 6,208 |
| 505 | (890350) | . 108 | 2.30 | 6,268 | 1,000 | 7.486 |
| 606 | (890351) | . 113 | 2.50 | 7.289 | 900 | 8,642 |

No. 19 S.P.W. Lead Covered Cable, .09 M.C.

| No. of Pairs | Stock No. | Lead Thk. | O.D. | $\begin{gathered} \text { Net Wt. } \\ \text { M. Ft. } \end{gathered}$ | Reel Length | Approx. Ship. Wt. per M. Ft. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | (890387) | . 063 | . 43 | 425 | 3.500 | 486 |
| 11 | (890388) | . 065 | . 52 | 576 | 3,500 | 692 |
| 16 | (890389) | . 067 | . 59 | 714 | 3,500 | 844 |
| 26 | (890390) | . 070 | . 72 | 967 | 3.000 | 1,118 |
| 51 | (890391) | . 075 | . 97 | 1,513 | 2,500 | 1,821 |
| 76 | (890392) | . 080 | 1.13 | 2,032 | 1,800 | 2,505 |
| 101 | (890393) | . 084 | 1.29 | 2,530 | 1,600 | 3,063 |
| 202 | (890394) | . 095 | 1.76 | 4,347 | 1,200 | 5,265 |
| 303 | (890395) | . 104 | 2.19 | 6,170 | 900 | 7,519 |

No. 19 D. P. W. Lead Covered Cable, 08 M.C.

| No. of Pairs | Stock No. | Lead Thk. | O.D. | Net Wt. M. Ft . | $\begin{aligned} & \text { Reel } \\ & \text { Length } \end{aligned}$ | Approx. Ship. Wt. per M. Ft. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | (890377) | . 063 | . 47 | 469 | 3,500 | 530 |
| 11 | (890378) | . 066 | . 57 | 646 | 3,500 | 762 |
| 16 | (890379) | . 068 | . 66 | 800 | 2,500 | 963 |
| 26 | (890380) | . 071 | . 80 | 1,089 | 2,500 | 1,271 |
| 51 | (890381) | . 078 | 1.07 | 1.734 | 1,500 | 2,037 |
| 76 | (890382) | . 083 | 1.28 | 2.328 | 1,500 | 2,896 |
| 101 | (890383) | . 087 | 1.44 | 2.875 | 1,500 | 3,443 |
| 202 | (890384) | . 100 | 1.98 | 4,974 | 1,100 | 6,079 |
| 303 | (890385) | . 110 | 2.40 | 6,974 | 1,000 | 8,300 |
| 404 | (890386) | . 119 | 2.75 | 8,924 | 700 | 10,821 |

## ANSONIA ANKOSEAL PLASTIC TELEPHONE CABLE



Ankoseal Aerial and Duct Lead Replacement Cable
Ankoseal Telephone Cables are manufactured with the use of thermoplastic insulating materials of high dielectric strength, low moisture absorption and good transmission qualities. They may be used in direct substitution for the textile and paper insulated cables now in service. These cables also have the advantage of a saving in weight over lead-covered cables of from $1 / 3$ to $1 / 2$ in the more popular sizes.
The protective covering over the cables is also thermoplastic material which has been compounded to provide a high degree of mechanical strength, as well as low moisture absorption and extremely long life. In addition the aerial and duct cables have a grounding shield for protection from electrical storms or other electro-static interference, and the direct burial cables have double flat $3 S$ alloy aluminum tapes between the inner and outer jackets for mechanical protection. Both of these cables are recommended as direct replacements for Western Electric CSA and CNB cables.

|  | Aer |
| :---: | :---: |
|  |  |
|  |  |
|  |  |
| Total | Guart'd. |
| No. | No. |
| Pairs | Pairs |
| 11 | 11 |
| 16 | 15 |
| 26 | 25 |
| 51 | 50 |
| 76 | 75 |
| 101 | 100 |
| 152 | 150 |
| 202 | 200 |
| 303 | 300 |
| 404 | 400 |


|  |  |
| :---: | :---: |
| Total | Guart'd. |
| No. | Not <br> Pairs |
| 11 | 11 |
| 16 | 15 |
| 26 | 25 |
| 51 | 50 |
| 76 | 75 |
| 101 | 100 |
| 152 | 150 |
| 202 | 200 |
| 303 | 300 |
| 404 | 400 |


| Total | Guart'd. |  | Size 19 Copper |  |
| :---: | :---: | :---: | :---: | :---: |
| No. | No. | Approx. | Reel | Net Wgt. |
| Pairs | Pairs | O.D. | Length | Lbs./M. Ft. |
| 11 | 11 | . 530 | 5,000 | 170 |
| 16 | 15 | . 700 | 5,000 | 256 |
| 26 | 25 | . 810 | 5,000 | 375 |
| 51 | 50 | 1.090 | 2,500 | 700 |
| 76 | 75 | 1.300 | 3,000 | 1,024 |
| 101 | 100 | 1.530 | 3,000 | 1,370 |
| 152 | 150 | 1.850 | 1,000 | 1,725 |
| 202 | 200 | 2.250 | 1,000 | 2,520 |
| 303 | 300 | 2.630 | 1,000 | 3,434 |
| 404 | 400 | 3.100 | 1,000 | 4,918 |

## Specifications for Types 775P and 775AP

Conductors-Soft bare copper wire per ASTM B-3
Conductor Insulation-Stabilized Polyethylene
Shield Tape-Type 3S Aluminum, .004" thick
Jackets-Ankoseal Plasticized Polyvinyl Chloride
Operating Range from $-40^{\circ}$ to $+80^{\circ} \mathrm{C}$
Armor Tape-Type 3S Aluminum, . $013^{\prime \prime}$ thick
AC Test Voltage- 1000 Volts
Insulation Resistance-500 megohm miles at $60^{\circ} \mathrm{F}$-any conductor to all other conductors and shield

Mutual Capacity in Mfd/Mile-24 gauge .070, 22 gauge .075, 19 gauge .085
Db/Mile (1000 cps)-24 gauge 2.11, 22 gauge 1.71, 19 gauge 1.26

| Multiple Pair Self-Supporting Drop Cable Size 19 Medium Hard Copper |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { Total } \\ \text { Nol } \\ \text { Pairs } \\ 6 \end{gathered}$ | $\begin{gathered} \text { Guart'd. } \\ \text { No. } \\ \text { Pairs } \\ 5 \end{gathered}$ | $\begin{aligned} & \text { Approx. } \\ & .0 . \mathrm{D} . \\ & .505 \end{aligned}$ | $\begin{gathered} \text { Nominal } \\ \text { Reel } \\ \text { Length } \\ 5,000^{\prime} \end{gathered}$ | Approx. Lbs./M. Ft 168 |

## WHITNEY BLAKE TELECABLE ${ }^{\circledR}$ (OUTSIDE)



## For Aerial and Duct Use

Whitney Blake Telecable is a totally new design using only copper, polyethylene jacket and an aluminum shield.

Polyethylene is used for conductor insulation because of its low capacitance, high dielectric strength and generally excellent stability. Black polyethylene, properly compounded to withstand effects of outdoor weathering, is used for the jacket because it combines the properties of flexibility at low temperatures and long life expectancy, to a greater degree than any other commercially used thermoplastic.

This cable meets all the electrical values and life expectancy of paper insulated, lead sheathed cables and in addition is simpler and less costly to install. The tough, flexible black polyethylene sheath is unaffected by the stresses imposed during installation and operates efficiently under extremes of winter and summer weather. It is not subject to environmental cracking.

Whitney Blake Telecable is REA approved.

## Construction

Each conductor is bare annealed copper and is insulated with a wall of polyethylene designed to assure compliance with capacitance requirements and to provide high dielectric strength, even if the sheath becomes damaged.

Up to and including 76 Pair Cable, one pair of each cable has one red leg and one orange leg for use as a tracer pair. All other pairs have one red leg and one natural leg.

101 Pair cable has a center core of 50 pairs, 49 pairs with one leg red and one leg natural and one tracer pair with one leg red and one leg orange. Around this core are cabled 51 pairs, 50 pairs with one leg blue, and one leg natural and one tracer pair with one leg red and one leg orange.

152 Pair cable has a center core of 52 pairs, 51 pairs with one leg red and one leg natural and one tracer pair with one leg red and one leg orange. Around this core are cabled 62 pairs, 61 pairs with one leg blue and one leg natural, and one tracer pair with one leg red and one leg orange. The outside layer has 38 pairs, 37 pairs with one leg red and one leg natural and one tracer pair with one leg red and one leg orange.

202 Pair cable has a center core of 52 pairs, 51 pairs with one leg red and one leg natural and one tracer pair with one leg red and one leg orange. Around this core are cabled 62 pairs, 61 pairs with one leg blue and one leg natural, and one tracer pair with one leg red and one leg orange. The next layer has 41 pairs, 40 pairs with one leg red and one leg natural and one tracer pair with one leg red and one leg orange. The outside layer has 47 pairs, 46 pairs with one leg blue, one leg natural and one tracer pair with one leg red, one leg orange.

303 Pair cable is composed of 50 and 51 pair units, each having a red-orange pair in the outer layer. Five units -3 with blue-white pairs and 2 with red-natural pairs are cabled around one unit with red-natural pairs. Each unit is provided with an
open spiral multiple end textile binder.
404 Pair cable is composed of 50 and 51 pair units, each having a red-orange pair in the outer layer. Six units -3 with bluenatural pairs and 3 with red-natural pairs, alternated-are cabled around two units - 1 with red-natural pairs and 1 with blue-natural pairs. Each unit is provided with an open spiral, multiplex end textile binder.

To minimize crosstalk, the length of lay is varied for adjacent pairs. The core is wrapped spirally with non-hygroscopic tape for further protection and then covered with an aluminum shield. This shield, when grounded, protects the cable from damage by lightning, prevents low frequency induction and consequent noisy circuits. The jacket is black weather-resistant polyethylene, assuring long service life.

| Exchange Area Cable for Aerial and Duct Use |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | No. <br> Pairs <br> Total | No. <br> Pairs Guart'd | Nom. Wall Jacket Inches | Nom. <br> O.D. <br> Inches | Approx. Net Wt./Mft Pounds | Approx. Gross Wt./Mft Pounds | $\begin{aligned} & \text { Feet } \\ & \text { Per } \\ & \text { Reel } \end{aligned}$ |
| No. 24 AWG Conductor |  |  |  |  |  |  |  |
| 1201 | 11 | 11 | . 050 | . 395 | 70 | 87 | 5000 |
| 1202 | 16 | 15 | . 050 | . 445 | 91 | 109 | 5000 |
| 1203 | 26 | 25 | . 050 | . 530 | 133 | 153 | 5000 |
| 1204 | 51 | 50 | . 060 | . 705 | 244 | 284 | 2500 |
| 1205 | 76 | 75 | . 060 | . 815 | 342 | 393 | 2500 |
| 1206 | 101 | 100 | . 070 | . 945 | 450 | 515 | 2500 |
| 1207 | 152 | 150 | . 070 | 1.110 | 645 | 748 | 2500 |
| 1208 | 202 | 200 | . 080 | 1.295 | 855 | 1,117 | 1000 |
| 1209 | 303 | 300 | . 090 | 1.650 | 1.248 | 1,548 | 1000 |
| 1210 | 404 | 400 | . 100 | 1.910 | 1,405 | 2,070 | 1000 |
| No. 22 AWG Conductor |  |  |  |  |  |  |  |
| 1231 | 11 | 11 | . 050 | . 450 | 97 | 113 | 5000 |
| 1232 | 16 | 15 | . 050 | . 515 | 131 | 151 | 5000 |
| 1233 | 26 | 25 | . 060 | . 635 | 202 | 235 | 5000 |
| 1234 | 51 | 50 | . 060 | . 830 | 364 | 399 | 2500 |
| 1235 | 76 | 75 | . 070 | . 995 | 530 | 645 | 2500 |
| 1236 | 101 | 100 | . 070 | 1.125 | 685 | 801 | 2500 |
| 1237 | 152 | 150 | . 080 | 1.365 | 1,005 | 1,237 | 2500 |
| 1238 | 202 | 200 | . 090 | 1.565 | 1,312 | 1,662 | 1000 |
| 1239 | 303 | 300 | . 110 | 2.020 | 2,049 | 2,714 | 1000 |
| 1240 | 404 | 400 | . 120 | 2.270 | 2,885 | 3,550 | 1000 |
| No. 19 AWG Conductor |  |  |  |  |  |  |  |
| 1261 | 11 | 11 | . 050 | . 575 | 161 | 186 | 5000 |
| 1262 | 16 | 15 | . 060 | . 675 | 230 | 266 | 5000 |
| 1263 | 26 | 25 | . 060 | . 810 | 351 | 407 | 5000 |
| 1264 | 51 | 50 | . 070 | 1.095 | 657 | 751 | 2500 |
| 1265 | 76 | 75 | . 080 | 1.300 | 985 | 1,109 | 2500 |
| 1266 | 101 | 100 | . 090 | 1.520 | 1,307 | 1,462 | 2500 |
| 1267 | 152 | 150 | . 100 | 1.820 | 1,927 | 2,325 | 1000 |
| 1268 | 202 | 200 | . 110 | 2.070 | 2,375 | 2,776 | 1000 |

## Shielded Self-Supporting Multiple Drop Cable

This cable is similar in construction to Aerial and Duct Cable except the No. 19 A.W.G. conductors are medium hard drawn copper. The cable can be used for multiple drops to small businesses and apartment buildings and also for pole runs.

|  |  |  |  |  | Approx. | Approx. |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Other sizes and pairs available on special order. Put-up: Non-returnable wooden reels.

# WHITNEY BLAKE MULTI-CONDUCTOR PAIRED (INSIDE) WIRING TELECABLE ${ }^{\circledR}$ 



Paired Inside Wiring Telecable

## Semi-Rigid Plastite ${ }^{\circledR}$ Insulation Brown or Ivory Plastite Jacket

Lightweight for easy installation; water resistant for use in damp ducts.

Semi-rigid Plastite insulation has high resistance to crushing and has reduced cold flow. The latter is especially important when cable is liable to be bent sharply, as when installed in conduit.

This cable has superior insulation resistance and is unaffected by humidity. Conductors are easy to terminate-just strip the insulation and solder. The insulation is permanently colored for lasting polarity identification. Semi-rigid Plastite has compression strength far exceeding that of regular polyvinyl chloride compounds. The polyvinyl chloride jacket is tough, flame resistant and abrasion resistant. The long service life of this cable means lower maintenance costs.

## Construction

Solid bare soft copper conductors in No. 24 AWG and No. 22 AWG insulated with tough semi-rigid polyvinyl chloride to a nominal wall of $.014^{\prime \prime}$. Color coded for polarity and pair identification. Pairs are twisted with systematically varied lays to minimize crosstalk. Pairs are cabled without fillers into a round core. Free-stripping jacket is brown or ivory polyvinyl chloride with a nominal wall of $.040^{\prime \prime}$ for all except 51 and 76 pair which have $.050^{\prime \prime}$ nominal wall. Steel rip wire under jacket for easy removal of plastic covering. Specify color when ordering.

| Cat. No. | No. of Pairs | Approx. O.D. | $\begin{gathered} \text { Approx. } \\ \text { Net } \\ \text { Wt./M Ft. } \\ \text { Pounds } \end{gathered}$ | Approx Gross Wt./M Ft Pounds |
| :---: | :---: | :---: | :---: | :---: |
| No. 24 AWG Conductors |  |  |  |  |
| 1001 | 6 | . 305 " | 50 | 59 |
| 1002 | 11 | . $370^{\prime \prime}$ | 76 | 93 |
| 1003 | 12 | . 380 " | 81 | 98 |
| 1004 | 16 | . 4301 | 105 | 122 |
| 1005 | 26 | . 520 " | 154 | 183 |
| 1006 | 51 | .710" | 299 | 358 |
| 1007 | 76 | .840" | 414 | 482 |
| No. 22 AWG Conductors |  |  |  |  |
| 1026 | 6 | . 325 " | 61 | 70 |
| 1027 | 11 | . 400 " | 99 | 116 |
| 1028 | 12 | .410" | 106 | 123 |
| 1029 | 16 | .470" | 136 | 156 |
| 1030 | 26 | .570" | 208 | 237 |
| 1031 | 51 | .775" | 414 | 464 |

Furnished 2500 ft . per non-returnable reel.

CEECO LOADING COILS
These voice frequency loading coils are used primarily for loading exchange and toll entrance cables. The coils are potted in either lead sleeves or steel cases or furnished with leads for splicing in sleeves made on the job.

The voice frequency loading coils, type 632 and 638 are
 designed for use on two wire telephone circuits in non-quadded paper insulated or plastic cables. Coils for quadded inter-office trunks and toll entrance cables are type MF10, MF11, 641, 642.

## Electrical Characteristics

|  | 632 | 638 |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 88 |  |  |  |
|  | 8 | 44 | 88 | 44 |
| Tolerance plus (MH). | 1.5 | 1.0 | 1.5 | 1.0 |
| Tolerance minus (MH) | 1.0 | 0.6 | 1.0 | 0.6 |
| DC resistance $70^{\circ} \mathrm{f}$ maximum per winding (ohm). | 4.2 | 2.2 | 2.8 | 1.6 |
| Maximum DC resistance unballance (ohm) | 0.20 | 0.15 | 0.20 | 0.15 |
| Q minimum 1000 cycle | 55 | 50 | 65 | 65 |
| Minimum insulation resistance (meg ohm) | 10,000 | 10,000 | 10,000 | 10,000 |
| Minimum dielectric strength between windings (DC volts). | 1500 | 1500 | 1500 | 1500 |
| Maximum crosstalk between adjacent coils (db).......... | 86 | 86 | 86 | 86 |

The MF10 and MF11 phantom groups shall have the characteristics of the 641 and 642 coils. The inductance of the phantom coils is 25 and 50 MH respectively.

CEECO CASES


Lead sleeve cases are supplied for potting up to 76 coils and are coded Type 124. Aerial steel cases are supplied to house up to 460 coils and are coded Type 125 . Underground steel cases also house up to 460 coils and are coded Type 225.

| Dimensions and Weights |  |  |  |
| :---: | :---: | :---: | :---: |
| Loading Coil Case Type | Contains Coils Type 632 or 638 | Approx. Case Size | Shipping Weight |
| Lead case for aerial use |  |  |  |
| 124A | 4 to 15 coils | 2" Dia. up to $13^{\prime \prime} \mathrm{lg}$ | 19 to 25 lbs |
| 124B | 16 to 24 coils | $4^{\prime \prime}$ Dia. up to $9^{\prime \prime} \mathrm{lg}$ | 25 to 45 lbs |
| 124 C | 25 to 51 coils | $4^{\prime \prime}$ Dia. up to $15^{\prime \prime} \mathrm{lg}$ | 45 to 70 lbs |
| 124 D | 52 to 76 coils | $5^{\prime \prime}$ Dia. up to $15^{\prime \prime} \mathrm{lg}$ | 70 to 90 lbs |
| Steel case for aerial use |  |  |  |
| 125A | 75 to 101 coils | $65 / 8^{\prime \prime}$ Dia. $18^{\prime \prime} \mathrm{lg}$ | 90 to 110 lbs |
| 125B | 102 to 152 coils | $65 / 8^{\prime \prime}$ Dia. 24 " lg | 110 to 160 lbs |
| 125 C | 153 to 205 coils | $9^{\prime \prime}$ Dia. 18" lg | 160 to 210 lbs |
| 125D | 206 to 303 coils | $9^{\prime \prime}$ Dia. 34" lg | 210 to 300 lbs |
| 125E | 304 to 460 coils | 103/4" Dia. $30^{\prime \prime} \mathrm{lg}$ | 300 to 450 lbs |
| Steel case for Underground |  |  |  |
| 225A | 75 to 101 coils | $65 / 8^{\prime \prime}$ Dia. $18^{\prime \prime} \mathrm{lg}$ | 90 to 110 lbs |
| $225 B$ | 102 to 152 coils | 65/8" Dia. 24" lg | 110 to 160 lbs |
| 225 C | 153 to 205 coils | $9^{\prime \prime}$ Dia. 18" 19 | 160 to 210 lbs |
| 225D | 206 to 303 coils | $9^{\prime \prime}$ Dia. 34" lg | 210 to 300 lbs |
| 225E | 304 to 460 coils | 103/4" Dia. 30" lg | 300 to 450 lbs |

## CEECO TYPE 177 TERMINAL LOADING CASE

The type 177 terminal loading case is a combination box and mounting for loading coils to be used with the recently developed self-supporting rural distribution cable. The case consists of an aluminum casting with a hinged cover of pressed aluminum. Terminal blocks and loading coils are provided in various combinations.


Cat. Stock
No. No.
177A (896079) 2 sets of 6 pair protected terminals and 6 type 632 ( 88 MH ) coils mounted in individual plastic housing.
177B (896080) Same as 177A except with 6 type 638 ( 44 MH ) coils.
177C (896081) Same as 177A except with non-protected terminals.
177D (896082) Same as 177B except with non-protected terminals.
177 E (896083) With 2 six-pair protected blocks, no loading coils.
177F (896084) With 1 six-pair protected block, no loading coils.
177 (896085) With 2 six-pair non-protected blocks, no loading coils.
177H (896086) With 1 six-pair non-protected block, no loading coils.

## PREFORMED LASHING RODS



Preformed Lashing Rods are produced of spring temper material and are applied without the use of tools or spinners. They are self-adhering and are removable and reusable for reapplication. Ideal for lashing initial installations, cables to existing messengers, adding cables and relashing where old lashing wire has had to be replaced. Lashing rods listed below are of galvanized steel. Copperweld, stainless steel and bronze available.

| Catalog No. | Stock No. | Conductor \& Messenger <br> Total Outside Diameter <br> Min. O.D. |
| :--- | ---: | :---: | :---: |
| Max. O.D. |  |  |

PREFORMED LINE GUARDS FOR SELF-SUPPORTING PLASTIC CABLE


Essentially for protecting your cable from tie or clamp pressures. Merely wrap line guards around cable at tangent support points. No tools required. Line Guards are accurately formed to fit snugly without using clamps or clips to hold ends secure.

| Catalog No. | Stock No. | Cable <br> Construction | Shipping Wt. <br> Lbs./loo <br> Line Guards |
| :--- | :---: | :---: | :---: |
| 18 AMGT- $\mathbf{3 8 0}$ | $\mathbf{( 8 9 5 9 0 4 )}$ | 6 pair No. 20 AWG | 19 |
| 20 AMGT-450 | $\mathbf{( 8 9 5 9 0 5 )}$ | 6 pair No. 19 AWG | 30 |
| 22 AMGT-560 | $\mathbf{( 8 9 5 9 0 6 )}$ | 11 pair No. 19 AWG | 45 |
| 24 AMGT-680 | $(895907)$ | 16 pair No. 19 AWG | 61 |
| 28 AMGT-824 | $\mathbf{( 8 9 5 9 0 8 )}$ | 26 pair No.19 AWG | 100 |

## TANGENT SUPPORT CLAMP



Especially designed as a tangent supporting device, there is a clamp available for each self-supporting cable with Line Guards applied-eliminates tying. Tongue and slot design permits bottom and top half of clamp to be placed around the cable, holding the assembly in place while single bolt or lag screw is applied. Stock No. (895909).


Ideal for protecting covered cables or conductors from abrasion by trees or other objects. Fit securely like metal Line Guards are as easily installed. Standard stock sizes come in 6-ft. lengths. $3-\mathrm{ft}$., $9-\mathrm{ft}$. and other lengths are available on order.

| Inside Diam. | Stock No. |
| :---: | :---: |
| $9 / 33^{\prime \prime}$ | $(895910)$ |
| $3 / 8^{\prime \prime}$ | $(895911)$ |
| $1 / 2^{\prime \prime}$ | $(895912)$ |
| $58^{\prime \prime}$ | $(895913)$ |
| $3 / 4^{\prime \prime}$ | $(895914)$ |
| $1{ }^{\prime \prime}$ | $(895915)$ |
| $114^{\prime \prime}$ | $(895916)$ |

Revised 1-1-57


These Dead-Ends never relax their grip-will not slip even under sudden impact and they hold the full-rated strength of the telephone wires. Dead-Ends are quickly and easily installed by hand - no tools needed. They eliminate looping of the wire. Simply installed by inserting one leg of the Dead-End around an insulator or through a thimble eye and then wrapping both legs around the wire. Can be used as a false dead-end without cutting the wire so the messenger or conductor may continue right through. Thus, splicing is eliminated at dead-end points. Dead-Ends can be easily removed and reused. Also available in Copperweld and Stainless Steel.

|  | Galvanized Steel |  |  |
| :--- | :---: | :---: | :---: |
| Catalog No. | Stock No. | Wire Size | Ship. Wt. Lbs./100 |
| $\mathbf{1 1}$ GDE-083 | $\mathbf{1 8 9 5 9 1 7 )}$ | 14 BWG | 6 |
| $\mathbf{1 2}$ GDE-109 | $\mathbf{( 8 9 5 9 1 8 )}$ | 12 BWG | 9 |
| $\mathbf{1 3}$ GDE-134 | $\mathbf{( 8 9 5 9 1 9 )}$ | 10 BWG | 15 |

PREFORMED DEAD-ENDS FOR SELF-SUPPORTING PLASTIC CABLE


The standard Dead-End is designed to hold the full-rated strength of the Self-Supported Cable, protecting the outer covering and internal members even under extreme temperature variations. They are easily applied by hand, slip one leg through a standard hardware thimble clevis and wrap the legs around the cable. Available for 6, 11, 16 and 26 pair 19 AWG Self-Supporting Cable. Special short-length Dead-Ends for applications that do not require holding the full-rated strength are available on order. Double clevis assembly per illustration (Hubbard No. 666) available on order.

|  | AnsoniaAnkoseal Type 775-P-SS <br> (Left Hand Lay) | Shipping Wt. <br> Lbs./100 |  |
| :--- | :---: | :---: | :---: |
| Catalog No. | Stock No. | Construction | Dead-Ends |

Whitney-Blake Co. (Right Hand Lay)
WBDE-470 (895888) 6 pair No. 19 AWG


Protect the plastic jacket of rural distribution or insulated wire messenger from clamp pressure and abrasion. Armor Rods are an inexpensive method of preventing damage at a later date. They are easily applied, and can be reused.


|  |  |  | Conductor |
| :--- | :--- | :---: | :---: | | Shipping Wt. |
| :---: |
| Lbs./100 sets |

Insulated Telephone Line Wire

| 12 AAR-155 | $(895927)$ | .109 G. S. Covered | 6 |
| :--- | :--- | :--- | :--- |
| 24 AAR-155 | $\mathbf{( 8 9 5 9 2 8 )}$ | .109 G. S. Covered | 12 |
| 12 AAR-139 | $\mathbf{( 8 9 5 9 2 9 )}$ | .109 G. S. Covered | 6 |
| 24 AAR- 139 | $\mathbf{1 8 9 2 9 3 0 )}$ | .109 G. S. Covered | 12 |
| 12 AAR-110 | $\mathbf{1 8 9 5 9 3 1 1}$ | .080 C. W. Covered | 4 |
| 24 AAR-110 | $\mathbf{1 8 9 5 9 3 2 )}$ | .080 C. W. Covered | 8 |

PLASTIC CABLE GUARD
(illustrated above)

Protect cable from abrasion where it runs against suspension clamps by using plastic cable guards. Made of flexible Polyethylene, this sheath is slit all the way along one side. The sheath has an overlay to permit any size to carry more than one diameter of cable.
Siz
$1 / 2$
1
2
$1 / 2$
$3 / 4$
$11 / 2$
$21 / 4$

| Stock No. | Length (In.) |
| :--- | :---: |
| $\mathbf{( 8 9 5 4 1 2 )}$ | 8 |
| $\mathbf{( 8 9 5 4 1 3 )}$ | 8 |
| $\mathbf{( 8 9 5 4 1 4 )}$ | 8 |

(895415) $8 \quad 13 / 4$ " to $3^{\prime \prime}$ dia.

# CABLEAND <br> C ABLE 

## PREFORMED SPLICES FOR TELEPHONE LINE WIRES AND MESSENGER



This splice can be used to repair damaged line wires and messengers or can be used to splice new construction. Easy to install, no tools are required - simply wrap the splice around messenger or conductor. When used for repair, it does not require cutting wire for application. The splice will develop full rated strength of the wire on which it is installed, and once applied, it will not let go. It can easily be removed and reused.

No moving parts to cause "relaxing" either during installation or at a later date. Moisture, temperature changes or freezing has no effect on its grip.

Also available in Copper and Copperweld.

| Galvanized Steel |  |  |  |
| :---: | :---: | :---: | :---: |
| Catalog No. | Stock No. | Messenger Size | Shipping Wt. Lbs./100 Splices |
| 10 GLS-083 | (895920) | 14 BWG | 6 |
| 22 GLS-083 | (895921) | 14 BWG | 13 |
| 12 GLS-109 | (895922) | 12 BWG | 9 |
| 24 GLS-109 | (895923) | 12 BWG | 18 |
| 14 GLS-134 | (895924) | 10 BWG | 16 |
| 26 GLS-134 | (895925) | 10 BWG | 29 |

## PREFORMED DROP-WIRE DEAD-ENDS



Drop-Wire Dead-Ends are made of stainless steel with a neoprene coating which cushions the grip and effectively protects the conductor insulation. They provide a low radial pressure
over the entire holding area which not only prevents slippage but also eliminates a cause of resagging. Drop-Wire Dead-Ends can be used with reinforced or non-reinforced drop wire. It's a simple matter to install these Dead-Ends. Just place the loop (bail) in the insulator and then wrap on the legs. Where a closed insulator is used, insert one leg of the Dead-End through the insulator eye and then apply the legs. The multiple-wire loop gives extra strength and prevents fatigue failure. These DropWire Dead-Ends can be removed and reused.

| Stainless Steel - Neoprene Coated |  |  |
| :---: | :---: | :---: |
| Cat. No. | Stock No. | Overall |
| Length |  |  |
| 13NSDE | $(897192)$ | $13^{\prime \prime}$ |
| 14NSDE | $(897193)$ | $14^{\prime \prime}$ |

## PREFORMED C RURAL DEAD-ENDS



Conductor Sizes
2 No. 14 CW
2 No. 12 CW
$2-.083$ Steel

These C Rural Dead-Ends are applied by hand and are designed for use on 2 No. 14 and 2 No. 12 Copperweld and 2-. 083 Steel. C Rural Dead-Ends are made of stainless steel with a neoprene coating. Low radial pressure over the entire holding area assures a positive grip and prevents slipping or damage to the conductor insulation. The multiple wire loop (bail) gives extra strength. To install, simply insert one leg through the eye-bolt and wrap on the legs.
Overall Length
Dead-End
Tangent Support
$155^{\prime \prime}$
$20^{\prime \prime}$
Quantity Per
Standard Package
200
200
Weight Lbs. Per 100
15

19

PREFORMED C RURAL TANGENT SUPPORTS


These C Rural Tangent Supports provide a simple, efficient and inexpensive way to make a mid-span support for all C Rural Cable. They are made of stainless steel with a neoprene coating for corrosion and abrasion protection. C Rural Tangent Supports are easily applied by hand - no tools required. To install, place the loop configuration on the wire and then wrap on the legs. Cross talk is eliminated by giving the line wire ten longitudinal twists, alternating at every other pole.
Overall Length
Dead-End
Tangent Support
$20^{\prime \prime}$
$22^{\prime \prime}$
Quantity Per
Standard Package
200
200

Weight Lbs. Per 100

9
10

TCI Library www.telephonecollectors.info

## CLAY CONDUIT

Clay Conduit is manufactured from high grade fine clay, treated at over $2000^{\circ} \mathrm{F}$., and salt-glazed to provide $\alpha$ smooth, permanent surface. It is the standard material for underground cable work because of its strength, long life and low cost. A very
complete list of shapes meets all the usual requirements; sizes shown are readily obtainable, while others may be ordered if special applications require them.

In ordering, specify the shape, bore, and length.


1-Way Round
$31 / 4^{\prime \prime} \times 18^{\prime \prime}$ Stock No. (891087)
(Not Illustrated)
3-Way Square
$31 / 4$ "x24" Stock No. (891090)


4-Way Square
$31 / 4$ "x $36^{\prime \prime}$ Stock No. (891091)


1-Way Square $31 / 4^{\prime \prime} \times 18^{\prime \prime}$ Stock No. (891086)


6-Way Square
$31 / 4$ "x $36^{\prime \prime}$ Stock No. (891092)


2-Way Square $31 / 4^{\prime \prime} \times 24^{\prime \prime}$ Stock No. (891089)


9-Way Square 31/4"x36" Stock No. (894770)

NO. 9145 HUBBARD PLAIN DOWEL PINS
For Clay Conduit
Used in the ends of multiple duct clay conduit for preserving alignment of adjacent sections. Made of $5 / 16$-inch diameter steel with $\alpha$ shoulder in the center. Overall length, $33 / 64$ inches. Collar diameter, $5 / 8$ inch. Shipping Weight, 9 Pounds per 100.

$$
\text { Catalog No. } 9145 \quad \text { Stock No. (891085) }
$$



## CONDUIT JOINT TAPE

Used for wrapping the joints of multiple duct conduit prior to the application of the joint mortar, also for wrapping joints of single duct conduit in trench, subway or masonry structures prior to pouring the concrete encasement.
This tape has an adhesive waterproof coating on one side, and is supplied in 4 and 6 -inch widths, and put up in rolls of 100 yards.
Tape adheres closely and firmly to the glazed surface of the conduit and aids in sealing the joints.

In ordering, specify total number of linear yards required.

| Width Inches | Stock No. |
| :---: | ---: |
| 4 | $(891072)$ |
| 6 | $(891073)$ |

COPE AERIAL CABLE FEEDERS AND STRAIGHTENERS


This feeder and straightener is indispensable for pulling in aerial cable. The wide mouth aluminum bells and flexible steel tubing positively prevent danger to cable or sheath. The holding clamps which securely grip the messenger wire can also be used for dead-ending and splicing work.

All interior surfaces are smoothly finished to accommodate up to 3 -inch cables.
Furnished complete with 6 feet of tubing and 2 pairs of malleable iron clamps.
Extra lengths of tubing and extra holding and splicing clamps available at extra cost.

6-Ft. Tube with 2 Pr. Malleable Iron Clamps
Stock No. (890980)

HYKON REELIFT


An easy way to handle bulky cable reels without using jacks or tugging. A simple lift on the handles and the reel is set up for unrolling cable. Will not tip over. Leverage is such that one man can handle $1000-\mathrm{lb}$. reels.

| Cat. No. | Description | Stock No. |
| :--- | :--- | ---: |
| RL-25 | Max. $36^{\prime \prime}$ Dia., $25^{\prime \prime}$ Wide | (895190) |
| RL-31 | Max. $42^{\prime \prime}$ Dia., $31^{\prime \prime}$ Wide | $\mathbf{( 8 9 5 1 9 1 )}$ |

## ROLL-A-REEL

Roll-A-Reel is sturdily built to roll reels of electrical wire and cables, or steel strand. Ball bearing rollers with hex ends lock in the end channels and insure the reel rolling smoothly and without friction. The heavy gauge steel frame gives added strength and rigidity. Roll-A-Reel is light in weight and offers extreme portability.
Both styles have simple roller adjustments for extreme reel sizes. Style A, has one simple positive roller lock. Style B, has two locks; one for each front roller. The Style B, provides separate set of rigidly aligned rollers for each side of large reels to compensate for possible variation in their diameter.


Type A


Type B

Style A: Width $30^{\prime \prime}$. Depth $28^{\prime \prime}$. Height $31 / 2^{\prime \prime}$. Weight 50 lbs . Capacity 2000 lbs . Supports up to one $28^{\prime \prime}$ wide reel.

Stock No. (894050)
Style B: Width $52^{\prime \prime}$. Depth $28^{\prime \prime}$. Height $4^{\prime \prime}$. Weight 110 lbs . Supports two $24^{\prime \prime}$ wide reels or up to one $48^{\prime \prime}$ wide reel. Capacity 4000 lbs. Stock No. (894051)

SIMPLEX REEL OR DRUM JACKS


No. 321
No. 321 - Single Acting. Handles reels from $20^{\prime \prime}$ to $96^{\prime \prime}$ in diameter. Equipped with 5 lifting hooks $-9^{\prime \prime}, 151 / 4^{\prime \prime}, 213 / 4^{\prime \prime}, 28^{\prime \prime}$ and $39^{\prime \prime}$ respectively from ground level. Top hook is for $31 / 2^{\prime \prime}$ spindles, the second from the top for $3^{\prime \prime}$ spindles and the remaining 3 hooks for $21 / 2^{\prime \prime}$ spindles.

No. A1029 - Single Acting. Aluminum alloy housing reduces weight 21 pounds. For outside work where footing may be uneven. T-shaped base has total area of 319 square inches, with three threaded and adjustable steel rods insuring a firm, nonrocking foundation. Furnished with left and right hand bases; Jacks are generally paired to keep operators in sight of each other for even lifting. Handles reels from $36^{\prime \prime}$ to $84^{\prime \prime}$ in diameter. Equipped with 3 lifting hooks $17^{\prime \prime}, 23^{\prime \prime}$ and $29^{\prime \prime}$ respectively from ground level. Top hook for $3^{\prime \prime}$ spindles, and the other 2 for $21 / 2^{\prime \prime}$ spindles.

| Cat. | Stock | Capacity |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | No. | Height <br> Tons | Lift <br> Inches | Weight <br> Inches | Lever <br> Furnished <br> Inches |  |
| 321 | $\mathbf{( 8 9 7 2 2 0 )}$ | 10 | $341 / 4$ | 15 | 108 | 60 |
| *A1029(891205) | 10 | $291 / 2$ | $133 / 4$ | 83 | 60 |  |
| "Pairs furnished wtih right and left hand bases. |  |  |  |  |  |  |

## TYPE B COPE CABLE REEL JACKS

Constructed entirely of heavy welded steel channel section, thereby making an extremely rugged piece of equipment. The base sections are 5 -inch, 6.7 -pound channel; the side legs are of 4 -inch, 5.4 -pound channel and the back leg of 3 -inch, 4.1 -pound channel. The base size is 21 inches across and 12 inches in width, to give maximum support in both directions.

Wrought steel square thread has a diameter of $13 / 4$ inches and $\alpha$ length of 18 inches.
 Swivel yoke has $\alpha$ minimum height of 25 inches and $\alpha$ maximum height of 40 inches. Capacity, 10 tons. Stock No. (891014)

BIERCE CABLE ROLLERS


Frame of forged steel, roller of cast iron, supported and protected on both sides by pressed steel discs.

Hinged member when thrown back allows ample opening for easy removal of frame from messenger wire and cable after cable has been drawn and tied up in position.

Self-contained hinge and grip. Impossible to become disengaged from the messenger wire. Adaptable to all sizes of cable, practically indestructible. Construction assures perfect alignment.

Stock No. (891006)

NEALE MODEL B CABLE SPINNER


A machine designed expressly for one-man operation in spinning new cable or maintenance spinning of existing cable, it may be operated either by a hand crank or pulled along the supporting strand by a man on the ground. A dead weight of 50 to 100 pounds may be substituted for a rider to prevent slippage when operated from ground.

The two supporting trolley wheels are linked by means of $\alpha$ sprocket chain which insures positive driving action for both front and rear wheels. The machine is transferred easily at pole by removing gate in spinner head.

The machine is shipped with the following equipment: spinner chest, seat, safety belt, one tube of grease and one lashing wire clamp.

| Catalog No. | Stock No. |
| :---: | :---: |
| Model B | (891004) |

NO. LGI LITTLE GIANT SLACK PULLERS

This slack puller eliminates the necessity of leaving slack at the poles for terminal splices, and when $\alpha$ splice is completed the cable will return to its original position.

This handy tool should be in every cable man's kit. It requires but 14 inches on the
 strand and will pull slack in maximum size cables supported by 16 M . strand. It will not injure cable or strand.


Designed for forming three individual cables into a compact triangular pattern (apex downward). Carries two reels of wire, spinning a $13^{\prime \prime}$ spiral in which $61 / 2^{\prime \prime}$ spacing gives adequate support. May also be used for single cable down to $5 / 8^{\prime \prime}$ O.D. Includes one Phillips Screwdriver, $6^{\prime \prime}$; one Common Screwdriver (bent $6^{\prime \prime}$ ); two adjustment pins; one $3 / 3^{-7 / 16}$ " Open End Wrench; two Neale Bronze Lashing Wire Clamps; two Tow Ropes, and TB4K Spinner Chest.
Shipping Weight: 68 lbs Cat. No. 400 Stock No. (897221)
CABLE PLACING DOLLY AND CHEST COMPLETE


Designed for the raising and preforming of cable prior to spinning. Used immediately in front of the Model K Spinner. Of welded steel construction with Aluminum forming rollers. All steel cadmium plated. Furnished complete ready to use in $\alpha 3 / 8^{\prime \prime}$ plywood chest having metal reinforced corners.
Shipping Weight: 68 lbs Cat. No. PD26 Stock No. (897222)

Revised 1-1-57 NEALE MODEL D CABLE SPINNER


Designed for use by a construction crew to place and spin new cable or maintenance spinning of existing cable. Operates on ball bearing races with double drive mechanism which eliminate slipping. This machine is instantly adjustable to take cable from minimum size to $\alpha$ maximum diameter of $21 / 4$ inches. The spinning wire supply is always visible. A ratchet on the strand wheel makes it impossible for the spinning wire to slack off when pull on the tow line is released. The machine comes furnished with one lashing wire clamp, two adjustment wrenches, one screwdriver, one open end wrench, one tow rope, and packed in spinner chest. Machine size is: length 24 inches, diameter 10 inches, weighs 72 pounds.

This machine has compound gearing that eases the spinning operation on up grades. The hand crank has a positive snap action that can be changed from regular to compound drive.

## Catalog No. 300

Stock No. (894681)
NEALE SPINNING OR LASHING WIRE
Stock No. (891005)


CRAPO GALVANIZED STEEL CABLE LASHING WIRE

"C" Coated spinning method.

Crapo Galvanized ("C" Coated) Steel Cable Lashing Wire is a superior product manufactured specially for lashing cable to messenger strand by the modern

Produced from selected steel, this wire is carefully processed to insure ductility and ample tensile strength and then is given an extra heavy, smooth, tightly-adherent zinc coating to prolong its life. This coating, known as "Class C," is three times as heavy as standard Class " $A$ " or "double-galvanized" coating.

Crapo "C" Coated Cable Lashing Wire is produced in .091" and $.061^{\prime \prime}$ diameter. It is put up in neat, compact, thread-lay coils which can be furnished with straight or tapered arbor holes. COIL DIMENSIONS: Arbor hole for straight hub, $17 / 8$ inches, minimum; tapered hub, approximately 2 inches to $21 / 2$ inches. Outside diameter of coil (nominal) 6 inches; width (nominal) $11 / 2$ inches. Length of wire in coil: size .091", 325 feet, plus or minus 10 feet; size $.061^{\prime \prime}, 650$ feet, plus or minus 10 feet. Nominal weight of coil: size .091", 7.2 pounds; size $.061^{\prime \prime}, 6.45$ pounds.
Tied with easily removed cotton tubing. Each coil labeled to show size and approximate length. Packed in strong corrugated boxes, 6 coils to the carton. Approximate gross weight of carton ready for shipment: size $.091^{\prime \prime}, 44$ pounds; size $.061^{\prime \prime}, 40$ pounds. Tare weight, approximately 1 pound.
NOTE: Orders for spinning wire must specify whether for straight or tapered arbor.

| Cat. No. | Stock No. | Wire Size | Coil Length | Arbor Hole |
| :--- | :---: | :---: | :---: | :---: |
| C-091-S | $\mathbf{( 8 9 4 8 9 4 )}$ | $.091^{\prime \prime}$ | $325^{\prime}$ | Straight |
| C-091-T | $\mathbf{( 8 9 4 8 9 4 )}$ | $.091^{\prime \prime}$ | $325^{\prime}$ | Tapered |
| C-061-S | $\mathbf{( 8 9 6 0 6 6 )}$ | $.061^{\prime \prime}$ | $650^{\prime}$ | Straight |
| C-061-T | $\mathbf{( 8 9 6 0 6 6 )}$ | $.061^{\prime \prime}$ | $650^{\prime}$ | Tapered |

## CRAPO TYPE 430 STAINLESS STEEL CABLE LASHING WIRE

Developed primarily for use in highly corrosive atmospheres, this wire is being used also in other locations. Available in the following sizes and coil lengths:

| Stock No. | Diameter | Approx. <br> Coil Length | Nom. Wt. <br> per Coil |
| :--- | ---: | ---: | ---: |
| $\mathbf{( 8 9 6 0 6 8 )}$ | .065 inch | 450 feet | 5.0 pounds |
| $\mathbf{( 8 9 6 0 6 9 )}$ | .065 inch | 650 feet | 7.2 pounds |
| $\mathbf{( 8 9 6 0 7 0 )}$ | .061 inch | 735 feet | 7.17 pounds |
| $\mathbf{( 8 9 6 0 6 7 )}$ | .045 inch | 1200 feet | 6.37 pounds |

## ORDERING INFORMATION FOR NEALE SPINNING OR LASHING WIRE

| Cat. No. | Wire Size" | Ft. per Coil |  | Wire Type | Used With |
| :---: | :---: | :---: | :---: | :---: | :---: | Corrosion Conditions

STROMBERG-CARLSON

AERIAL CABLE SPLICERS' TENTS
Used in conjunction with pole platforms to protect cable splicers in cold and stormy weather. Made of $281 / 2$-inch best available quality cotton duck. Roof is spread and supported by means of a collapsible 3 -ribbed galvanized metal framework which fastens to cable suspension strand. On each of 2 opposite sides of tent there
 is an opening which can be laced from the inside after tent is erected.

| Cat No. | Stock No. | Lgth. In. | Width In. Height In. | Wt. Lb. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| S | $(890999)$ | 38 | $541 / 2$ | 104 | 38 |
| L | $(891000)$ | 54 | $541 / 2$ | 104 | 45 |

## NATIONAL CABLE RINGS

Easily and quickly placed on the strand and once in position are rigidly immovable.

## Easy to install.

Cable can be pulled in from either direction, and neither the strain of this operation nor the swaying of the cable by
 the wind, can move the ring from its original position, for the greater the strain, the tighter the grip.

Hot dip galvanized; made in all strand sizes. Specify strand size desired, as well as size of ring.

| Size Inches | Stock No. | Std. Pkg. | Wt. Lb. <br> per 1000 |
| :--- | :---: | :---: | :---: |
| 1 $1 / 2$ | $(890576)$ | 1000 | 47 |
| 2-Light | $(890577)$ | 500 | 66 |
| 2-Heavy | $\mathbf{( 8 9 0 5 7 8 )}$ | 500 | 90 |
| 2 $1 / 2$ | $(890579)$ | 500 | 108 |
| 3 | $(890580)$ | 400 | 125 |
| $31 / 2$ | $(890581)$ | 300 | 140 |
| 4 | $(890582)$ | 250 | 192 |
| $41 / 2$ | $(890583)$ | 200 | 210 |

## GALVANIZED CABLE RING SADDLES

Reduces ring cutting on lead sheath due to vibration and assures $\alpha$ longer life to the cable.

Made of steel, hot dip galvanized after forming.

| Size Inches | Stock No. | Std. Pkg. | Wt. Lb. per 1000 |
| :---: | :---: | :---: | :---: |
| $\mathbf{1} 1 / 2$ | $\mathbf{( 8 9 0 5 8 9 )}$ | 1000 | 90 |
| $\mathbf{2}$ | $\mathbf{( 8 9 0 5 9 0 )}$ | 1000 | 100 |
| $\mathbf{2} 1 / 2$ | $(890591)$ | 500 | 110 |
| $\mathbf{3}$ | $\mathbf{( 8 9 0 5 9 2 )}$ | 500 | 135 |
| $\mathbf{3} 1 / 2$ | $\mathbf{( 8 9 0 5 9 3 )}$ | 500 | 150 |

GROUND TENTS


This tent is used in conjunction with all kinds of ground work, especially when working in manhole. Covering is best available quality duck. Iron pipe frame has four legs, each of which is provided with $\alpha$ joint, so it can be folded back on itself and then the legs fold in toward the center of tent. Has no center pole, but is held up at the four corners. A 12 -inch sod cloth runs all around base of tent. No stakes included.

Size, $6 \times 6$ feet square base at bottom, 3 feet square at top, $61 / 2$ feet high.

Approximate weight, 60 pounds. Stock No. (890997)

## EXTRA LONG GALVANIZED CABLE RINGS

For placing a second cable on an existing messenger.

When this cable ring is used, service interruption and expense in time, labor and materials is eliminated.

Made in all strand sizes; specify strand size desired as well as size of ring.
Size In. Stock No. Lgth. Std. Wt. Lb.

|  |  | Inches | Pkg. per 1000 |  |
| :--- | :--- | :---: | ---: | ---: |
| 2 | $(890584)$ | $43 / 4$ | 500 | 114 |
| 2 | $(890585)$ | $51 / 4$ | 300 | 170 |


| $\mathbf{2}$ | $(890585)$ | $51 / 4$ | 300 | 170 |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{2} 1 / 2$ | $(890586)$ | $63 / 4$ | 250 | 216 |

$21 / 2$
$31 / 2$

Revised 1-1-57

## RELIABLE CABLE HANGERS

For supporting lead covered cable or insulated conductors to galvanized steel strand. Excellent with neoprene wire.

These zinc cable hangers wrap around the cable, securely attaching them to the messenger, minimizing creep bow and fatigue. No sheath cuts-no replacement of rings-no expensive equipment needed. Will outlast the cable.

The hangers bond the cable sheath and strand to give added protection against lightning. They are strong, easy to install and economical.

|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Ordering Information - Reliable Cable Hangers |  |  |  |  |  |
| Cat No. | Stock No. | Length | Size on $1 / 16$ In. | Cable trand s. Min. | Ship. Wt. Lb./M |
| Zinc |  |  |  |  |  |
| 1 | (890611) | 77/8" | $3 / 4$ " | $1 / 2^{\prime \prime}$ | 35 |
| 2 | (890612) | $11^{\prime \prime}$ | $11 / 8^{\prime \prime}$ | $1 / 2^{\prime \prime}$ | 53 |
| 3 | (890613) | $14^{\prime \prime}$ | $15 / 8^{\prime \prime}$ | $1 / 2{ }^{\prime \prime}$ | 73 |
| 4 | (890614) | $16^{\prime \prime}$ | $2^{\prime \prime}$ | $11 / 2^{\prime \prime}$ | 92 |
| Copper |  |  |  |  |  |
| 1 C | (895789) | 77/8" | $3 / 4^{\prime \prime}$ | $1 / 2^{\prime \prime}$ | 30.5 |
| 2 C | (895790) | $11^{\prime \prime}$ | $11 / 8^{\prime \prime}$ | $1 / 2^{\prime \prime}$ | 44 |
| 3 C | (895791) | $14^{\prime \prime}$ | $15 / 8{ }^{\prime \prime}$ | 1/2" | 78 |
| 4 C | (895792) | $16^{\prime \prime}$ | $2^{\prime \prime}$ | $11 / 2^{\prime \prime}$ | 99 |

Standard Package, either Zinc or Copper-100.

## DIAMOND 1-HOLE STEEL CLAMPS

Makes a very efficient fasten-
 ing where lighter construction is to be used, and where it will not be subjected to severe strains.

Made of cold rolled mild steel annealed and Diamond galvanized after forming.

| Cat. No. | Stock No. | Cable Size | Nearest Pipe Size | Nearest <br> Thinwall <br> Conduit | Size Stock | Wt. Lb per 100 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - L-3 | (890629) | 3/16" |  |  | $1 / 2^{\prime \prime} \times .072^{\prime \prime}$ | 1 |
| L-4 | (890630) | $1 / 4^{\prime \prime}$ |  |  | 1/2" ${ }^{\prime \prime}$ x .062" | 1 |
| L-5 | (890631) | 5/16" |  |  | 1/2" x .062" | 1 |
| L-6 | (890632) | $3 / 8{ }^{\prime \prime}$ | $1 / 8^{\prime \prime}$ |  | 1/2" x $048{ }^{\prime \prime}$ | 1 |
| L-7 | (890633) | 7/16" |  |  | 1/2" x $0448^{\prime \prime}$ | 1.1 |
| L-8 | (890634) | $1 / 2^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $3 / 3^{\prime \prime}$ | 1/2" x . 048 " | 1.2 |
| L-9 | (890635) | 9/16" |  |  | 1/2" x . $048{ }^{\prime \prime}$ | 1.2 |
| L-10 | (890636) | 5/7" |  |  | 1/2" $\times$. $048^{\prime \prime}$ | 1.3 |
| L-11 | (890637) | 11/16" | $3 / 8^{\prime \prime}$ | $1 / 2^{\prime \prime}$ | 5/8" $\times$. 062 " | 3 |
| L-12 | (890638) | $3 / 4^{\prime \prime}$ | $1 / 2^{\prime \prime}$ |  | $1116^{\prime \prime} \times .062^{\prime \prime}$ | 4.5 |
| L-14 | (890639) | $7 / 8^{\prime \prime}$ |  | $3 / 4{ }^{\prime \prime}$ | 11/1" ${ }^{\prime \prime}$ x $0.062^{\prime \prime}$ | 5 |
| L-16 | (890640) |  | $3 / 4{ }^{\prime \prime}$ |  | $3 / 4{ }^{\prime \prime} \times$ x 080 " |  |
| L-18 | (890641) | $11 / 8^{\prime \prime}$ |  | $1^{\prime \prime}$ | 3/4" x .080" | 7.5 |
| L-20 | (890642) | $11 / 4$ " | $1^{\prime \prime}$ |  | 7/8" $\times$. $115^{\prime \prime}$ | 15 |
| L-24 | (890643) | $11 / 2^{\prime \prime}$ |  | $11 / 4{ }^{\prime \prime}$ | 7/8" $\times$. $115^{\prime \prime}$ | 16 |
| L-26 | (890644) | $15 / 8^{\prime \prime}$ | $11 / 4{ }^{\prime \prime}$ |  | $7 / 8^{\prime \prime} \times .115^{\prime \prime}$ | 17 |
| L-28 | (890645) | $13 / 4$ " |  | $11 / 2^{\prime \prime}$ | 7/8" $\mathrm{m}^{\prime \prime}$. $115^{\prime \prime}$ | 19 |
| L-30 | (890646) | $17 / 8^{\prime \prime}$ | $11 / 2^{\prime \prime}$ |  | $7 / 8^{\prime \prime} \times .115^{\prime \prime}$ | 20 |

Std. Pkg. L-3-L-14, 500 pcs., L-16-L-18, 250 pcs., L-20-L-30, 100 pcs.

## DIAMOND AERIAL CABLE SUPPORTS



To supply flexible supports at each side of the pole to prevent ring cut. Strap is wrapped around the cable three times over itself, passing through the hinge member. Adjustable to any height. The supports are placed two on each side of each pole, 20 inches apart.
Composed of a zinc strap, $\alpha$ hinge joint member which holds free end of zinc strap in position on a soft galvanized $U$ shaped wire 5 inches long.

| Cat. No. | Stock No. | Length Strap Inches | Diam. of Cable or Sleeve In. | Circum- <br> ference Inches | Std. Ctn. | Wt. Lb per 1000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 891 | (890615) | 10 | 3/4 | 25/16 | 500 | 84 |
| 892 | (890616) | 16 | $13 / 16$ | $35 / 8$ | 500 | 110 |
| 893 | (890617) | 22 | 2 | $65 / 16$ | 300 | 130 |
| 894 | (890618) | 28 | $25 / 8$ | $85 / 16$ | 300 | 162 |
| 895 | (890619) | 34 | $31 / 8$ | 10 | 300 | 186 |
| 896 | (890620) | 50 | $\dagger 5$ | $15^{13 / 16}$ | 200 | 256 |
| 897 | (890621) | 64 | +61/2 | 201/2 | 200 | 315 |
| *897 | (890622) | 64 | +61/2 | $201 / 2$ | 200 | 350 |

*Has $10^{\prime \prime}$ wire. $\dagger$ Maximum diameter of sleeve.
To order Aerial Cable Supports less "U" shaped wires (for lashed cable), specify letter "L" as prefix to catalog number. Example: L-891 for $10^{\prime \prime}$ strap.

## DIAMOND STRAND CONNECTOR



Diamond Strand Connectors are designed for connecting up dead ends of messenger strands when they occur between poles. With this strand connector the wire strands are looped in opposite directions and held with guy clamps.

The improved design will accommodate up to $25,000 \mathrm{lb}$. strand. The enlarged oval-shaped holes facilitate threading strand through the connector. The larger body diameter around which the strand is looped in the connector distributes pressure over more of the strand.

The deeper grooves follow a smooth continuous arc forming a perfect seat for the strand, eliminating vibration wear.
Net weight each, 1 lb .
Catalog No. 867 Stock No. (893405)


## MARLINE TWINE

Furnished in one-pound balls in both the 2 and 3 -ply varieties.

| Catalog No. | Stock No. | Ply |
| :---: | :---: | :---: |
| 415 | $(890599)$ | 2 |
| 416 | $\mathbf{( 8 9 0 6 0 0 )}$ | 3 |



Of brazed and welded construction throughout, the outer jacket keeps material at correct pouring temperature for a long period. The heat conductor tube assures even melting of compound, allows gas to escape, and prevents solidified compound from exploding when heating. Double ring on bail permits attaching of hand line for raising or lowering kettle to work. Capacity 5 Qts. Weight $61 / 2 \mathrm{lbs}$.

Catalog No. 53
Stock No. (894982)


These pans, made from 18 gauge steel, are specifically designed for splicer's use. Corners are welded and top edges double hemmed. Drain plug bushings are brazed into the bottom. Handle straps and dee rings are securely riveted.

| Cat. No. | Stock No. | Length | Width | Depth | Weight |
| :---: | :---: | ---: | :---: | ---: | ---: |
| 67 | $(894983)$ | $24^{\prime \prime}$ | $14^{\prime \prime}$ | $31 / 4^{\prime \prime}$ | $81 / 2 \mathrm{lbs}$. |
| 68 | $(894984)$ | $22^{\prime \prime}$ | $13^{\prime \prime}$ | $21 / 4^{\prime \prime}$ | $63 / 4 \mathrm{lbs}$. |



## PARAFFIN POTS

Made from 16 gauge steel, this pot has electric seam welded construction throughout. Indented bottom section fits securely the top plate lugs of furnace. 9 Qt. capacity. Weight 5 lbs .

Catalog No. 56
Stock No. (894985)

## PARAFFIN DIPPER

Drawn from 20 gauge steel, has rolled bead completely around top with pouring lip on each side. Sturdy handle, $93 / 4^{\prime \prime}$ long riveted to dipper body. Di ameter top, 4-13/16"; bottom $37 / 8^{\prime \prime}$. Depth $31 / 4^{\prime \prime} .1$ Qt. capacity.
 Weight 1 lb .
Cat. No. 57
Stock No. (894986)
DOE'S PLUG BURNISHING PASTE


For polishing cord plugs in telephone exchanges. It insures an electrically perfect contact and insulates between tip and ring.

Guaranteed to be absolutely non-corrosive and electrically perfect.
Stock No. (890748)

## DOE'S COMMUTATOR BURNISHING PASTE

For Commutators - Slip Rings - and Any Electrical Contacts.
This preparation cleans, polishes and insulates between the commutator segments. Assures perfect contact and assures the elimination of noise, sparking and other commutator troubles.

Stock No. (890749)

## NO. O KORITE CABLE COMPOUND

No. 0 Korite is a non-corrosive, acid-resisting, non-conducting material applied to cables. Sets quickly and forms a protection against chemical fumes.

For new cable 100 pounds coats 325 feet of 25 pairs, 300 feet of 50 pairs, 200 feet of 75 pairs, 165 feet of 100 pairs, 150 feet of 125 pairs, 125 feet of 150 pairs, 100 feet of 200 pairs of No. 22 B. \& S. gauge new cable, if properly applied.

Sold in 100 pound cartons. Stock No. (890713)

## NO. 32 METAL RIM TAGS


tag, $1^{\prime \prime}$ diameter. 100 in $\alpha$ bunch

Designed especially for use on heavy merchandise which will receive much handling. Cut from stock which is clear white or evenly colored (red, green, or yellow) with an exceptionally fine writing surface, The rims, of bright, nontarnishing, smoothly cut metal, protect the edges, prevent bending, and improve the appearance. Strung with strong twine in colors to match the tags. Size of

500 in a box Stock No. (890746)


## PROTEK-SORB DESICCANT

## For Drying Cable Splices

Use of Protek-Sorb Desiccant is an improved method of drying cable splices eliminating the hazards and inconveniences of boiling-out cable splices with hot, melted paraffin. Splices are dried by pouring a recommended quantity of Desiccant into the splice before it is closed.
This Desiccant is a granular material, chemically inert and non-corrosive. It will not dust, cake, powder nor liquefy when used-even when completely saturated it looks and feels perfectly dry. Has exceptionally high dielectric constant.

160 gram can ( 12 per case) Stock No. (890870)
650 gram can (12 per case) Stock No. (890871)

## RUBBER INSULATING BANDAGE

Used for temporary insulation to protect cable splices from moisture, or as a temporary barrier for protection from high-tension wires. Roll is 14 feet long, four inches wide.
Stock No. (894917)

## CABLE WRAPPING CLOTH

A closely woven cotton fabric impregnated with waterproofing compound. For use in temporarily closing splices and openings in sheath of aerial cables to protect them from the weather. Furnished in sheets 24 inches by 38 inches or in yardage approximately 38 inches in width.
Stock No. (895192)

## UNIQUE SOLDER POURING LADLE



Pours the metal drop by drop or in a steady stream, exactly where you want it. Positive close-to-bowl grip on the cool wood handle reduces overhang to $\alpha$ minimum; eliminates strain; makes it easy to direct and control the flow of molten metal. Pressed steel ladle treated so solder cannot stick. Lasts a lifetime. Wood handle inexpensive and easy to replace, only a screwdriver needed.

| Dia. Bowl | Stock No. | Capacity | Weight |
| :--- | ---: | ---: | ---: |
| $21 / 2^{\prime \prime}$ | $(890763)$ | $1 / 8$ pint | 10 oz. |
| $3^{\prime \prime}$ | $(890764)$ | $1 / 4$ pint | 12 oz. |
| $31 / 2^{\prime \prime}$ | $(890765)$ | $3 / 8$ pint | 14 oz. |
| $\mathbf{4}^{\prime \prime}$ | $(890766)$ | $1 / 2$ pint | 16 oz. |

METAL POURING LADLES


## FLAT WIPING CLOTHS

Furnished in 16 -ply herringbone and 8 -ply moleskin.


## FORMED WIPING CLOTHS

Each cloth wrapped separately with size of cloth indicated on wrapper.

Williams formed flexible finished wiping cloths.


Readily prepared, not formed, straight edge.

Herringbone Moleskin Stock No. Stock No.
$5 \times 5 \quad(890798) \quad$ (890803)
$6 \times 6$ (890799) (890804)
$6 \times 7$ (890800) (890805)
$7 \times 8$ (890801) (890806)
$8 \times 8$ (890802) (890807)

All wiping cloths well prepared; ready for use without breaking in.

MELTING
Catalog No.
398
398
398

## LACING TWINE

Used for lacing wires into cables or lacing fanned out ends. Waxed linen; 6 and 12 Cord.

Put up in 1 lb . tubes.

| Stock No. | Description |
| :--- | :---: |
| (890741) | 6 Cord |
| (890742) | 12 Cord |

## MUSLIN TAPE

Muslin tape is used for wrapping cable splices before slipping lead sleeve into position. It is an unbleached muslin having a $48 \times 48$ weave, furnished 4 and 2 inches wide in rolls of 8 yards each. Edges are pink cut to prevent raveling.

| Width Inches | Stock No. |
| :---: | :---: |
| 2 | $(890744)$ |
| 4 | $(890745)$ |

NO. 295 HARDWOOD DRESSERS


Made of hardwood for shaping and dressing lead sleeving, etc. Weight, 15 pounds per dozen. Stock No. (890770)

NO. 450 WIRE SOLDER


Wire solder is produced by an extrusion process. It can be supplied in practically any desired diameter from $1 / 40^{\prime \prime}$ to $29 / 64^{\prime \prime}$ and of any specified composition.

Made in grade 35-65. Furnished in spools of from 5 to 50 lbs . Stock No. (894189)

## DUTCH BOY WIPING BAR SOLDER

Dutch Boy bar solder is available in several grades-each one of which is suitable for certain kinds of work and is designated by number. The grades with the lowest numerical designation contain the most tin.

## 

## DUTCH BOY 111

## 50/50 Tin Content

This is the highest grade solder sold under the Dutch Boy trademark. It is guaranteed to be made of new lead and tin, carefully mixed in equal parts ( $50 \%$ tin and $50 \%$ lead). Its melting range is $361^{\circ} \mathrm{F}$ to $421^{\circ} \mathrm{F}$. Dutch Boy 111 is bright, strong and free from impurities. It flows easily, covers more area and has superior adhesion. It is widely used for new roofing work and is popular among tinsmiths, manufacturers and canners. Sold in bars weighing approximately $11 / 2 \mathrm{lbs}$. Stock No. (890844)

## DUTCH BOY 776 40/60 Tin Content

Dutch Boy 776 contains an unusually large percentage of tin for solder of this grade. It has a melting range of $363^{\circ} \mathrm{F}$ to $450^{\circ} \mathrm{F}$. When used by plumbers for wiping it can be reduced slightly with more lead. Sold in bars weighing approximately $11 / 2 \mathrm{lbs}$. and ingots weighing 5 lbs . Stock No. (890845)

## ALLEN SODERING PASTE

Standard Formula. Safest sodering paste made-fast working- $\alpha$ convenient corrosion-free, soft form of flux. Adheres to the surface while you soder. Assures secure electrical and mechanical joints. Saves time. Triples strength of the soder. Makes soder selffluxing. Underwriters Laboratory approved listing.


| Size | Stock No. | No. Per Carton |  |
| ---: | ---: | :---: | :---: |
| 2 oz. | $(890851)$ | 24 |  |
| 4 oz. | $(890852)$ | 24 |  |
| $1 / 2 \mathrm{lb}$. | $(890853)$ | 12 |  |
| 1 | lb. | $(890854)$ | 6 |
| 5 | lb. | $(890855)$ | 1 |

## KESTER PLASTIC ROSIN-CORE SOLDER

For electrical and radio work. Contains a plastic rosin flux that will not corrode. Accepted standard for inside wiring and radio work.

Standard size No. 5 Kester rosin core solder is approximately $3 / 32$ inch in diameter, running about 50 feet to the pound, in 1-pound spools. In sizes from approximately $1 / 4$ inch to about .040 inch in diameter. Ribbon or flat
 type. Furnished in 1 and 5 pound spools.

```
1 Lb. Spool
Stock No. (890850)
5 Lb . Spool
Stock No. (894187)
```

A special size Kester Plastic Rosin-Core Solder, $\frac{1}{16}{ }^{\prime \prime}$ in diameter, is available on request.

## KESTER ACID CORE SOLDER

For general soldering. Used on both new and old work. Also recommended for heavy outside electrical wiring.

Standard size No. 3 about $1 / 8$ inch in diameter. About 30 feet per pound.

As heat is applied $\alpha$ scientific flux flows from tiny pockets inside hollow wire form of Kester; melting, it forms a permanent bond. Requires only
 heat. Furnished in 1 and 5 pound spools.

1 Lb. Spool
Stock No. (890849)
5 Lb . Spool
Stock No. $(894186)$

## KESTER STEARINE CORE SOLDER

Soft flux solder particularly adapted to work on lead sheathed cable. Available in $1 / 8^{\prime \prime}$ or $3 / 32^{\prime \prime}$ diameter, in 1 or 5 pound spools.

## COPE SOLDERING COPPERS

Maple Handle


The Cope Soldering Coppers are especially designed for use in the utility field, with features which make them superior to the ordinary commercial copper. The maple handle is securely fastened to the shank by steel pins, yet is insulated to protect it from burning. The handle is steel bound at both ends and has a heavy carrying ring.

| Cat. No. | Stock No. | Size | TYpe | Ship Wt. |
| :--- | :--- | :--- | :--- | ---: |
| 531 | $(895193)$ | 1 Lb. | Pyramid | 11/4 Lb. |
| 532 | $(895194)$ | 2 Lb. | Pyramid | $21 / 4 \mathrm{Lb}$. |
| 533 | $(895195)$ | 3 Lb. | Pyramid | $31 / 4 \mathrm{Lb}$. |
| 534 | $(895196)$ | 2 Lb. | Chisel | $21 / 4 \mathrm{Lb}$. |

NO. 302 DRIFT PLUGS

For expanding ends and smoothing out lead sleeves. Dogwood; sizes, 1, 11/4, 11/2 and 2 inches.

Stock No. (890771)


## NO. 301 TURN PINS



For expanding ends and smoothing out lead sleeves. Dogwood; sizes, $21 / 4,21 / 2$ and $23 / 4$ inches.

Stock No. (890772)

NO. 304 SHAVE HOOKS


Used for scraping lead sleeves, cable ends, etc. Has removable blade.

Cat. No.
No. 304, with One Oval Blade
No. 305, Oval Blade Only
No. 305, Half Oval Blade Only
No. 305, Triangular Blade Only

Stock No.
(890774)
(890775)
(890776)
(890777)

NO. 1515-1 KLEIN'S CABLE SHEATH
Splitting Knives


Extra heavy. Knife edge is tempered and ground to a keen edge. Handle is made of leather. Weight per dozen, 12 pounds. Stock No. (890773)

## CABLE PASTERS

A 2-inch wide paper tape gummed on one side.

600 ft . per roll.
Stock No. (890711)

## GENERAL INDEX

A complete alphabetical index with cross references for all the products shown in this section or any of the other sections will be found in the center of this catalog.

BERNZ DISPOSABLE CYLINDER PROPANE TORCHES AND LAMPS

The Bernz-o-Matic line of propane torches and lanterns is a definite asset to the lineman or inside repairman whose use of such equipment is not excessive. Replaceable tips and disposable cylinders used in either torch or lantern add to utility at low cost.


General purpose torch which has the following advantages:

1. Instant lighting-no pumping, priming, filling or spilling.
2. Precision tip flame in two interchangeable sizes-gives concentrated, directed heat for close work.


TX-9
3. Disposable cylinder-used with any Bernz torch head. Contains enough fuel for 15 continuous hours burning time. Self-sealing valve prevents leakage.
4. Lightweight - complete unit, fully loaded. weighs only 3 lb .
5. Free of maintenance and completely safe.

## TX-9 Replacement Unit

The propane cylinder, TX-9 is the basic unit, which in combination with a choice of tips or lantern stand and reflector make the complete assembly. Self-sealing feature allows it to be removed at any time. No carbon clogging or deposits requiring cleaning.


## Propane Gas Lantern



TX-700 Lantern

Long-burning, safe, bright light. Always ready-as easy as an electric torch and illuminates a much wider area. For cable work at night, on platforms or in tents; also for emergency repairs to trucks and as warning lamps. Uses the same TX-9 disposable cylinder used with torch heads. Self-sealing tank. Fuel can be stored indefinitely without evaporation.

## General Ordering Information

| Cat. No. | Stock No. | Description | Weight |
| :---: | :---: | :---: | :---: |
| TX-10 | (895686) | Pencil Flame Burner Torch (complete with disposable fuel cylinder) | 3lb. |
| TX-11 | (895687) | Utility Flame Burner Torch (complete with disposable fuel cylinder) | - 3 lb . |
| TX-9 | (895688) | Replacement Fuel Cylinder | 2 lb .2 oz . |
| TX-700 | (895803) | Propane Gas Lantern | 6 lbs .10 oz . |
| Catalog No. |  | Description | Weight |
| TX-1 | All Brass | Pencil-Flame Burner Unit | 10 oz . |
| TX-2 | All Brass | Utility Burner Unit | 10 oz . |
| TX-300 | Flame Spr | eader (use with TX-2) | 5 oz . |
| TX-400 | Small Sold | dering tip (use with TX-1) | 4 oz . |

## UNIQUE GASOLINE BLOW TORCHES



## No. 0

A safe, compact torch for the tool kit -with a hundred practical uses. A pleasing design this is certain to attract attention anywhere. Beautifully finished in red and black. Fine for use in close quarters and for sweating joints on small size copper tubing. Flame can be controlled to fine pointed jet. Burns in any position. Dimensions $1 \times 6^{\prime \prime}-1900^{\circ}$ F. Closing valve forces needle through orifice, cleaning it of foreign particles. Needle, orifice block and channel plugs are removable-threaded-for replacement or for cleaning of generator channels. Top filler opening. Flat tank $23 / 4^{\prime \prime}$ width $\times 5^{\prime \prime}$. Generator windshield included.

Cat. No.
0

Stock No.
(894852)

Description
1 Pint, Wt. 3 lb.

No. 3
A medium size flame torch for service under severe weather conditions. Used extensively by Public Utilities, Railroads, Municipalities and Electricians and mechanics whose work requires the use of a medium size flame. Long horizontal fuel veins drilled parallel with and directly under the flame. Produces a forceful blast flame-lx7" $-2000^{\circ}$ F. Flame can be regulated down to a small pointed jet. closing
 valve forces cleaning needle through orifice, keeping it clean and full size. Removable cleaning needle and orifice block. Removable fuel vein plugs. Fill thru bottom funnel filler.

| Cat. No. | Stock No. | Description |
| :---: | :--- | :---: |
| 3 | $(894854)$ | 1 Quart, Wt. 4 lb. |

Cat. No.
3
IEID


No. 50
The Public Utility standard shield. A 4-panel shield with welded steel grate and supporting brackets. Broad support for large pots and kettles. Made of galvanized iron. Panel edges rolled around $1 / 4^{\prime \prime}$ rod--no sharp corners. Completely rust-proof.

4 Panels fold flat for carrying and storing. Weight 27 pounds. Cat. No. 50 Stock No. (894850)

UNIQUE GASOLINE HEAVY DUTY PUBLIC UTILITY FURNACE


Powerful blast flame melts 50 pounds solder in 10 minutes. The finest all weather gasoline furnace. Thousands of units in daily use by Utilities, Municipalities, Railroads, heavy industries, sheet metal workers and plumbers for melting solder, paraffin compounds; for heating solder-irons.
GENERATOR-Fitted with replaceable orifice block. Easily cleaned thruout by removing plugs from straight lined channels. Windproof, requiring no additional protection. When the revolving shield is open the generator is in full view for priming and attention. The flame is $2000^{\circ}$ F., $11_{2}^{\prime \prime} \times 12^{\prime \prime}$ length. From small jet to full blast it is finely controlled without overheating.
TANK—Of heavy steel with broad base. Welded thruout, shock ring protects bottom.
TOP PLATE-Rugged, with ample lug support for large pots and kettles. The handle locks to support solder-irons.

| Cat. No. | Stock No. | Description |
| :---: | :---: | :---: |
| 50 | $(894855)$ | $11 / 8$ Gal., Wt. 15 lb. |
| 53 | $(894856)$ | 1 Gal., Wt. 13 lb. |

No. 50-C
Protects the public from flame and hot material. It shields the furnace from wind, affording storage space for pot, ladle and small tools. Made of galvanized iron. Panel edges rolled around $1 / 4^{\prime \prime}$ rod-no sharp corners. Completely rust-proof.

3 Panels fold flat for carrying and storing. Weight 15 pounds. Cat. No. 50-C Stock No. (894851)


## UNIQUE KEROSENE HEAVY DUTY UTILITY FURNACE

Powerful blast flame melts 50 pounds solder in 10 minutes. Specify the kerosene furnace if you have trouble getting unleaded gasoline. It starts on kerosene in 4 minutes and is just as efficient in every way as a gasoline furnace. Thousands of units in daily use by Utilities, Municipalities, Railroads, Telephone and Heavy Industries, Plumbers and others, for melting solder, paraffin and compounds.
GENERATOR-The figure-8 generator burns kerosene without carbon formation, producing a clean flame of $2000^{\circ}$ F. Regulating the flame volume valve
 for full or reduced flame automatically passes the scraper blades under orifice, clearing it of foreign particles.
TANK-Made of Steel, copper brazed thruout-with powerful dependable pump.
TOP PLATE-Rugged, with ample lug support for large pots and kettles.

| Cat. No. | Stock No. | Description |
| :---: | :---: | :---: |
| 55 | $(894857)$ | 1 Gal., Wt. 13 lb. |

## PREST-O-LITE 5-in-1 OUTFIT



Five distinct outfits for $\alpha$ multitude of uses where it is necessary to apply the proper flame and exactly the right amount of heat to $\alpha$ job. Includes No. 402 Torch Handle, Tank Union for B and MC Tanks, four Torch Stems in graduated sizes, and No. 8 Soldering Iron. Also 6 ft . of hose, and metal carrying case.

Does not include Pressure Regulator, but this may be ordered separately. (See description on this page.)

Catalog No.
$30 \times 03$

Description
Stock No.
(890905)
(replaces 0-6109)

## PREST-O-LITE 4-in-1 OUTFIT



The 4-in-1 Outfit has the same No. 402 handle and open flame stems as the 5 -in-1, but omits the soldering iron. Used in the same manner for heating, soldering and light brazing. Comes in $\alpha$ waterproof carrying roll of vinylite, with separate pockets for each part.

Does not include Pressure Regulator, but this may be ordered separately.
Catalog No.

> Description
> 4-in-1 Standard Outfit
> (replaces 0-6343)

Stock No. $30 \times 06$
(890895)

## Note

The illustrations above show the Precision Models of the 5-in-1 and 4 -in-1 Outfits. The only difference between the models illustrated and the Standard Model is that the Precision Model uses No. 401 Handle with shut-off valve (see below), and comes with a Pressure Regulator which is not included in the Standard Model.


No. 402 Standard Torch Handle


No. 401 Precision Handle


R-411 ACETYLENE

## REGULATOR

The Prest-O-Lite R-411 Acetylene Pressure Regulator is $\alpha$ fully adjustable type which may be set for precisely the correct working pressure regardless of how much gas is in the tank. The gauge shows at a glance the contents of the tank. Often saves its cost by eliminating use of excessive pressures. Pressure adjustment screw regulates pressure from 1 to 13 lb . per sq. inch.

Description
Used with MC Tank
Stock No. Catalog No. R-411-MC
(895197)

## PREST-O-LITE STYLE MC ACETYLENE TANKS

Prest-O-Lite Gas is available in steel shell tanks which deliver pure acetylene at the turn of a valve. In these tanks it is freeze-proof and of guaranteed purity. Refills can be obtained for the price of the gas alone.

| Style | Capacity <br> Co. | Height <br> CubicFt. | Dia. <br> Inches | Weight <br> Inches | Stock No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MC | 10 | 15 | 4 | $91 / 2$ | (890907) |

## PREST-O-LITE EXTRA STEMS

Prest-O-Lite Torch Stems, as used in the 5 -in-1 and 4-in-1 Outfits are available separately on special order.


TCI Library www.telephonecollectors.info

## STROMBERG-CARLSON

## Protectors



A full line of outdoor and indoor protectors, cable terminals and fuses - rugged and dependable. Stromberg-Carlson recommends only the best, thoroughly proven equipment.

## PROTECTORS

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## Reliable Type "B" PROTECTED CABLE TERMINALS

Reliable Type B Cable Terminals are made for three standard cable terminal fuses.

These terminals are ruggedly made of non-corrosive alloys which insure a life equal to that of the cable itself.

The B-27 cable terminal is equipped with No. 27L-5-amp. ceramic fuses.

The B-56 cable terminal is equipped with No. 56 fibre 5 -amp. asbestos-lined fuses.

The B-55 cable terminal is equipped with No. 55L 5 ampere ceramic fuses.

Supplied with 7 -foot. No. 22 AWG stub. Equipped with P495 Sawtooth Discharge Blocks and P1384 Carbons.


| Capacity | Stock No. | Height Overall | Stub Data | $\begin{aligned} & \text { Ship. Wt. } \\ & \text { Ea. (Lbs.) } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 11 Pair | (890551) | 141/2" | Less Stub | 11 |
| 11 Pair | (890552) | $141 / 2^{\prime \prime}$ | With 7' Stub | $16^{1 / 2}$ |
| 16 Pair | (890553) | $171 / 2^{\prime \prime}$ | Less Stub | 13 |
| 16 Pair | (890554) | 171/2" | With 7' Stub | 191/2 |
| 26 Pair | (890555) | 233/4" | Less Stub | $181 / 2$ |
| 26 Pair | (890556) | 233/4" | With 7' Stub | 27 |

## COOK TYPE S-20 POLE CABLE TERMINAL AND PROTECTOR MOUNTING



The Type S-20 Pole Cable Terminal and Protector Mounting is a combined protected and unprotected all steel cable terminal. Type $H$ Protector Mounts may be installed as required.

The self soldering nozzle is located close to the pole to bring the cable behind the subscribers' drops. The mounting base is open at the back adjacent to the pole. A separate mounting bracket shaped to fit the pole provides easy installation without gaining the pole. Drop wires enter the terminal through individual insulating knockout holes.

Metal fanning strips with insulating bushings are mounted in front of the cable chamber. All metal parts are non-corrosive. The gasketed sealing plate of the cable chamber is easily removed from the front.

Terminal Less Stub

| Cat. No. | Stock No. | Capacity | Dimensions | Ship. Wt. |
| :--- | :--- | ---: | :---: | ---: |
| $506-1800$ | $(890515)$ | 6 pairs | $12^{\prime \prime} \times 9^{\prime \prime}$ | 11 lbs. |
| $506-1820$ | $\mathbf{( 8 9 0 5 1 7 )}$ | 11 pairs | $151^{\prime \prime} \times 9^{\prime \prime}$ | 15 lbs. |
| $506-1840$ | $\mathbf{( 8 9 0 5 1 9 )}$ | 16 pairs | $19^{\prime \prime} \times 9^{\prime \prime}$ | 18 lbs. |
| $506-1870$ | $\mathbf{( 8 9 0 5 2 1 )}$ | 26 pairs | $28^{\prime \prime} \times 9^{\prime \prime}$ | 23 lbs. |

Terminal With Stub

| $506-1805$ | $(890516)$ | 6 pairs | $12^{\prime \prime} \times 9^{\prime \prime}$ | 18 lbs. |
| :--- | ---: | ---: | ---: | ---: |
| $\mathbf{5 0 6 - 1 8 2 5}$ | $\mathbf{( 8 9 0 5 1 8 )}$ | 11 pairs | $151 / 2^{\prime \prime} \times 9^{\prime \prime}$ | 23 lbs. |
| $506-1845$ | $(890520)$ | 16 pairs | $19^{\prime \prime} \times 9^{\prime \prime}$ | 28 lbs. |
| $506-1875$ | $\mathbf{( 8 9 0 5 2 2 )}$ | 26 pairs | $28^{\prime \prime} \times 9^{\prime \prime}$ | 35 lbs. |

## Cook Type S-6 PROTECTED CABLE TERMINALS

For terminating lead covered cable. Cable chamber has removable face plate fastened with machine screws and gasket sealed. Self-soldering nozzle.

Cable wires, set in rubber blocks, are carried from inside of cable chamber through hollow brass studs and soldered to the tinned end of the stud.

Spring phosphor bronze fuse clips hold the fuses under constant tension.

The S-6 is equipped with Cook A-7 wood fuses of 5 amperes, which blow at rating. The lightning arresters consist of Tru-Gap Dischargers and hard grooved carbons which are held under permanent tension by separate phosphor bronze springs.

On the drop side, both screw and washer and solder connections are provided. Diameter 9 inches.
Cat. No.
112-1706
$112-1709$
$112-1712$
$112-1715$
$112-1716$

| Terminal With Stub |  |  |  |
| :--- | :---: | :---: | :---: |
| Stock No. | Capacity |  |  |
|  |  |  | Height In. |
| Ship. Wt. <br> Pounds |  |  |  |
| (890483) | 11 pair | 14 | 27 |
| (890485) | 16 pair | $171 / 2$ | 30 |
| (890487) | 26 pair | $261 / 2$ | 38 |
| (890489) | 51 pair | $391 / 2$ | 82 |
| (890491) | 102 pair | 79 | 164 |

Cat. No.
112-1700

112-1701
112-1702
112-1703
112-1704
Terminal Less Stub

| Stock No. | Capacity | Height In. | Ship. Wt. <br> Pounds |
| :--- | :---: | :---: | :---: |
| (890482) | 11 pair | 14 | 16 |
| (890484) | 16 pair | $171 / 2$ | 19 |
| (890486) | 26 pair | $261 / 2$ | 27 |
| (890488) | 51 pair | $391 / 2$ | 65 |
| (890490) | 102 pair | 79 | 130 |

## Reliable Type "RP"

## PROTECTED CABLE TERMINALS

The Reliable RP is a six pair reversible protected cable terminal that is compactly designed and made of corrosion resistant aluminum alloy throughout, resulting in $\alpha$ very light-weight but substantial structure. Insulation is molded rubber phenolic.
The Reliable RP is designed to meet requirements for $\alpha$ small protected terminal of high quality and fine workmanship. It is equipped with P495L self-cleaning saw-tooth discharge blocks and P663 carbons. Made in two types with two standard terminal fuses.

Over-all height, 11 inches. Stub, 6 feet. Shipping weight, $10^{3 / 4}$ pounds.

| Cat. No. | Stock No. | Capacity | Fuse |
| :--- | :---: | :---: | :---: |
| RP-27 | $(890550)$ | 6-pr. | 27L 5-amp. |
| RP-56 | $(894900)$ | 6-pr. | $56 \quad$ 5-amp. |

# STRAND TYPE CABLE TERMINALS, PROTECTED OR UNPROTECTED 

The new Strand Cable Terminals are offered in 11 pair, 16 pair and 26 pair for terminating either plastic or lead sheathed cable. These can be mounted out in the open or on a wall or pole, wherever it is easiest to work. Can be ordered with or without protection.

## Reliable Type "ST" POLE MOUNTED CABLE TERMINAL Protected or Unprotected



The ST-26 type terminal shown here is designed for vertical mounting on a pole or building; otherwise it is similar to the Strand Terminals Type ST-11 and ST-16 described on a following page. This terminal is furnished with a detachable mounting bracket, for pole or surface mounting. Can be used with either lead sheathed or plastic insulated cable. If desired, the cable stub can be reversed so that it will extend from the bottom of the terminal housing. This can be done by simply reversing the housing on the bracket and sliding the cover on from the top.

Reinforced cast resin binding post terminal blocks.

Reliable ST- 26 for Pole or Wall Mounting

| Catalog No. <br> ST-26 | Stock No. | Description |
| :--- | :--- | :--- |
| (895782) | 26 pr. unprotected |  |
| ST-26P | $\mathbf{( 8 9 5 7 7 6 )}$ | 26 pr. protected (cable) |
| ST-26PS | $\mathbf{( 8 9 5 7 7 9 )}$ | 26 pr. station protection |

## PROTECTOR UNITS FOR "ST" TERMINALS



The 506 protector unit is designed for cable protection and is used in the ST-11P, ST-16P and ST-26P terminals. This unit provides air gap carbon block and secondary metallic grounding protection. The carbon block air gap is set at $.006^{\prime \prime}$. These units are screwed together, giving weatherproof carbon block protection. The No. 506 protector unit has a blue painted cap and a blue insulator carbon block. Standard package, 10.

The No. 504 protector units are used in the PS type terminals when station protection is desired and in the 700 and 800 fuseless station protectors. The 504 protector units are identical to the 506 units except that the 504 has a $.0035^{\prime \prime}$ carbon block air gap, a plain cap and a white insulator carbon block. Standard package, 10.

## Protector Units

Catalog No.
Description
504 Used with fuseless station protector \& PS ST terminals 506 Used with ST terminals

## Replacement Parts

P-6082 Carbon block common to both 506 and 504 protector units P-6083 Alloy pellet common to both 506 and 504 protector units
P-5841 Insulator-carbon block for No. 504 unit
P-5827 Insulator-carbon block for No. 506 unit


ST-11P Terminal, Strand supported
These cable terminals, for strand, pole and wall mounting, employ reinforced cast resin binding post terminal blocks with a choice of lead sheathed, paper insulated, or plastic sheathed, plastic insulated cable stubs. These terminals are suitable for use in cable systems maintained under gas pressure. The cast aluminum alloy housings of the 11 and 16 pair terminals are equipped with stub cable entrance holes at opposite ends for reversal of stubs. The stub entrance is sealed with a ring grommet: the opposite entrance with a solid grommet. The two entrances also provide practical means for connecting a plastic and a lead cable, where direct splicing is not desirable.

The Reliable protected strand terminal is equipped with No. 506 protector units.

## Protected Terminals

|  | - Protected Terminals |  |  |
| :---: | :---: | :---: | :---: |
| Cat. No. STIIP | $\begin{aligned} & \text { Stock No. } \\ & \text { (8957744) } \end{aligned}$ | 11 pr . | Capacity pro |
| - ST16P | (895775) | 16 pr . | pro |
| STIIPS | (895777) | 11 pr . | pro |
| ST16PS | (895778) | 16 pr. | pro |
|  | Unprotected Terminals |  |  |
| Cat. No. | Stock No. |  | Capacity |
| ST-16 | (895781) |  | 16 pr . |

## RELIABLE STRAND CABLE TERMINALS (CONT.)



Strandvise used to deadend the supporting messenger
(1) One-screw mounting clamps with snub tightening produce secure locking of the mounting straps.
(2) Simple cover closure mechanism provides weathertight enclosure.
(3) Bronze binding post terminal screws molded in high dielectric, low moisture-absorbing ma-


Mounted on wall
terial. Minimum surface leakage.
(4) The carbon protector blocks in threaded housing provide moisture-proof air gap.
(5) Cable protection is not lost when cover is open.

## Mounting Brackets

Brackets for surface mounting Reliable strand terminals are available for 11 and 16 pair sizes.

COOK STRANTERM TERMINALS (Strand-Mounted)


16 pair Stranterm, open to show protectors
For lead or plastic cable installations. All terminals are supplied with $3^{1 / 2}$-foot, 24 -gauge cable stubs, which are soldered to heavy Everdur studs imbedded in a special unsaturated Polyester thermal setting plastic with fibre-glass filler, which provides indestructible, moisture-proof, gas-tight potting of the terminal core.

Additional flexibility is provided in that the 11-and 16-pair cable stub and core are interchangeable in the standard terminal housing. Left and right hand cable entrance to the terminal box is also possible.

## 24 Ga. Lead Stub Strandterm

| Cat. No. | Stock No. | Capacity | Length Stub | Protection |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{3 5 2 - 1 2 1 1}$ | $\mathbf{( 8 9 5 3 2 6 )}$ | 11 Pr. | $31 / 2^{\prime}$ | Less Protectors |  |
| $\mathbf{3 5 2 - 1 2 4 0}$ | $\mathbf{( 8 9 5 3 2 7 )}$ | 11 Pr. | $31 / 2^{\prime}$ | With Protectors |  |
| $\mathbf{3 5 2 - 1 2 1 6}$ | $\mathbf{( 8 9 5 3 2 8 )}$ | 16 Pr. | $31 / 2^{\prime}$ | Less Protectors |  |
| $\mathbf{3 5 2 - 1 2 4 1}$ | $\mathbf{( 8 9 5 3 2 9 )}$ | 16 Pr. | $31 / 2^{\prime}$ | With Protectors |  |
| $\mathbf{3 5 2 - 1 3 6 0}$ | $\mathbf{( 8 9 5 3 3 0}$ | 26 Pr. | $51 / 2^{\prime}$ | Less Protectors |  |
| $\mathbf{3 5 2 - 1 3 6 1}$ | $\mathbf{( 8 9 5 3 3 1 )}$ | 26 Pr. | $51 / 2^{\prime}$ | With Protectors |  |

## 24 Ga. Plastic Stub Strandterm

| Cat. No. | Stock No. | Capacity | Length Stub | Protection |
| :---: | :---: | :---: | :---: | :---: |
| 352-1250 | (895333) | 11 Pr . | $31 / 2^{\prime}$ | Less Protectors |
| 352-1336 | (895334) | 11 Pr . | $31 / 2^{\prime}$ | With Protectors |
| 352-1251 | (895335) | 16 Pr . | $31 / 2^{\prime}$ | Less Protectors |
| 352-1337 | (895336) | 16 Pr . | $31 / 2^{\prime}$ | With Protectors |
| 352-1362 | (895337) | 26 Pr . | $31 / 2^{\prime}$ | Less Protectors |
| 352-1363 | (895338) | 26 Pr. | $3^{1 / 2} 2^{\prime}$ | With Protectors |
| 352-1440 | (895794) | Detachable Mounting Bracket for Wall or Pole Mounting of 11 and 16 pair Stranterm for either lead or plastic stub terminal. |  |  |



COOK NO. 452-500 SOCKET WRENCH


For $3 / 8^{\prime \prime}$ nut, on protectors. Catalog No. 452-500 Stock No. (890541)

## MINIGAP SOCKET WRENCH

Combination socket wrench which provides an easy means for removing or inserting the Minigap arresters, as well as the rapid termination of drop wires to binding post studs.

Stock No. 895795

## COOK MINIGAP PROTECTOR



Has carbon-to-carbon gap, instantaneous acetate burn out, and is self-grounding.

| Cat. No. | Stock No. | Description Use |
| :---: | :---: | :--- |
| $41-290$ | $(895332)$ | Stranterm and PLX loop- <br> type cable terminals |
| $41-300$ | $(897236)$ | Threaded type for general <br> application |
|  |  |  |
| $41-310$ | $(895745)$ | For PLX and RDX cable |
| $41-350$ | $(895800)$ | terminals |



## COOK MYTIGAP PROTECTOR

Cook Mytigap arrester is a lightning arrester, surge and power-cross protector all in one with self-restoring operation after functioning.

Cat. No. Stock No.
41-450 (897238)
41-474 (897239)

Description
Snap-in type for Cook strand terminals Screw-type for general application

## COOK PLX UNPROTECTED TERMINAL <br> FOR PLASTIC COVERED CABLE



This terminal is designed to make installation easy by employing the cable loop principle. No stubbing, no splicing, no potting required.

Heavy galvanized steel frame, welded zinc cover, and XB bakelite face plate with Everdur studs. The front of the unit opens down for working convenience.

| Catalog No. | Stock No. | Cable Size | Ship. Wt. |
| :--- | ---: | ---: | ---: |
| $452-1106$ | $(895245)$ | 6 Pair | 8 lbs. |
| $452-1111$ | $(895246)$ | 11 Pair | 10 lbs. |
| $452-1116$ | $(895247)$ | 16 Pair | 10 lbs. |
| $452-1126$ | $(895248)$ | 26 Pair | 13 lbs. |

## COOK TYPE S-2OV PROTECTED



## TERMINAL

## FOR PLASTIC CABLE

The S-20V Protected Cable Terminal was designed expressly to serve the needs of telephone companies using plastic cable.

The S-20V Terminal, when used with plastic cable is manufactured with two cable entrances, each of which is arranged to take any size of compression coupling from 6 pair to 51 pair. When only one cable entrance is required, a standard pipe plug can be inserted to close the other entrance.

The terminals can be ordered without couplings - and the couplings and pipe plug can be ordered later to conform to the specific cable layout.

This method not only simplifies the installation of the cable, but also provides the maximum and economical use of the cable terminal.

When plastic cable additions are required at a later date, the terminals do not have to be removed from the poles to increase or reduce the compression couplings size in order to conform to the revised cable layout.

These features, when combined with the flexibility of the H-20 Protector units, make the S-20V Protected Pole Cable Terminal the most versatile terminal for the telephone industry.

## S-20V Cable Terminal

| Cat. No. | Stock No. | Pairs | Dimen. | Ship. Wt. |
| :--- | :---: | :---: | :---: | ---: |
| $\mathbf{5 0 6 - 2 3 3 0}$ | $(895043)$ | 6 | $12^{\prime \prime} \times 9^{\prime \prime}$ | 11 lbs. |
| $506-2331$ | $(895044)$ | 11 | $151^{1 / 2} 2^{\prime \prime} \mathrm{x} 9^{\prime \prime}$ | 15 lbs. |
| $506-2332$ | $(895045)$ | 16 | $19^{\prime \prime} \times 9^{\prime \prime}$ | 18 lbs. |
| $506-2333$ | $(895046)$ | 26 | $28^{\prime \prime} \times 9^{\prime \prime}$ | 23 lbs. |
| $506-2334$ | $(895047)$ | 51 | $39^{1 / 2^{\prime \prime} \times 9^{\prime \prime}}$ | 45 lbs. |

## COOK COMPRESSION COUPLINGS



\begin{abstract}
Used with S-20V Protected Cable Terminals so that any size cable-from 6 pair to 51 pair-may be connected. Couplings can be ordered and inserted after the specific cable requirements have been determined.

| Cat. No. | Stock No. | $\begin{aligned} & \text { Cable } \\ & \text { Max. } \end{aligned}$ | Dia. <br> Min. | $\begin{aligned} & \text { Plastic } \\ & \# 22 \mathrm{Ga} . \end{aligned}$ | Cable <br> \#19 Ga. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 506-630 | (895048) | $1 / 2^{\prime \prime}$ | $\frac{7}{16}{ }^{\prime \prime}$ | 11 pr . | 6 pr . |
| 506-631 | (895049) | $5 / 8$ " | $1 / 2^{\prime \prime}$ | 16 pr . | 11 pr . |
| 506-632 | (895050) | $3 / 4$ " | $5 / 8{ }^{\prime \prime}$ | 26 pr . | 16 pr . |
| 506-633 | (895051) | $1^{\prime \prime}$ | 7/8" | 51 pr . | 26 pr . |
| 506-629 | (895052) | $1^{\prime \prime} \mathrm{P}$ | e Plu | d when | only one |

## Cook Type "H"

## DUAL GAP PROTECTOR UNIT


Catalog No.
$506-1850$
$506-1851$

The Type H Dual Gap Protector is assembled on a strong non-absorbent Bakelite base. Phosphor bronze fuse and arrester clips have special incisor jaws which bite into the fuse ends to insure minimum connection resistance. It is utilized on the RO mounting bracket, S-20 and S-20V terminals, and type " $U$ " protector.

Tru-Gap Discharger insures continued protection should fuse operation disconnect the primary arrester from live leads.

| Stock No. | Type Fuse |
| :--- | :---: |
| $\mathbf{( 8 9 0 1 8 6 )}$ | A-7 |
| $\mathbf{( 8 9 0 1 8 7 )}$ | A-9 |

# TYPE UX CABLE TERMINAL 

## (Underground Unprotected)

For mounting in manholes for termination and distribution of underground cable systems.

Designed to facilitate installation and service in manhole termination and distribution of underground cable systems, the Type UX Cable Terminal combines many features which have made it popular with telephone men everywhere.

The lateral cable enters through a well in the cable chamber into which solder is puddled so that a strong moisture-proof connection is made. The terminal may be mounted with cable stub out of top or bottom.

The terminal provides for service outlets. These oulets in the sides of the terminal are sealed with a brass pipe plug having a $3 / 8^{\prime \prime}$ pipe thread. Lead sheath of instrument distribution cables are terminated in heavy brass stuffing boxes set in the service outlets. Stuffing boxes are made to accommodate lead cable of $3 / 8^{\prime \prime}$ diameter and are sold separate from the terminal. The number required should be stated.

The face plate is made of a single piece of molded bakelite. Bosses moulded on the face of the bakelite increase the surface distance between stubs.

Heavy studs with square heads are set in the bakelite so they cannot turn. Terminal is furnished with or without cable stub attached.

The cover of the Type UX fits the box so as to compress a gasket and make a water tight seal.

| Catalog <br> No. | Stock No. | Description | Hit. <br> In. | Width <br> In. | Net <br> Wt. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{5 1 2 - 3 7 0 2}$ | $(890508)$ | 6 pair less stub | $73 / 4$ | 6 | 12 |
| $\mathbf{5 1 2 - 3 7 0 3}$ | $(890509)$ | 6 pair with stub | $73 / 4$ | 6 | 20 |
| $512-3700$ | $(890510)$ | 11 pair less stub | $111 / 2$ | $61 / 2$ | 20 |
| $\mathbf{5 1 2 - 3 7 0 1}$ | $(890511)$ | 11 pair with stub | $111 / 2$ | $61 / 2$ | 30 |
| $\mathbf{5 1 2 - 3 7 0 5}$ | $(890512)$ | 16 pair less stub | $111 / 2$ | $61 / 2$ | 22 |
| $\mathbf{5 1 2 - 3 7 0 6}$ | $(890513)$ | 16 pair with stub | $111 / 2$ | $61 / 2$ | 31 |
| $\mathbf{4 5 2 - 3 7 5 0}$ | $\mathbf{( 8 9 0 5 1 4 )}$ | Stuffing Boxes | - | - | - |

## TYPE XB CABLE TERMINAL

The Type XB Unprotected Cable Terminal embodies many important advancements in construction, wiring features, maintenance savings and insulation characteristics the more important of which are detailed as follows:

A patented bakelite face plate and insulating fanning strip moulded in one piece. The raised stud mountings eliminate surface leakage.

Sturdy, non-corroding Everdur studs have tinned solder shoulders. Studs cannot twist off and are firmly embedded in the bakelite mounting plate, correctly positioned for convenient wiring.

Patented cable entrance and cable holding sleeve provide secure and tight cable joint.

Compound is completely filled by an exclusive moisture proofing process that insures against shorts and grounds by permanently positioning the cable pairs.

Heavy reversible zinc hood permits mounting with stub from either top or bottom.

Terminals are furnished either with or without 6 ft ., 22 gauge cable stub.

| Catalog <br> No. | Stock No. | Description | Ht. <br> In. | Width <br> In. | Net <br> Wt. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{4 5 2 - 3 5 0 2}$ | $\mathbf{( 8 9 0 4 9 2 )}$ | 6 pair less stub | 9 | 6 | 5 |
| $\mathbf{4 5 2 - 3 5 0 6}$ | $\mathbf{( 8 9 0 4 9 3 )}$ | 6 pair with stub | 9 | 6 | 8 |
| $\mathbf{4 5 2 - 3 5 0 3}$ | $\mathbf{( 8 9 0 4 9 4 )}$ | 11 pair less stub | $121 / 2$ | 7 | 7 |
| $\mathbf{4 5 2 - 3 5 0 9}$ | $\mathbf{( 8 9 0 4 9 5 )}$ | 11 pair with stub | $121 / 2$ | 7 | 15 |
| $\mathbf{4 5 2 - 3 5 0 4}$ | $\mathbf{( 8 9 0 4 9 6 )}$ | 16 pair less stub | $121 / 2$ | 7 | 7 |
| $\mathbf{4 5 2 - 3 5 1 2}$ | $\mathbf{( 8 9 0 4 9 7 )}$ | 16 pair with stub | $121 / 2$ | 7 | 15 |
| $\mathbf{4 5 2 - 3 5 0 5}$ | $\mathbf{( 8 9 0 4 9 8 )}$ | 26 pair less stub | $151 / 4$ | $73 / 8$ | 11 |
| $\mathbf{4 5 2 - 3 5 1 5}$ | $\mathbf{( 8 9 0 4 9 9 )}$ | 26 pair with stub | $151 / 4$ | $\mathbf{7 3} / 8$ | 22 |
| $\mathbf{4 5 2 - 2 8 3}$ | $\mathbf{( 8 9 0 5 0 0 )}$ | Hood, 11 or 16 pr. | - | - | -- |
| $\mathbf{4 5 2 - 1 8 9}$ | $\mathbf{( 8 9 0 5 0 1 )}$ | Hood, 26 pair | - | - | -- |



# Reliable Type "RU" UNPROTECTED CABLE TERMINALS 

This reversible unprotected cable terminal, with ribbed aluminum alloy sliding cover, protects terminal connections from weather and permits installation with stub at top or bottom. Chamber filled and sealed with Reliable Cable Compound, when supplied with stub.
The flat fanning plate simplifies wiring, and in combination with $a$ cover which surrounds the wires at the back, makes an unusually weatherproof terminal, and also gives the lineman more convenient working space.
Detachable mounting bracket simplifies installation.

Equipped with gravity catches to hold cover in raised position and cover chain. Silicon bronze screws - free from season cracking - are mounted on bosses to increase surface leakage distances, and locked in panels of highest grade molded insulation.

| Capacity | Stock No. | Height Overall | Stub Data Shipping Wt. Ea. (Lbs.) |  |
| :---: | :---: | :---: | :---: | :---: |
| 6 Pair | (890559) | 11" | Less Stub | 4 |
| 6 Pair | (890560) | 11" | With 6' Stub | 7 |
| 11 Pair | (890561) | 11" | Less Stub | $4^{1 / 2}$ |
| 11 Pair | (890562) | $11^{\prime \prime}$ | With 6' Stub | $71 / 2$ |
| 16 Pair | (890563) | $121 / 2^{\prime \prime}$ | Less Stub | 5 |
| 16 Pair | (890564) | $121 / 2^{\prime \prime}$ | With 6' Stub | $91 / 2$ |
| 26 Pair | (890565) | $16^{\prime \prime}$ | Less Stub | 8 |
| 26 Pair | (890566) | $16^{\prime \prime}$ | With 6'Stub | 14 |

Furnished with 6 ft . of No. 22 AWG double wrap paper insulated cable unless otherwise specified.


## Reliable Type "GR" UNPROTECTED CABLE TERMINALS

The GR is a cast aluminum alloy unprotected cable terminal. It is provided with $\alpha$ gravity cover that is balanced to shut tight. Equipped with porcelain faceplate, grooved in back to prevent turning of binding posts. Silicon bronze screws. Chamber filled and sealed with Reliable Cable Compound.
Cover and cable of corrosion resistant aluminum alloy.

| Capacity | Stock No. | Height Overall | Stub Data |  |
| :--- | :---: | :---: | :---: | :---: |
| Wt. Ea. (Lbs.) |  |  |  |  |

Furnished with 6-foot, No. 22 AWG stub, unless otherwise specified. When ordering, specify whether required with cable stub at top or bottom.

## COOK HY-CAP POWER CROSS PROTECTOR



Stock No. (895028)

the same general purpose as the smaller HY-CAP Protector, this unit provides a single assembly for 5 circuits, to be mounted on a 10 -pin arm requiring only $\alpha$ single ground wire. Easily installed with only three mounting screws and five pigtail connections.

Electrodes are equipped with fusible elements as a protection against excessive power cross over extended periods.

$$
\begin{array}{ccc}
\text { Catalog No. } & \text { Stock No. } & \text { Ship. Wt., Each } \\
501-50 & (895251) & 6 \mathrm{lbs} .
\end{array}
$$

## RELIABLE NO. 20HVP, 30HVP high voltage protector



A high voltage, high current unit for use when communication lines share poles with power conductors, and at power crossings. The unit consists of three heavy duty carbon electrodes mounted on $\alpha$ steatite ceramic base. The base is attached to an aluminum mounting bracket and covered with $\alpha$ weathertite drawn aluminum cover.

The 30HV Protector has an air gap breakover of approximately 3,000 volts AC, RMS. The 20HV has a breakover of approximately 2,000 volts.

## TYPE UA-20 AERIAL TO UNDERGROUND TERMINAL AND PROTECTOR MOUNTING



Unique cross connection features insure high efficiency and maximum utility of cable. Subscribers' drops can be taken out of the terminal without disturbing the protection and testing features. Protection is provided by the Dual Gap H-20 Trans-Mount Protector Units.

The UA-20 Cable Terminal is used at the junction of aerial and underground cables.

The UA-20 closely resembles the design of the S-20 Pole Cable Terminal. The UA-20 is equipped with two entering nozzles and the cable chamber is equipped with terminating stubs for each cable. Protection is provided by the Dual Gap H-20 Protector Unit which connects each aerial cable pair with its adjacent underground pair.

By removing the fuses the overhead and underground cables are quickly disconnected, permitting testing in either direction. Special test clips with fuse clip adapters and cords are furnished. Service is reestablished by re-inserting the fuses into the heavy spring clips, which insures constant electrical contact and no resistance loss, an important feature in toll cable transmission.

|  | Terminal Less Stub |  |  |
| :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Capacity | Ship. Wt. |
| 506-1900 | (894749) | 11 pair | 17 lbs . |
| 506-1902 | (894751) | 16 pair | 22 lbs . |
| 506-1904 | (894753) | 26 pair | 28 lbs . |
| 506-1906 | (894755) | 51 pair | 50 lbs . |
| 506-1866 | (894757) | H-20-20 Protector Mount- |  |
|  |  | ing with A-7 Fuse, foruse with any UA-20 Ter- |  |
|  |  | minal. |  |
|  | Terminal With Stub |  |  |
| 506-1901 | (894750) | 11 pair | 31 lbs . |
| 506-1903 | (894752) | 16 pair | 35 lbs . |
| 506-1905 | (894754) | 26 pair | 42 lbs . |
| 506-1907 | (894756) | 51 pair | 84 lbs . |

"RUG" UNDERGROUND CABLE TERMINAL


This is a Reliable Unprotected Cable Terminal, especially for underground use. It is reversible, and can be made gastight (extra charge) if so ordered.
Has a rugged cast iron housing and cover, both thoroughly hot galvanized.
Equipped with brass plugs which may be removed to insert solder dipped brass stuffing boxes, available separately.

Terminal has a detachable mounting bracket.
Light in weight, with a bakelite face plate with locked silicon bronze binding posts.

Extra length cable studs furnished at additional charge.

| Capacity | Stock No. | Height Overall | Stub Data |  |
| :--- | ---: | :---: | :---: | ---: | ---: |
|  |  |  | Whipping |  |

## COOK TYPE "U" UTILITY PROTECTOR



With the type " U " Utility Protector small cables and open wires, up to 6 pairs per unit, can be protected at railroad crossings, power line crossovers, and parallels.
It is especially valuable for the protection of subscribers drops where several instruments are closely grouped.
The Type " $U$ " is a compact, convenient unit, furnishing the utmost in versatile utility. It consists of a sturdy steel hot galvanized base fitted with non-corrosive studs on which as many as 6 Type "H" Protector Units may be mounted. A heavy galvanized hood and insulated entrance holes in the base make the entire unit insect- and water-proof.

Catalog No. 517-1722
(Less Protector) Stock No. (895797) Catalog No. 506-1850 (Protector Mount) Stock No. (890186)

## RELIABLE 700 AND 800 FUSELESS PROTECTORS



No. 800 and 801 for Outdoor Installation
Reliable's fuseless station protectors for inside use, and weatherproofed for out-of-doors mounting, meet the requirements of the 1953 national electric code (see Article 800). Reliable No. 700 and No. 800 protectors are approved and listed by UL Laboratories, Inc.

Catalog No. 700 for Indoor use consists of a molded plastic base with bronze terminal and grounding posts, stainless steel ground plate, mounting two No. 504 protector units.

Catalog No. 800 for Outdoor use consists of an aluminum bracket and weatherproof cover, containing one No. 700 protector. The bracket has two neoprene grommets in the base for wire entrance and exit. The back of the bracket has four small knockouts for use in mounting - no open holes or slots for the entrance of water or bugs. The cover is fastened with a stainless steel screw.

504 protector unit is a self-contained weatherproofed screw-in type unit. Two carbon electrodes are spaced approximately $.0035^{\prime \prime}$ to provide an air gap arrester. A low melting point alloy pellet is used as a fusible spacer to provide metallic grounding in the event of heavy current discharge. Static discharges will not cause metallic grounding, except with heavy or repeated light discharges, but power contact with replaceable elements are available for the No. 504 protector unit.

| Catalog No. | Stock No. | Standard Pkg. | Ship. Wt. Per C |
| :---: | :---: | :---: | :---: |
| 700 | (895770) | 2 | 27 |
| 800 | (895771) | 2 | 40 |
| 801 | (896057) | 2 | 31 |
|  |  | (fuseless station protector) |  |
| 801 A | (896060) | (fuseless cable protector) |  |
|  |  |  |  |
| 504 | (895772) | 10 | 40 |

## COOK "INTERCEPTOR" FUSELESS PROTECTORS



No. 501-150 for Outdoor Installation

This new, compact Fuseless Protector for indoor or outdoor mounting uses the Cook Minigap. It is ideal for open wire pole or cross arm installation chead of the subscriber drop-wire where protection is desirable for joint occupancy with power circuits.

The Interceptor is designed 10 meet the Underwriters' "Standard for Protectors for Communication Circuits." Consequently, both Minigap arresters will pass, simultaneously, a current of 30 amperes for 15 minutes without destruction.

For indoor mounting, Catalog No. 501-165, the Interceptor consists of a moulded Bakelite base with heavy Everdur terminal and ground studs and two No. 41-350 Minigap arresters.

For outdoor mounting, Catalog No. 501-150, the Interceptor is enclosed in an all-metal, corrosion-resistant, weatherproof housing with grommetted bracket.

Minigaps are keyed to fit the individual protector air gap or voltage breakdown requirements so as to prevent incorrect installation with subsequent excessive maintenance costs.

Each arrester consists of two carbons with a thermoplastic acetate dielectric providing an air gap, which in the event of heavy or prolonged discharges will allow contact between the discharge blocks.

| Catalog No. | Stock No. | Std. Pkg. | Ship Wt./C |
| :--- | :---: | :---: | :---: |
| $501-150$ | $(895798)$ | 25 | 52 |
| $501-165$ | $(895799)$ | 25 | 30 |

Minigap Protector for use with Cook Fuseless Protectors


No. 501-165 for Indoor Use

## RELIABLE OUTDOOR STATION PROTECTORS

Reliable No. 2000 station protectors afford
 numerous advantages. The high quality flexible neoprene base has integral wire entrance sealing slots and, with its tapered design, closes the cover so snugly that it is truly weathertight and insect tight.
The fuse mount is molded of high quality phenolic. Its design provides full insulation for the wiring.
It is unnecessary to remove either the fuses or the bracket to wire and mount the protector. All binding posts are on the side opposite the fuses and are clearly marked.

The fuse mount is reversible by removing one screw.
All metal parts are non-rusting; either bronze, plated bronze, aluminum or stainless steel. Cover and mounting bracket are aluminum. With Underwriters approved fuses (Patented No. $2,532,078$ ) and Reliable P-495 self-cleaning sawtooth discharge blocks, the Catalog Numbers 2000 (with No. 55L nutted end fuses) and 2000 H (with No. 77L clip type fuses) are UL approved Station Protectors.


## COOK O9U TELEPHONE PROTECTOR



A single circuit protector for both indoor and outdoor use.
The body of the Type O9U is a single piece of heavy white glazed, low absorbent porcelain. Fuse and lightning arrester clips are of phosphor bronze. The lightning arresters consist of two TruGap dischargers, two flat carbons mounted on a copper ground strip, and two A9U 7-ampere lavite fuses. Each protector is equipped with a 40 durometer Neoprene gasket to keep out insects, dust, snow, etc. A removable locking device is attached to the base of each unit in order to secure the hood. Over-all dimensions are: $6^{\prime \prime}$ long, $21 / 4^{\prime \prime}$ wide and $13 / 4^{\prime \prime}$ deep. This protector is listed as standard by Underwriters Laboratories.

Catalog No. 473-10
Stock No. (895287)

## Type "O" Sub-Station Protectors

These protectors are of the same basic design as the Type O9U shown above except for length and type of fuses.

| Cat. No. | Stock No. | Description |  | Length | Wt. Lb. |
| :--- | :--- | :--- | :---: | :---: | :---: |
| $\mathbf{4 7 1 - 1 5 8 1}$ | $\mathbf{( 8 9 0 1 7 7 )}$ | $0-12$ with A-12 fuses | $4^{1 / 2}$ | $11 / 2$ |  |
| $\mathbf{4 7 2 - 1 5 8 2}$ | $\mathbf{( 8 9 0 1 7 8 )}$ | $0-7$ with A-7 fuses | $6^{1 / 4}$ | 2 |  |
| $\mathbf{4 7 3 - 1 5 8 3}$ | $\mathbf{( 8 9 0 1 7 9 )}$ | $0-9$ with A-9 fuses | $6^{1 / 4}$ | 2 |  |
| $\mathbf{4 7 4 - 1 5 8 4}$ | $\mathbf{( 8 9 0 1 8 0 )}$ | $0-16$ with A-16 fuses | $6^{1 / 4}$ | 2 |  |
| $\mathbf{4 8 1 - 1 5 8 5}$ | $\mathbf{( 8 9 0 1 8 1 )}$ | $0-44$ with A-44 fuses | $4^{1 / 2}$ | $11 / 2$ |  |
| $\mathbf{4 7 5 - 1 5 8 6}$ | $\mathbf{( 8 9 0 1 8 2 )}$ | $0-52$ with A-52 fuses | $6^{1 / 4}$ | 2 |  |

## COOK RO-9U STATION PROTECTOR



Type RO-9U

## Supplied less Protector Units

The Type R Sub-Station Protector Mounting for outside mounting on post, wall, etc., is equipped with bracket and heavy zinc weatherproof hood. The Type R represents something new in sub-station protector design. The heavy steel bracket which replaces the outmoded, brittle porcelain member will appeal to those telephone engineers and maintenance men who want equipment that can take quick, rough handling and subscriber abuse without the danger of breakage.

The high insulating value and great tensile strength of the quality moulded bakelite used in the Type H Mount gives the Type R Sub-Station Protector Mounting higher resistance to breakage from the shocks of severe electrical discharges, and greater physical strength and durability.

Type R Sub-Station Protector Mountings are equipped with heavy studs for connecting drop wires and ground. All structural parts and the hood and bracket are grounded. The Type R uses the Type H Protector Mounts thus gaining all of the advantages of the Type H features.

| Type R furnished less Protector Units |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Catalog No. | Stock No. | Type | Dimensions | Net Wt. |
| $516-1$ | $(890184)$ | Outdoor | $71 / 2 \times 21 / 2 \times 3$ | $13 / 4 \mathrm{Lb}$. |

## COOK FOUR PARTY LINE JUNCTION BOX



The Four Party Line Junction Box is for terminating and protecting the cable pair drop, the cable pair, and distributing four party line drops. It is easy to install and all drop wires are doubly protected when used in conjunction with Cook substation protectors.

Consists of a porcelain base, steel mounting bracket and zinc non-corrosive cover. The circuit consists of ground stud, a pair of true gap lightning arresters, cable drop studs and heavy busses each equipped with four new screw type terminals.

Catalog No.
501-7400
Stock No.
(895018)

Wt. Each $11 / 2 \mathrm{lbs}$.

NO. 222 AND 5503 OUTDOOR ARRESTERS


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. Equipped with P495 Discharge Blocks and P663 Carbons. Size $81 / 4^{\prime \prime} \times 23 / 8^{\prime \prime} \times 41 / 2^{\prime \prime}$. Shipping weight 4 lbs .

| Cat. No. | Stock No. |
| :---: | :---: |
| 222 | $(890212)$ |
| 5503 | $(895802)$ |

Same as above except less Protector Blocks and Binding Post. Use with 5-Pr. Rural Distribution Wire. For 6 Pr. Termination, also use No. 402RR (below).


TWO WIRE CROSSARM ARRESTER
The No. 402RR dry spot lightning arrester is equipped with self-cleaning sawtooth discharge blocks which drain the line of static without danger of leaving accidental ground on line.

Equipped with P495L Discharge Blocks and P663 Carbons. Size $8^{1 / 2^{\prime \prime}} \times 3^{\prime \prime} \times 3^{\prime \prime}$. Shipping weight 2 lbs .
Cat. No. 402RR
Stock No. (890214)

## DISCHARGE BLOCKS



These discharge blocks are ideal for use in station protectors and arresters, crossarm arresters, protected cable terminals and central office protectors. Listed as standard by Underwriters' Laboratories. Either of these discharge units will assure adequate long term protection with the minimum of maintenance.

Reliable P-495 Stock No. 1890262
Cook 41-1907 Stock No. (890194)

TYPE 7 HIGH POTENTIAL LIGHTNING ARRESTER Outdoor Pole Type Arrester Ten Wire Capacity


The Type 7 High Potential Lightning Arrester provides lightning protection and static drain for 5 pairs of open-wire circuits. This arrester should also be used for the protection of drop wires and cables terminating in unprotected cable terminals where atmospheric conditions require constant static drain. Insulation and fanning strip are single-piece moulded Bakelite. Non-corrosive metal hood, Everdur studs, and galvanized mounting bracket assure satisfactory service and long life. Phosphor bronze springs clips accommodate non-grounding. Tru Gap lightning dischargers.


## TYPE 1 HIGH POTENTIAL LIGHTNING ARRESTER For Station Protection or Static Drain

The Type 1 High Potential Lightning Arrester can be used for either station protection or static drain on long rural circuits where lightning is the principal hazard. The long life and dependable service rendered by this protector is insured by patented non-grounding Tru Grap dischargers, grounded non-corrosive Everdur cover, and heavily galvanized mounting bracket. This device is also recommended as an adjunct to the line wire side of the sub-station protector for grounding heavy potentials at the pole in areas where power crosses, joint pole occupancy, and heavy discharges present constant hazards.



Wt. ${ }_{3 / 4}^{\mathrm{Lb}}$


## TESTERM DROP WIRE CONNECTOR

The Cook Testerm is used to connect subscriber drops to open wire. Mounted on the cross-arm, it provides a dryspot connection for terminating drop wires. Tie wires terminate on two 12-24 studs set in porcelain. Drop wires attached to same studs permit testing without opening a taped connector. All metal parts are rust-proofed, and the one piece drawn metal hood is hot galvanized.

Catalog No. 563-30
Stock No. (894859)

## RELIABLE WIRE TERMINALS



Reliable 5500
The No. 5500 is an unprotected unit, two-post wire terminal, 1 pair, with molded plastic type block.

Catalog No. 5500
Stock No. (896039)


## Reliable 5502

The Reliable Two-Post Wire Terminal is designed for connecting drop wires to bridle wires in a small weathertight unit. It consists of an aluminum bracket mounting a ceramic base having two bronze terminal post screws. A rubber grommet is secured in the base for the entrance wires. The unit is protected by $\alpha$ drawn aluminum cover which is fastened to the bracket assembly with a screw clamp. The bracket permits mounting on cross arms or poles. Cover is held captive by a bead chain. Terminal posts are provided with five washers.

Catalog No.
Stock No.
(895801)

## Five Pair Connections

The five pair wire terminal was designed for use with 5 pair Rural Distribution Wire. Porcelain terminal block with binding posts, washers and nuts, is in a formed aluminum housing. Bracket has two $3 / 8^{\prime \prime}$ mounting holes. Aluminum cover is held captive by a bead chain. The terminal is used for joining drop. bridle wires and cables.

| Cat. No. | Stock No. | Capacity <br> (Pairs) | Type of Block | Shpg. Wt. <br> Lbs. Each |
| :--- | :---: | :---: | :---: | :---: |
| $\mathbf{5 5 0 3}$ | $\mathbf{( 8 9 5 8 0 2 )}$ | 5 | Porcelain | 3 |

## RELIABLE WIRE TERMINALS Six, Eleven and Sixteen Pair Connections

A line of wire terminals, for use with 6,11 and 16 pair Rural Distribution Wires, is now offered in three categories: With Cable Protectors, Station Protectors and Unprotected Terminals.


Unprotected

| Cat. No. | Stock No. | Capacity <br> (Pairs) | Type of Block | Shpg. Wt. <br> Lbs. Each |
| :--- | :---: | :---: | :--- | :---: |
| $\mathbf{5 5 0 5}$ | $(895850)$ | 6 | Molded, resin filled | 4 |
| $\mathbf{5 5 0 7}$ | $(895852)$ | 6 | Porcelain | 2 |
| 5509 | $(895853)$ | 6 | Porcelain | 5 |
| 5525 | $(895855)$ | 11 | Molded, resin filled | 5 |
| 5545 | $(895858)$ | 16 | Molded, resin filled | 6 |

Station Protected

| Starion Prorecred |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Capacity (Pairs) | Type of Block | Protector Unit No. | Shpg. Wt. Lbs. Each |
| 5504 | (895849) | 6 M | Molded, resin filled | 504 | 5 |
| 5524 | (895854) | 11 | Molded, resin filled | 504 | 6 |
| 5544 | (895857) | 16 M | Molded, resin filled | 504 | 8 |
| Cable Protected |  |  |  |  |  |
| 5506 | (895851) | 6 | Molded, resin filled | 506 | 5 |
| 5526 | (895856) | 11 M | Molded, resin filled | 506 | 6 |
| 5546 | (895859) | 16 | Molded, resin filled | 506 | 8 |

## WIRE TERMINAL BLOCKS



Reliable terminal blocks used in the wire terminals are sold separately for use in building boxes or similar housings. All are molded, resin filled except the No. 5517 which is porcelain. The protected type block is equipped with ground strip and either the No. 506 protector unit for cable protection, or No. 504 protector unit for fuseless station protection. A ground lug is attached to the ground strip capable of taking a No. 6 copper ground wire. There are two $1 / 4^{\prime \prime}$ mounting holes in the block.

| Unprotected |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Capacity |  | Type of Block |  | Shpe. Wt. |
| Cat. No. $5515$ | $\begin{aligned} & \text { Stock No. } \\ & \text { (897227) } \end{aligned}$ | $\begin{gathered} \text { (Pairs) } \\ 6 \end{gathered}$ | Molded, resin filled |  | Lbs. Each |
| 5517 | $(89722$ | 9) 6 | Porcelain |  | 1 |
| 5555 | $(89723$ | 1) 11 | Molded, res | in filled | 2 |
| 5565 | $(89723$ | 4) 16 | Molded, res | in filled | 3 |
|  |  | Pr | ed |  |  |
| $\begin{aligned} & \text { Cat. } \\ & \text { No. } \end{aligned}$ | Stock <br> No. | Capacity (Pairs) | of Block | Protector Unit No. | Shpg. Wt. <br> Lbs. Each |
| 5516 | (897228) | 6 Mold | resin filled | 506 | 2 |
| 5556 | (897232) | 11 Mold | resin filled | 506 | 4 |
| 5566 | (897235) | 16 Mold | resin filled | 506 | 6 |
| 5514 | (897226) | Mold | resin filled | 504 | 2 |
| 5554 | (897230) | 11 Mold | resin filled | 504 | 4 |
| 5564 | (897233) | 16 Mold | resin filled | 504 | 6 |

INDOOR ARRESTERS


The Reliable No. 977AA Indoor Arrester is equipped with air gaps for protection against static where crosses with electric circuits are not likely to occur.

|  |  |  |  | Ship. Wt. |
| :--- | :--- | :--- | ---: | :---: |
| Cat. No. | Stock No. | Description | Size Inches | Ea.(Lbs.) |
| 977AA | $(890197)$ |  | $35 / 8 \times 21 / 2 \times 2^{5} / 16$ | 1 |

## RELIABLE TELEPHONE STATION PROTECTORS

Equipped with Adjustable P162 Sawtooth Discharge Plates and P164 Carbons

INDIVIDUAL STATION PROTECTOR


The Reliable No. 975 Arrester is mounted on glazed porcelain base and has adjustable sawtooth metal discharge plates spaced $.004^{\prime \prime}$ from carbon ground.

| Cat. | Stock |  | Fuse | Fuse | Amp. | Size | Ship. Wt. |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | No. | Description | No. |  | Inches Ea. (Lbs.) |  |  |
| 975 | (890195) | (With | Round | Two | 3 | $5 \times 2 \times 29 / 16$ | $11 / 2$ |



The Reliable No. 975-B Individual Station Protector has adjustable sawtooth metal discharge plates spaced .004" from the carbon ground.

| Cat. No. | Stock No. | Description | Size | Wt. Each |
| :--- | :--- | :---: | :---: | :---: |
| 975B | (890198) | (Without Cover) | $5 \times 2 \times 11 / 2$ | $11 / 4$ |
| $975 B$ | $(890199)$ | (With Cover) | $5 \times 2 \times 11 / 2$ | $11 / 2$ |



Reliable Connecting Blocks are used for connecting inside and outside wires where telephone protectors are mounted outdoors; also used for extension connections. Heavy bronze posts spun over and mounted on special low absorption porcelain.

| No. of Binding | Stock No. osts | Size- <br> Inches | Std. Pkg. | Shipping Wt per C |
| :---: | :---: | :---: | :---: | :---: |
| 2 | (890210) | $1 \times 2 \times 13 / 8$ | 20 | 50 |
| 3 | (890211) | $1 \times 3 \times 13 / 8$ | 20 | 75 |

## INDOOR STATION PROTECTORS

The 955 Series of station protectors have all the features of the well-known Reliable Protectors. This protector is $\alpha$ one piece design which simplifies mounting and installation. The protector is neat and compact, with connections easily accessible for installation.
Reliable Nos. 955 and 955A protectors are listed as standard by Underwriters' Laboratories. Their severe tests are sponsored by the National Board of Fire Underwriters in the interest of fire prevention. A cover for the above terminals is available if desired.

| Cat. No. | Stock No. | Fuse No. | Amp. | Type Fuse | $\begin{gathered} \text { Size } \\ \text { Inches } \end{gathered}$ | Shipping <br> Wt. (Lb.) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 955 | (890202) | Two 55L | 7 | Ceramic | $31 / 2 \times 5 \frac{9}{16}$ | . |
| 955A | (890203) | Two 77L | 7 | Ceramic | $31 / 2 \times 5 \frac{9}{16}$ |  |

TYPE NO. 2 LIGHTNING ARRESTER


An indoor arrester, consisting of a solid piece of glazed porcelain fitted with Everdur binding posts, nuts, washers, and phosphor bronze springs.

Lightning arresters are nongrounding Tru Gap Discharg. ers and plain ground carbons, set in a recess and covered with $a$ ventilated metal cap.

Width 3 inches; Length $23 / 4$ inches; Depth 2 inches; Net Wt. $3 / 4 \mathrm{lb}$.

| Cat. No. | Stock No. | Description |
| :---: | :---: | :---: |
| 244-1606 | $\mathbf{( 8 9 0 1 8 9 )}$ | With Discharger |
| $\mathbf{2 4 4 - 1 6 0 7}$ | $\mathbf{( 8 9 0 1 9 0 )}$ | With Carbons |

## LIGHTNING ARRESTER REPLACEMENTS

Lightning Arresters and Dielectrics

| Cat. No. | Stock No. | Description |
| :--- | ---: | ---: |
| $41-2002$ | $(890264)$ | 3 Carbon block grooved |
| $41-11$ | $(890265)$ | 2 Acetate Dielectric .005"' thick |
| $41-12$ | $(890266)$ | Acetate Dielectric $.007^{\prime \prime}$ thick |
| $41-10$ | $(890267)$ | Mica Dielectric $.007^{\prime \prime}$ thick |
| $41-53$ | $(890268)$ | Mica Dielectric $010^{\prime \prime}$ thick |
| $41-3002$ | $(890269)$ | 1 Carbon block plain |
| $41-1282$ | $(890270)$ | Carbon block for No. 100 protector |
| COOK TYPE B-7 SUB-STATION PROTECTOR |  |  |

To be mounted indoors


Base is of heavy porcelain, highly glazed, on which are mounted phosphor bronze contact springs. Screws, nuts, and washers are of Everdur.

Lightning arresters consist of two non-grounding Tru Gap Dischargers and two flat carbons set in $\alpha$ well in the porcelain and covered with a vented metal cap. Equipped with A-9, 3 ampere fuses.

| Cat. No. | Stock No. | Length | Width | Depth | Net Wt. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $115-1530$ | $(890183)$ | $63 / 4^{\prime \prime}$ | $3^{\prime \prime}$ | $2^{\prime \prime}$ | $11 / 2 \mathrm{lb}$. |

RELIABLE BUILDING TERMINAL BOXES


Reliable Building Terminal Boxes are provided with numerous knockouts at top and bottom. They are also provided with fanning strips and terminal strips having screw binding posts for distributing wires, and soldering terminals for cable wires. They are easy to cable.

Type E equipped with Type E Terminal Strips

| Cat. No. | Stock No. Pairs Per Row |  | Rows of Term'ls | Width Inches | Height Inches | Depth Inches | Ship. Wt. <br> (Lbs.) Ea. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E 11 | (891027) | 11 | 1 | 6 | 10 | 4 | 7 |
| E 16 | (891028) | 16 | 1 | 6 | 16 | 4 | 8 |
| E 22 | (891029) | 11 | 2 | 12 | 12 | 4 | 10 |
| E 26 | (891030) | 13 | 2 | 12 | 16 | 4 | 14 |
| E 32 | (891031) | 16 | 2 | 12 | 16 | 4 | 15 |
| E 52 | (891032) | 26 | 2 | 12 | 20 | 4 | 19 |
| E104 | (891033) | 52 | 2 | 12 | 40 | 4 | 34 |
| E208 | (891034) | 52 | 4 | 24 | 48 |  | 125 |

Type EC for cross connecting cables.
Equipped with jumper rings and space for jumper wires
 $\begin{array}{llllllll}\text { EC } & 52 & (891038) & 26 & 2 & 12 & 20 & 4\end{array}$

| EC104 | (891039) | 26 | 4 | 24 | 24 | 4 | 45 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | ---: |
| EC208 | $(891040)$ | 52 | 4 | 24 | 48 | 4 | 125 |

Type L equipped with Type L Terminal Strips
Cat. Stock No. Pairs
No. Rows of Width $\begin{gathered}\text { Height } \\ \text { Per Row }\end{gathered}$

| L11 | $\mathbf{( 8 9 1 0 3 5 )}$ | $51 / 2$ | 2 | 12 | 12 | 4 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| L16 | $\mathbf{( 8 9 1 0 3 6 )}$ | 8 | 2 | 12 | 16 | 4 | $111 / 2$ |
| L26 | $\mathbf{( 8 9 1 0 3 7 )}$ | 13 | 2 | 12 | 20 | 4 | 16 |
| L52 | $\mathbf{( 8 9 4 7 6 8 )}$ | 26 | 2 | 12 | 40 | 4 | 20 |

TERMINAL STRIPS
Reliable Type "E"

| Cat. No. | Stock No. | Length Inches | $\underset{(\text { Lbs.) }}{\text { Shipping }}$ |
| :---: | :---: | :---: | :---: |
| E-11PR | (891044) | 95/16 | 1/2 |
| E-13PR | (891045) | 109/16 | 3/4 |
| E-16PR | (891046) | 127/16 | $3 / 4$ |
| E-22PR | (891047) | $171 / 8$ | 1 |
| E-26PR | (891048) | 195/8 | 1 |
| E-32PR | (891049) | $231 / 8$ | $11 / 2$ |
| E-52PR | (891050) | 373/4 | $21 / 2$ |

## Reliable Type "L"

Twin screw binding posts with one soldering terminal mounted on molded plastic with treated maple base strip.

| Cat. No. | Stock No. | Length <br> Inches | Shipping <br> (Lbs.) Wt. |
| :--- | :---: | :---: | :---: |
| L- 51/2PR | $(891051)$ | $83 / 8$ | $1 / 2$ |
| L- 8PR | $(891052)$ | $111 / 2$ | $3 / 4$ |
| L-11PR | $(891053)$ | $151 / 4$ | $11 / 2$ |
| L-13PR | $(891054)$ | $173 / 4$ | $11 / 4$ |
| L-16PR | $(891055)$ | $211 / 2$ | $11 / 2$ |
| L-26PR | $(891056)$ | 34 | $21 / 2$ |



## Reliable Type "T"

Terminal strips are equipped with soldering terminals embedded in phenolic retaining strips and mounted on a phenolic base, made with $1,2,3$, or 4 rows of terminals of 20 or 26 terminals per row.

| Cat. No. | Stock No. | Length <br> Inches | Shipping <br> (Lbs.) Wt. |
| :---: | :---: | :---: | :---: |
| $\mathrm{T}-1 \times 20$ | $(891057)$ | $93 / 4$ | $1 / 2$ |
| $\mathrm{~T}-1 \times 26$ |  |  | $3 / 4$ |
| $\mathrm{~T}-2 \times 20$ | $(891058)$ | $93 / 4$ | 1 |
| $\mathrm{~T}-2 \times 26$ |  | $93 / 4$ | $11 / 4$ |
| $\mathrm{~T}-3 \times 20$ | $(891059)$ | $93 / 4$ | $11 / 26$ |
| $\mathrm{~T}-3 \times 26$ | $(891060)$ |  |  |

Code No. denotes type (T) number of Rows (1) Terminals per row (20) T-1x20.


## S-C PROTECTED WEATHERPROOF HOUSING

## For Repeating Coils

Forms phantom circuit either metallic or grounded.
Connects grounded section of line to metallic in electric light and power line induction clearance. Drains lines exposed to electric light and power line induction.

No. HT-610-A is designed for one No. 15-B repeating coil and equipped with 3 pairs of protection. Stock No. (890574)
No. HT-610-B is designed for two No. 15-B repeating coils and equipped with 5 pairs of protection. Stock No. (890575)

COOK TYPE 57 INTERIOR TERMINAL BOX


The type 57 terminal box is for distribution and termination of lead covered or loom cable for low voltage circuits. It consists of a metal box with hinged cover, fanning and terminal strips, screw connectors on the drop sides and solder clips for cable wires. Locks can be supplied if requested.

| Catalog No. | Stock No. | Capacity | Length <br> In. | Width <br> In. | Depth <br> In. |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{4 9 0 - 7 0 0 0}$ | $\mathbf{( 8 9 5 8 0 7 )}$ | 11 pr. | 12 | 6 | 3 |
| $\mathbf{4 9 0 - 7 0 0 1}$ | $\mathbf{( 8 9 5 8 0 8 )}$ | 16 pr. | 12 | 6 | 3 |
| $\mathbf{4 9 0 - 7 0 0 2}$ | $\mathbf{( 8 9 5 8 0 9 )}$ | 22 pr | 12 | 12 | 3 |
| $\mathbf{4 9 0 - 7 0 0 3}$ | $\mathbf{( 8 9 5 8 1 0 )}$ | 26 pr. | 12 | 12 | 3 |
| $\mathbf{4 9 0 - 7 0 0 4}$ | $\mathbf{( 8 9 5 8 1 1 )}$ | 52 pr | 24 | 12 | 4 |
| $\mathbf{4 9 0 - 7 0 0 5}$ | $\mathbf{( 8 9 5 8 1 2 )}$ | 104 pr. | 40 | 12 | 4 |

## COOK TYPE 53 AND 54 JUNCTION BOXES



Type 53


The 53 Junction Box is for use in small unattended exchanges and floor distribution of cables in factories, offices and stores where screw connections and economy are desired. Its construction consists of a wooden base and metal cover with solder clips and screw connections mounted on a maple terminal strip. The Type 54 Junction Box is similar to the Type 53 except that the heads are smaller and the unit more compact. It is especially designed for distribution of ennunciator wire in small PBX systems and where economy is a factor.

Type 53 Junction Box

| Catalog No. | Stock No. | Cap. <br> Pairs | Length In. | Width In. | Depth In. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 490-5313 | (894966) | 13 | 115/8 | $31 / 8$ | $21 / 2$ |
| 490-5326 | (894967) | 26 | $213 / 8$ | 31/8 | $21 / 2$ |
| Type 54 Junction Box |  |  |  |  |  |
| Catalog No. | Stock No. | Number of Pairs | Total Height | Total Width | Cover <br> Depth |
| 490-5406 | (894968) | 6 | $5^{\prime \prime}$ | 3 "' | $21 / 2^{\prime \prime}$ |
| 490-5410 | (894969) | 10 | 7" | $3^{\prime \prime}$ | $21 / 2^{\prime \prime}$ |
| 490-5413 | (894970) | 13 | $81 / 2^{\prime \prime}$ | $3^{\prime \prime}$ | $21 / 2^{\prime \prime}$ |
| 490-5426 | (894971) | 26 | $15^{\prime \prime}$ | $3^{\prime \prime}$ | $21 / 2^{\prime \prime}$ |

COOK TYPE WXB BUILDING TERMINAL BOX
For terminating and distributing lead covered cable inside buildings.


The WXB Building Terminal provides many new conveniences for terminating and distributing lead covered cables inside of buildings. It is furnished for $6,11,16$ or 26 pair cables in flush or surface type enameled steel boxes. The terminal unit consists of mois-ture-proof steel cable chamber and single piece moulded bakelite face plate and fanning strips. Non-corrosive studs are embedded in the bakelite, insuring strong low resistance connections. Cables enter the cable chamber through heavy compression fittings. Loom covered cables are also used satisfactorily with these terminals.

## WXB Surface Type

| Cat. No. | Stock No. |  | Description | Lgth. |  |  | Net |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 452-800 |  |  |  | In. | In | In. | . |
|  |  |  | air less stub | 10 | 8 | 3 | 16 |
| 452-8006 | (890532) |  | pair with stub | 10 | 8 | 3 | 14 |
| 452-8002 | (890535) |  | pair less stub | 10 | 8 | 3 | 6 |
| 452-8007 | (890536) | 16 | pair with stub | 10 | 8 | 3 | 14 |
| 452-8003 | (890539) |  | pair less stub | 15 | 8 | 4 | 9 |
| 452-8008 | (890540) |  | pair with stub | 15 |  | 4 | 20 |

## COOK LINE TERMINAL BLOCKS



Cook Type 1000 Line Terminal Blocks are made of solid rubber with push-through solder clips. Furnished with or without solid maple fanning strips.

| Cat. No. <br> Vert. | Cat. No. <br> Horiz. | Clips <br> High | Pairs | Description |
| :---: | :---: | :---: | :---: | :--- |
| $\mathbf{2 - 3 3 2}$ | $\mathbf{2 - 3 7 2}$ | 2 | 20 | with maple strip |
| $\mathbf{2 - 3 2 2}$ | $\mathbf{2 - 9 5 2}$ | 2 | 20 | less maple strip |
| $\mathbf{2 - 3 5 2}$ | $\mathbf{2 - 3 8 2}$ | 2 | 26 | with maple strip |
| $\mathbf{2 - 3 4 2}$ | $\mathbf{2 - 9 6 2}$ | 2 | 26 | less maple strip |
| $\mathbf{2 - 3 3 4}$ | $\mathbf{2 - 3 7 4}$ | 3 | 20 | with maple strip |
| $\mathbf{2 - 3 2 4}$ | $\mathbf{2 - 9 5 3}$ | 3 | 20 | less maple strip |
| $\mathbf{2 - 3 5 4}$ | $\mathbf{2 - 3 9 4}$ | 3 | 26 | with maple strip |
| $\mathbf{2 - 3 4 4}$ | $\mathbf{2 - 9 6 3}$ | 3 | 26 | less maple strip |
| $\mathbf{2 - 3 3 6}$ | $\mathbf{2 - 3 7 6}$ | 4 | 20 | with maple strip |
| $\mathbf{2 - 3 2 6}$ | $\mathbf{2 - 9 5 4}$ | 4 | 20 | less maple strip |
| $\mathbf{2 - 3 5 6}$ | $\mathbf{2 - 3 8 6}$ | 4 | 26 | with maple strip |
| $\mathbf{2 - 3 4 6}$ | $\mathbf{2 - 9 6 4}$ | 4 | 26 | less maple strip |
| $\mathbf{2 - 3 3 8}$ | $\mathbf{2 - 3 7 8}$ | 5 | 20 | with maple strip |
| $\mathbf{2 - 3 2 8}$ | $\mathbf{2 - 9 5 5}$ | 5 | 20 | less maple strip |
| $\mathbf{2 - 3 5 8}$ | $\mathbf{2 - 3 8 8}$ | 5 | 26 | with maple strip |
| $\mathbf{2 - 3 4 8}$ | $\mathbf{2 - 9 6 5}$ | 5 | 26 | less maple strip |
| $\mathbf{2 - 3 4 0}$ | $\mathbf{2 - 3 8 0}$ | 6 | 20 | with maple strip |
| $\mathbf{2 - 3 3 0}$ | $\mathbf{2 - 9 5 6}$ | 6 | 20 | less maple strip |
| $\mathbf{2 - 3 6 0}$ | $\mathbf{2 - 3 9 0}$ | 6 | 26 | with maple strip |
| $\mathbf{2 - 3 5 0}$ | $\mathbf{2 - 9 6 6}$ | 6 | 26 | less maple strip |

STROMBERG-CARLSON

## RELIABLE TYPE 303 AND 308 <br> MAIN DISTRIBUTING FRAMES

Type 303 and 308 Main Distributing Frames offer two arrangements in terminating outside exchange cables and switchboard cables. The outside cable can be terminated on either the line terminal or protector side. Cross connectors are provided by jumper wires. The frame is strong and rigid. Jumper rings are provided on the main uprights. Protector fanning strip and line terminal fanning strips are provided, for a neat and convenient cable and jumper layout.

Each vertical section has a capacity of 100 or more pairs of protectors mounted in banks of 20 pairs each, and 130 or more pairs of 112 F line terminal blocks in 26 pair blocks. Terminal blocks may be attached in either horizontal or vertical rows as ordered.

Line terminals and protectors are numbered as specified.

In addition to the standard frames shown, Reliable main distributing frames are made to meet specific requirements, and estimates will be furnished on request. Specify type of frame, pro-
 tectors, terminal blocks, fanning strips, and iron work.

Cat. No. Stock No. Fuse
Other Units
303F (894881) 106 P495 Dischg. Blk., P663 Carbons 303H (894882) 107 Heat Coil P495 Dischg. Blk., P663 Carbons 308F (894883) 114 P308 Disch. Blk., P4375 Carbon 308H (894884) 115 Heat Coil P308 Disch. Blk., P4375 Carbon

## RELIABLE WALL DISTRIBUTING FRAMES

Reliable Wall Type Distributing Frames include framework and line terminals only. Protector banks, in multiples of 20 must be ordered separately. Specify whether for 308 or 303 Protectors.

| Catalog No. | Stock No. | Capacity <br> Protector Side | Capacity <br> Cable Side |
| :--- | :---: | :---: | :---: |
| 308-W-20 | $(895813)$ | 20 pr. | 26 pr. |
| 303-W-20 | $\mathbf{( 8 9 5 8 1 4 )}$ | 20 pr. | 26 pr. |
| 308-W-40 | $\mathbf{( 8 9 5 8 1 5 )}$ | 40 pr. | 52 pr. |
| 303-W-40 | $\mathbf{( 8 9 5 8 1 6 )}$ | 40 pr. | 52 pr. |
| 308-W-60 | $\mathbf{( 8 9 5 8 1 7 )}$ | 60 pr. | 78 pr. |
| 303-W-60 | $\mathbf{( 8 9 5 8 1 8 )}$ | 60 pr. | 78 pr. |
| 308-W-80 | $\mathbf{( 8 9 5 8 1 9 )}$ | 80 pr. | 104 pr. |
| 303-W-80 | $\mathbf{( 8 9 5 8 2 0 )}$ | 80 pr. | 104 pr. |
| 308-W-100 | $\mathbf{( 8 9 5 8 2 1 )}$ | 100 pr. | 130 pr. |
| 303-W-100 | $\mathbf{( 8 9 5 8 2 2 )}$ | 100 pr. | 130 pr. |

COOK TYPE L

## MAIN DISTRIBUTING FRAMES



Type L Main Distributing Frames provide the advantage of two methods of terminating the outside cable on the frame. The cable entering the central office can be terminated on line terminals and the switchboard cable on protectors or, the outside cable can be terminated on protectors and the switchboard cable on line terminals. Flexible jumper wires connect the line terminals and protectors. Any outside pair, therefore, can be connected to any switchboard pair. Type L Main Distributing frames are furnished either welded or knocked down and bolted. These frames are also exclusively equipped with a special alarm circuit for signalling heat coil operation. Protectors afford a convenient means for testing both outside lines and switchboard circuits and cutting them in and out of service. Cut shows several types of Protectors.

Three types of protector groups are available: (1) lightning arresters and heat coils; (2) lightning arresters and fuses; (3) fuses, arresters and heat coils.

Type L Frames are constructed of steel in sectional form, 100 or more pairs in height. Additions may be added to right or left. Frames are attractively finished in durable paint unless otherwise ordered. Stock No. (894039)

## COOK TYPE L9 WALL DISTRIBUTING FRAMES

The Type L9 Wall Distributing Frame is intended for economical distribution and protection of limited capacity cable and especially for installation in small exchanges.

The L-9 Wall Distributing Frame, made in 20, 40, 60, 80, and 100 pair sizes is designed to carry any Cook central office protector. The frame of the L-9 consists of two pieces of hard kiln dried maple, one drilled and arranged for, and equipped with, line terminals; the other drilled and milled for mounting the protectors; and two heavy mounting brackets of bar iron finished in durable paint.

| Catalog No. | Stock No. | Capacity <br> Protector Side | Capacity <br> Cable Side |
| :--- | :---: | :---: | :---: |
| $361-1050$ | $\mathbf{( 8 9 4 6 5 1 )}$ | 20 pr. | 26 pr. |
| $361-1052$ | $\mathbf{( 8 9 4 6 5 2 )}$ | 40 pr. | 52 pr. |
| $\mathbf{3 6 1 - 1 0 5 4}$ | $\mathbf{( 8 9 4 6 5 3 )}$ | 60 pr | 78 pr. |
| $\mathbf{3 6 1 - 1 0 5 6}$ | $\mathbf{( 8 9 4 6 5 4 )}$ | 80 pr. | 102 pr. |
| $361-1058$ | $\mathbf{( 8 9 4 6 5 5 )}$ | 100 pr. | 130 pr. |

NOTE: All L-9 frames furnished complete with wall brackets, distributing strips, terminal blocks and protector fanning strip. Protector fanning strips and rubber terminal blocks numbered top down 1, 2, 3, 4, 5, etc.

## COOK CENTRAL OFFICE PROTECTORS

Type No. 100


For cable termination and protection of central office equipment and personnel from high potentials and sneak currents. Pairs are mounted on $1 / 2^{\prime \prime}$ centers.

The No. 100 Central Office Protector opens the switchboard circuit and grounds the outside line; it operates an automatic alarm circuit; it provides for temporary disconnect; it is equipped with the Cook patented self-soldering, relatching heat coils of low resistance which can be reset without changing coil; its line connections are on one side of protectors and switchboard connections are on the other side; testing may be done without removing the heat coil.

Heavy carbon and heat coil holding springs in the No. 100 Protector insure a positive permanent pressure between the precision ground discharger carbons and the ground plate. All current carrying parts are thoroughly insulated by hard rubber and bakelite.

In operation the No. 100 Protector opens the switchboard circuit, grounds the outside line and operates an alarm signal.

| Cat. No. | Stock No. | Description <br> of Section | Lgth. <br> In. | Width <br> In. | Depth <br> In. Wt. Wet <br> 100 Prs. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | ---: |
| $360-1210$ | $(894035)$ | 10 pair | $51 / 2$ | 2 | $31 / 2$ | 17 |
| $360-1220$ | $(894036)$ | 20 pair | $101 / 2$ | 2 | $31 / 2$ | 17 |

Type No. 105


Provides fuse protection in addition to lightning arresters and heat coils for the protection of central office personnel and equipment. Pairs are on $1 / 2^{\prime \prime}$ centers.

This protector is especially recommended for the protection of toll line and carrier circuits.

Extraneous currents of low intensity operate the No. 105 Central Office Protector heat coil, ground the outside line, and operate the alarm signals. High potentials go to ground across the air gap of the lightning arresters. A current of 3 amperes or more will operate the fuse.

Mounting plates are metal and may be mounted on a standard frame, carrying protectors on $1 / 2^{\prime \prime}$ centers. The circuit from the heat coil spring to the switchboard terminal is carried between the grounded mounting plates and is well shielded.

| Cat. No. | Stock No. | Description of Section | Lgth. In. | Width In. | Depth In. | $\mathrm{h} \text { Wt. Lb. }$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 392-1510 | (894758) | 10 pair | $51 / 2$ | 3 | 7 | 41 |
| 392-1520 | (894759) | 20 pair | $101 / 2$ | 3 | 7 | 41 |

## Type H-36

Provides fuses and lightning arresters.
For small town rural exchanges where sneak current hazard does not exist the H-36 Protector offers an ideal protector unit. This time-tested protector, built on heavy zinc metal plates, gives both fuse and lightning arrester protection.

The unit is fire-proof. The H-36 has had thirty years of successful field use in those areas in which lightning conditions have been unusually severe.

The H-36 Central Office Protector is built in 10 and 20 pair sections in metal plates. Pairs are on $1 / 2^{\prime \prime}$ centers. Fuse clips and insulation the same as in the No. 105

Type A-45 fuses which blow at 1 ampere are furnished as standard. A-46 wood fuses will be furnished when specified.

| Cat. No. | Stock No. | Description <br> of Section | Lqth. <br> In. | Width <br> In. | Depth <br> In. | Net <br> Wt. Lb. <br> 100 Prs. |
| :--- | :---: | :---: | :---: | :---: | :---: | ---: |
| $\mathbf{2 9 6 - 3 6 1 0}$ | $\mathbf{( 8 9 4 0 4 2 )}$ | 10 pair | $51 / 2$ | $11 / 2$ | $51 / 2$ | 21 |
| $\mathbf{2 9 6 - 3 6 2 0}$ | $\mathbf{( 8 9 4 0 4 3 )}$ | 20 pair | $101 / 2$ | $11 / 2$ | $51 / 2$ | 21 |



## Type No. 3800

Pairs are mounted on $3 / 8^{\prime \prime}$ centers.
The No. 3800 Central Office Protector offers the same combination of protection features as the No. 100. As in the No. 100, the No. 3800 protector is reset after operation by simply relatching the operating spring over the heat coil. There are no coils to change, reverse or resolder.

| Cat. No. | Stock No. | Description <br> of Section | Lqth. <br> In. | Width <br> In. | Depth <br> In.Wt. Net. Lb. <br> 100 Prs. |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{3 8 0 - 1 3 2 0}$ | $\mathbf{( 8 9 4 0 3 7 )}$ | 20 pair | $85 / 8$ | 3 | $43 / 4$ |

## COOK HEAT COILS

For Central Office Protectors


No. 4A
Cat. No. 7-32
(894000)


No. 100 or 105 Cat. No. 360-70 (894003)


No. 10
Cat. No. 60-71
(894001)


No. 3800 Cat. No. 380-30 (894004)

## reliable heat coil fuses



## Fuse-Closed

The wire wound heat coils operate in accordance with standard specifications for protection of central office equipment. A very low resistance heating element is used because heat is not dissipated by metallic contact with mountings.

These sneak current fuses are designed to carry .35 ampere indefinitely, sustain short period overloads and open within five minutes when carrying .53 ampere ( $150 \%$ of rated current) at ambient temperature of $68^{\circ} \mathrm{F}$.

Reliable No. 107 and No. 115-H heat coil fuses operate faster than standard 7 -amp. line fuses when blown at 10.5 amp . or more.

After operating, the indicator plunger protrudes approximately an inch from the end of the fuse cartridge and can be readily seen from $\alpha$ distance. The fuses can normally be reset by pressing on the indicator plunger while a current of approximately one ampere is applied through the fuse.

Reset panels for these fuses are furnished with new distributing frames.

| Cat. No. | Stock No. | Used In | Size- <br> Dia. |  |
| :--- | :---: | :---: | :---: | :---: |
| Inches <br> Shoulder To <br> Shoulder |  |  |  |  |
| 107 | $(894127)$ | 303 Protectors | $3 / 8$ | $31 / 16$ |
| 115 H | $(894769)$ | 308 Protectors | $5 / 16$ | $31 / 16$ |

## RELIABLE MICA FUSES

Made with superior grade of mica and heavy copper terminals. When ordering fuses, specify code number, amperage, open or enclosed type. Enclosed fuses supplied on standard sizes unless otherwise specified.


## FUSES FOR PROTECTORS AND CABLE TERMINALS

Reliable fuses are of uniform quality and electrical characteristics. Sizes and types are available for all standard telephone protectors and cable terminals.

Early telephone fuses were rated at their blowing points. Later, power ratings came into wide use, permitting a fuse to carry rated current for an indefinite period and to blow within five minutes at $50 \%$ overload. Reliable standard fuses are in 1 , 3 and 5 ampere telephone ratings. and 7 ampere power rating. Other power and telephone ratings are available on request. Starred catalog numbers are listed by the Underwriters' Laboratories in 7 ampere capacity.

$$
3 / 8^{\prime \prime} \text { Ceramic with } 13 / 64^{\prime \prime} \text { Tips }
$$


$7 / 16^{\prime \prime}$ Ceramic with $3 / 8$ " Hex. Nuts


$$
7 / 16^{\prime \prime} \text { Fibre with } 7 / 16^{\prime \prime} \text { Hex. Nuts }
$$



| $7 / 16^{\prime \prime}$ Fibre with Flat Tip |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Material | Shoulder <br> To | Standard <br> Package | Ship. Wt. <br> Lbs. per C |
| *52 | (890228) | Fibre | Shoulder <br> $31 / 2^{\prime \prime}$ | 50 | 3 |



## RELIABLE BLOW-RITE fuSE WIRE

Blow-Rite Fuse Wire is a copper alloy wire specially made for telephone fuses. It has high tensile strength and can be soldered without fear of burning the wire. It will not corrode or crystallize.

Made in 1, 2, 3 and 5 -ampere capacities. Supplied on 300 -foot spools.
Stock No. (890237)

## COOK FUSES FOR PROTECTORS AND TERMINALS

These fuses are designed for use in Cook Protectors and Terminals. To facilitate ordering, the illustrations show the actual size of each fuse. There are two methods of rating telephone and telegraph fuses. Power rated fuses will carry their rated capacity indefinitely without an undue rise in temperature, and will blow within five minutes on $150 \%$ of their rated capacity. Cook tele-
phone fuses recognize the importance of the telephone rating, which means that they will operate at their capacity, thus assuring critical protection. Cook Fuses are listed as approved by the Underwriters' Laboratories.

Fibre dowled power rated fuses are interchangeable with the corresponding types of telephone rated fuses.


| Cat. No. | Stock No. | Type | Used in Wt. Lb. |  | FUSE WIRE |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59-0700 | (890238) | A-7 Wood | S-6, H-29-D, O-7 | 8 | Cat. No. | Stock No. | Description |
| 91-1200 | (890250) | A-12 Lavite | H-51, O-12 | 7 | 900-6000 | (895824) | Fuse wire spool of 250 ft . |
| 146-0900 | (890239) | A-9 Lavite | B-7, B-13, O-9 | 8 | 900-6000 |  | Specify amperage: 1, 2, 3, 5 or 7 cmp . |
| 149-1600 | (890244) | A-16 Wood | O-16 | 7 |  |  | Speciry amperage: $1,2,3,5$ or 7 amp . |
| 299-4400 | (894128) | A-44 Wood | H-44 | 7 |  |  |  |
| 306-4500 | (890249) | A-45 Lavite | H-36 | 7 |  |  |  |
| 307-4600 | (890248) | A-46 Wood | H-36 | 7 |  |  | FUSE NEEDLE |
| 424-5200 | (890243) | A-52 Fibre | O-52 | 8 |  |  |  |
| 494-6200 | (890245) | A-62 Fibre | O-62 | 8 | Cat. No. | Stock No. | Description |
| 499-6400 | (890247) | A-64 Wood | O-64 | 7 | 59-16 | (894044) | Steel needles for threading fuse wire. |
| *146-217 | (895825) | A-90 Lavite |  |  |  |  |  |
|  |  | 7 cmp . | O-9U | 8 |  |  |  |

## TRUMBULL SWITCHES

There are still many applications for open knife switches. Trumbull switches meet the requirements of high quality and suitability. The switches shown are front connected, no fuse, single and double throw, with porcelain base and plain (bright) finish. 30 Amperes.

Switches 707, 708 have 1 pole, Weight $1 / 4$ pound, each.

Switches 709 and 710 have 2 poles. Weight $1 / 2$ pounds, each.

| Cat. | No. Stock No. | Throw | Dim. In. |
| :--- | :--- | :--- | :--- |
| $\mathbf{7 0 7}$ | $(890258)$ | Single | $2^{7 / 16 \times 11 / 4}$ |
| $\mathbf{7 0 8}$ | $(890259)$ | Double | $35 / 8 \times 15 / 16$ |
| 709 | $(890260)$ | Single | $27 / 16 \times 2$ |
| 710 | $(890261)$ | Double | $35 / 8 \times 2$ |



## STROMBERG-CARLSON

## STROMBERG-CARLSON

## Insulators and Sleeves



Dependable glass insulators to withstand the worst weather conditions; porcelain knobs and screw eyes; splicing equipment for those inevitable "breaks" caused by severe icing.

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Reliable Sleeves ...................................1s

Splicing Tools ................................13s

## ARMSTRONG'S GLASS INSULATORS



NO. 10
Top Groove D. P.
Height Over All. . . in. 41/4
Diameter Over All in. $321 / 32$
Diameter Groove..in. 7/16
Quantity per Box..... 40
Appr. Wt. per 1000 lb .1750
Stock No. (891191)


NO. 13
Double-Groove Pony
Height Over All. ..........in. $31 / 2$
Diameter Over All........in. $23 / 8$
Diameter Groove.........in. 3/8
Quantity per Box............ 50
Appr. Wt. per 1000......lb. 640 Stock No. (891192)


NO. 3

## Exchange Line

Height Over All. . . . . . . . . .in. $31 / 4$
31/4 Diameter Over All. . . . . . . . . in. 27/16
Diameter Groove...........in. 7/16
Quantity per Box.............. 50
Appr. Wt. per $1000 . . .$. . . ib. 720
NO. 14


Dbl.G., D. P. Pony

| Height Over All.........in. | $33 / 8$ |
| :--- | ---: |
| Diameter Over All. . . . in. | $27 / 8$ |
| Diameter Top Groove...in. | $3 / 8$ |
| Quantity per Box. ........ | 50 |
| Appr. Wt. per $1000 \ldots .$. b. | 820 |
| Stock No. $(891193)$ |  |




CSC

## Carrier Service

Height Over All.........in. 4
Diameter Over All.......in. $25 / 8$
Diameter Groove.......in. 1/2
Quantity per Box......... 50
Appr. Wt. per 1000.....lb. 1120
Designed for mounting on a steel pin cushioned with a . $016^{\prime \prime}$ lead thimble or approved equivalent.

Stock No. (891195)

HEMINGRAY GLASS INSULATORS


NO. 9
Pony
Height Over All
3 3/8
Diameter Over All $\qquad$ 21/4
Diameter Groove . . . . . . . . . .in. 3/8
Quantity per Box
50
Approx. Wt. per 1000 . ....lb. 620 Stock No. (891177)


NO. 42

## Double Petticoat

Height Over All . . . . . . . in. $331 / 32$
Diameter Over All ......in. 33/4
Diameter Groove . . . . . in. 7/16
Quantity per Box . . . . . . . . 40
Approx. Wt. per 1000 . . lb. 1487
Stock No. (891182)


NO. 10
Exchange Line
Height Over All ........in.
$31 / 4$
Diameter Over All .....in. $27 / 16$
Diameter Groove .......in. 7/16
Quantity per Box
7/16

Approx. Wt. per 1000 . . . lb. Stock No. (891178)


NO. 43
Top Groove W. U.

| Height Over All . . . . . . .in. | $49 / 32$ |
| :--- | ---: |
| Diameter Over All . . . in. | $33 / 4$ |
| Diameter Groove . . . . . in. | $7 / 16$ |
| Quantity per Box . . . . . . | 40 |
| Approx. Wt. per $1000 \ldots$. in. | 1750 |
| Stock No. (891183) |  |



NO. 12
Double-Groove Pony

| Height Over All | 35/8 |
| :---: | :---: |
| Diameter Over All | $23 / 8$ |
| Diameter Top Groove | 3/8 |
| Quantity per Box | 50 |
| Approx. Wt. per 1000 | 650 | Stock No. (891179)



NO. 45

## One-Piece Trans.

Height Over All . . . . . . . in. 3 15/16
Diameter Over All ......in. 39/16 Diameter Groove .......in. 7/16 Quantity per Box . . . . . . . . 40
Approx. Wt. per 1000 . .lb. 1625
Stock No. (891184)


NO. 16
Long Distance

| Height Over All .......in. | 4 |
| :--- | ---: |
| Diameter Over All .....in. | $213 / 16$ |
| Diameter Groove . . . . . . . . | $3 / 8$ |
| Quantity per Box . . . . . . | 50 |
| Approx. Wt. per $1000 \ldots$ b. | 1090 |
| Stock No. $(891181)$ |  |



NO. 23
Point Transposition

| Height Over All ...........in. | 3 3/4 |
| :---: | :---: |
| Diameter Over All ........in. | $25 / 8$ |
| Diameter Groove .........in. | 1/2 |
| Quantity per Box | 50 |
| Approx. Wt. per 1000 . . . .lb. | 990 |
| Stock No. (897198) |  |



NO. 17

## Medium Length Lines

Height Over All ...........in. 37/8
Diameter Over All .........in. 213/16 Diameter Groove . . . . . . . . .in. 1 15/16 Quantity per Box.......... 50
Approx. Wt. per 1000...... lb. 1060
Stock No. (897197)


NO. 56
Point Transposition
Height Over All . . . . in. $37 / 8$

Diameter Over All ...in. $31 / 4$
Diameter Groove . . . .lb. $3 / 8$
Quantity per Box ...... 40
Approx. Wt. per $1000 \mathrm{lb} . \quad 1537$
Stock No. (894893)

Table of Comparable Pin Type Insulators
All comparisons are approximate, and not identical.


| Number |  |  |  |
| :---: | :---: | :---: | :---: |
| 9 | 10 | 13 | C.S.C. |
| 9 | 43 | 12 | C.S.C. |

## TYPE R-3 NON-BREAKABLE INSULATORS



Designed for wood pins. With a wood cob may also be used on steel pins; ties are not necessary.

Under both dry and wet weather conditions the insulation is fully equal to glass.
The insulators will withstand repeated blows from stones and rifle bullets and will maintain the wires in place even though lacerated by gun shot. The standard package contains 100 insulators.

Stock No. (894675)

## PLASTIC TUBES



## Non-Breakable Dry Process Extruded Plastic

These tubes are used in the same applications as the ceramic or unglazed porcelain tubes which they replace. Made of thermoplastic material, they are noninflammable and practically unbreakable. They afford considerable saving in weight as well as a tremendous saving in breakage. Also, because of their much smaller wall thickness, time will be saved in drilling holes.
" B " tubes are in individual boxes, 5 pieces per box, 200 pieces per shipping carton.

| 3/8" Inside Diameter "B" Tubes |  |  |
| :---: | :---: | :---: |
| Size | 7 | Stock No. |
| $3 / 8{ }^{\prime \prime} \times 4^{\prime \prime}$. | 7 | .(895179) |
| $3 / 8{ }^{\prime \prime} \times 6^{\prime \prime}$. |  | (895180) |
| $3 / 8^{\prime \prime} \times 8^{\prime \prime}$. |  | (895181) |
| $3 / 8^{\prime \prime} \times 12^{\prime \prime}$ |  | (895182) |

VICTOR PORCELAIN
 SPLIT INSULATORS

| Catalog No. | 22 |
| :---: | :---: |
| Stock No. | 91203 |
| Height ........ in. | 15/8 |
| Diameter ...... in. | $21 / 8$ |
| Hole . ........ in. | 1 |
| Groove . . . . . . . in. | 5/16 |
| No. per Barrel | 1250 |
| Weight per 1000, lbs. | 332 |

STANDARD PORCELAIN TELEPHONE KNOBS


| Catalog No. $\ldots \ldots \ldots \ldots \ldots$ | $4-2$ GR | 6061 | T | C |
| :--- | :---: | :---: | :---: | :---: |
| Height $\ldots \ldots \ldots \ldots \ldots$ | in. | $111 / 16$ | $17 / 16$ | $113 / 16$ | $11 / 4$.



FOUR-GROOVE TELO

-I N S ULATORS

Revised 1-1-57
PORCELAIN STRAIN INSULATORS


Dry Process

| Cat. | Stock No. | Dimensions, Inches |  |  |  |  | Std. | t. Lb. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. |  | A | B | C | D | E | Pkg. | per 100 |
| 500 | (891237) | $23 / 8$ | 1 | $3 / 8$ | $1 \frac{9}{16}$ | $1 \frac{1}{16}$ | 100 | 24 |
| 502 | (891238) | $31 / 2$ | $13 / 4$ | $5 / 8$ | $21 / 2$ | $13 / 4$ | 50 | 128 |
| 504 | (891239) | $41 / 4$ | $21 / 4$ | 7/8 | 27/8 | $21 / 8$ | 36 | 178 |
| 506 | (891240) | $53 / 8$ | $31 / 8$ | 1 | $33 / 8$ | $23 / 8$ | 25 | 368 |

## Wet Process

| Cat. <br> No. | Stock No. | A | Dimensions, Inch |  |  | E | Std. Pkg. | Wt. Lb. <br> per 100 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | B | C | D |  |  |  |
| 500 | (894137) | $23 / 8$ | 1 | $3 / 8$ | $1 \frac{9}{16}$ | $1 \frac{1}{16}$ | 100 | 24 |
| 502 | (894138) | $3^{1 / 2}$ | $13 / 4$ | 5/8 | $21 / 2$ | $13 / 4$ | 50 | 128 |
| 504 | (894139) | $41 / 4$ | $21 / 4$ | $7 / 8$ | 27/8 | $21 / 8$ | 36 | 178 |
| 506 | (894140) | 53/8 | $31 / 8$ | 1 | 33/8 | $23 / 8$ | 25 | 368 |

## ALLIGATOR NAIL KNOBS

For providing insulating support in interior wiring, both open and concealed.

It is simple, economical, dependable, and safe.
Made of hard vitrified porcelain, either glazed or unglazed, assembled with 12 d nails.
The nail is held in position by a steel washer, which eliminates
 weakening or bending the nail. The nail head is thoroughly cushioned with a leather washer to prevent breakage.

Height, $13 / 4$ inches. Diameter, $1^{1 / 8}$ inches.
Size of wire, 12-14.
Quantity per barrel, 2700.
Shipping weight per 1000, 165 pounds.
Stock No. (891206)


## SELF-TYING KNOBS

Requires no tie wires, brackets, angle irons or bolts. The drop wire can be led in from any angle and pulls directly against the screw.

Made from white glazed porcelain.
Weight per 1000, 450 pounds.
Stock No. (891205)

## WIRE HOLDERS

## All-Porcelain Type

 Single and Double Groove

Combines a wall bracket, insulator and screw all in one. A jab and a few turns is all that is necessary to install it. Designed so that no metal is exposed after installations.
The special wood screw which is a part of this wire holder has $\alpha$ clean cut thread and a point which starts into the wood under very little pressure.
Packed 50 in a standard package.

| Cat. No. | Stock No. | Size of <br> Screw, In. | Size Wire <br> Hole, In. | Wt. Lbs. <br> per 100 |
| :---: | :---: | :---: | :---: | :---: |
| 1621 | $(891254)$ | $20 \times 21 / 8$ | $5 / 8$ | 65 |
| 1622 | $(891255)$ | $20 \times 2$ | $9 / 16^{3} \times 3$ | 65 |

## SERVICE WIRE HOLDERS

Designed for long service. Made of porcelain. All corners are rounded. Screws have sharp threads and are leaded solidly into the porcelain.

All steel screws are hot galvanized.
Size hole of holder No. J1955, $1 / 2 \times 3 / 4$ inches; Diameter of porcelain at base $17 / 8$ inches; Height of porcelain, $27 / 8$ inches.


No. J1955


No. J1960


No. J-089

The No. J-089 Wireholder is unequalled for rugged construction, attractive appearance, and ease of installation. Equal strength on dead end or $45^{\circ}$ pull. All steel parts are hot dip galvanized; all edges on the porcelain insulator are well rounded and will not chip even though a steel bar is used as a handle to install the wireholder.

| Cat. No. | Stock No. | Screw <br> Size \& Length | No. in Pkg. | Wt. per |
| :--- | :---: | :---: | :---: | :---: |
| J-089 | $(894771)$ | $22 \times 21 / 4^{\prime \prime}$ | 50 | 75 lb. |

Size of hole of holders J1960, J1961, J1965, J1976, 7/8 inches: Diameter of porcelain at base $21 / 2$ in.; Height of porcelain $31 / 8$ in

| Cat. No. | Stock No. | Insulator <br> Mounted on | Wt. Lb. <br> per 100 |
| :--- | :---: | :--- | :---: |
| J1955 | $(891256)$ | Galv. Steel Screw | 65 |
| J1960 | $(891257)$ | Galv. Steel Screw | 95 |
| J1961 | $(891258)$ | Brass Screw | 95 |
| J1965 | $(891260)$ | Galv. Carriage Bolt | 107 |
| J1976 | $(891261)$ | Galv. Toggle Bolt | 105 |

## NATIONAL NICOPRESS SPLICING SLEEVES <br> For Communication Lines

In the making of a Nicopress splice, the sleeves which are lined with a metal alloy, harder than the metal of either sleeve or conductor, are pressed onto the conductors with the special Nicopress tool. The hard alloy is forced onto the softer metals of sleeve and conductor. The resultant joint has $\alpha$ strength that is greater than the rated breaking strength of the conductor, and is so tight that the conductor cannot pull out.

Nicopress splices will withstand the toughest strains of vibration and have $a$ high lasting conductivity.

## NICOPRESS SLEEVES

Nothing could be simpler than making a splice with NICOPRESS equipment. Here is all you do:

1) Clean the end of the wire to be spliced
2) Insert wire in the proper size sleeve
3) Compress sleeve with special NICOPRESS TOOL

The result is a splice that will hold up for the life of the wire.

## Many Sizes and Materials <br> Are Available

NICOPRESS SLEEVES are made in several sizes and materials, each for a specific job. The code numbering, an easy key to ordering, is explained below.

First Figure signifies the material: 1-Copper, 2-Galvanized Copper, 3-Bronze, 4-Galvanized Bronze, 5-Galvanized Steel.

Second Group of three figures show the decimal equivalent of the wire diameter ( $162-.162^{\prime \prime}$ or No. 6 B and S Copper).

The Last Letter indicates the tool groove for compressing the sleeve (J groove, D groove, etc.).
Example: 1-064C is made of Copper, takes wire of .064". Diameter (No. 14B\&S Gage), and is compressed in the "C" groove of the tool.

## Special Prefix Numbers

The regular code numbers, as detailed above, are sometimes preceded by a prefix number or letter to signify a particular use.
For Repair Sleeves, the code is preceded by "R."
Example: R1-162J
For Nicotap, the code is preceded by "T."
Example: T2-109 x 045D
For Offset Dead-End, the code is preceded by " 9. "
Example: 91-162J.
The coding pattern is given here as additional helpful information only; all necessary ordering information is clearly shown on the following pages.


Completed Splice

## For Drop, Bridle and Inside Wires

Splices made with Nicopress sleeves have maximum strength and tightness, are small, compact, and neat. There is a saving of wire and tape due to the fact that the wires are butted and not overlapped. Splicing is quickly done with the light, compact, one-hand-operated No. 17 type tool, completely eliminating need of solder.


Completed Drop Wire Splice


| Completed Inside Wire Splice |  |  |  |
| :--- | :---: | :---: | :---: | :---: |

For Hard Drawn Copper Wire Copper Sleeves

|  |  | Gage | Gage | in Tool Wt. Lb. |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | B. \& S. | N.B.S. | Forove Use per 100 |
| Fhip. |  |  |  |  |

*Indicates sleeve with larger than standard outside diameter for use in a larger tool groove.

For "BB" Galvanized Wire
Catalo
Stock No. B.W.G. For Use Ship. Wt. $\begin{array}{lc}\text { in Tool } & \text { Lbs. } \\ \text { Groove } & \text { per } 100\end{array}$
Galvanized Steel Sleeves

## 5-083C <br> 5-109C

5-109DBB
$2-083 \mathrm{C}$
$2-083 \mathrm{D}$
$2-109 \mathrm{D}$
$2-134 \mathrm{~J}$
$2-148 \mathrm{~J}$
$2-165 \mathrm{~J}$

4-109C

| $(893221)$ | 14 | C | $11 / 2$ |
| :--- | ---: | :--- | ---: |
| $(893222)$ | 12 | C | $11 / 2$ |
| $(893223)$ | $* 12$ | D | $13 / 4$ |

Galvanized Copper Sleeves

| $(893227)$ | 14 | D | $13 / 4$ |
| ---: | ---: | ---: | ---: |
| $(893228)$ | $* 14$ | C | $11 / 2$ |
| $(893229)$ | 12 | D | $13 / 4$ |
| $(893230)$ | 10 | J | 2 |
| $(893231)$ | 9 | J | $41 / 2$ |
| $(893232)$ | 8 | J | $41 / 2$ |

Galvanized Bronze Sleeve

| (893233) | 12 | $C$ | $11 / 4$ |
| :--- | :--- | :--- | :--- |


| For "85" Galvanized Wire |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Galvanized Steel Sleeves |  |  |  |  |
| Cat. No. <br> 5-083C <br> 5-109D85 | Stock No. (893221) (893235) | B.W.G. 14 12 | For Use in Tool Groove C D | Ship. <br> Wt. Lb. <br> per 100 <br> $11 / 2$ <br> 2 |
| Galvanized Copper Sleeves |  |  |  |  |
| 2-083C | (893227) | 14 | C | $11 / 2$ |
| 2-083D | (893228) | *14 | D | $13 / 4$ |
| 2-134J85 | (893240) | 10 | J | $41 / 2$ |
| 2-148J | (893231) | 9 | J | $41 / 2$ |
| For "135" Galvanized Wire |  |  |  |  |
| Galvanized Steel Sleeve |  |  |  |  |
| 5-109D135 | (893242) | 12 | D | 3 |
| 5-109D190 | (897166) | 12 | 31 D or 31DC | $41 / 2$ |
| For "190' Galvanized Wire |  |  |  |  |
| 5-109G190 | (895831) | 12 | 41-GD | $4^{1 / 2}$ |
| For Rusty Iron Wire |  |  |  |  |
| Galvanized Copper Sleeves |  |  |  |  |
| 2-102C | (893243) | 12 | C | $13 / 4$ |
| *Indicates sleeve with larger than standard outside diameter for use in larger tool groove. |  |  |  |  |
| For Copperweld Telephone and Telegraph Wire |  |  |  |  |
| Solid-high strength and extra high strength. |  |  |  |  |
| Catalog No. | Stock No. | A.W.G. | $\begin{gathered} \text { Tool } \\ \text { Groove } \end{gathered}$ | Ship. Wt. <br> Lb. per C |
| 1-064C | (893206) | 14 | C | $11 / 2$ |
| 1-080D | (893208) | 12 | D | $11 / 2$ |
| 1-080E | (893209) | *12 | E | $21 / 2$ |
| 3-102D | (895164) | 10 | D | $51 / 2$ |
| 1-102J | (893214) | 10 | J | $51 / 2$ |
| 1-114J | (893217) | 9 | J | $51 / 2$ |

*Indicates sleeve with larger than standard outside diameter for use in larger tool-groove.

## NICOPRESS REDUCING SLEEVES

For Galvanized Line Wire to Drop, Bridle, and Inside Wires

| Cat. No. | Stock No. | B.W.G. to B. \& S. | For Use in Tool Groov | Approx. Ship. Wt. e per 100 |
| :---: | :---: | :---: | :---: | :---: |
| 2-083×036C | (893344) | 14 to 19, 20, 22 | C | $11 / 2$ |
| 2-083x045C | (893345) | 14 to 17, 18 | C | $11 / 2$ |
| 2-083x051C | (893346) | 14 to 16 | C | $11 / 2$ |
| 4-109x045C | (893347) | 12 to 17, 18 | C | 2 |
| 2-109x045D | (893348) | 12 to 17, 18 | D | 2 |
| 4-109x051C | (893349) | 12 to 16 | C | 2 |
| 2-109x051D | (893350) | 12 to 16 | D | 2 |
| 4-109x064C | (893351) | 12 to 14 | C | 2 |
| 2-109x064D | (893352) | 12 to 14 | D | 2 |
| 2-134×051J | (893353) | 10 to 16 | J | 5 |
| 2-134×064J | (893354) | 10 to 14 | J | $43 / 4$ |
| 2-148x064J | (893355) | 9 to 14 | J | $51 / 2$ |
| 2-165×064J | (893356) | 8 to 14 | J | $51 / 2$ |
| For Galvanized "BB' Line Wire |  |  |  |  |
| Cat. No. | Stock No. | B.W.G. F | For Use in Tool Groove | Approx. Ship. Wt. per 100 |
| 4-109x083C | (893339) | 12 to 14 | C | $11 / 2$ |
| 2-109x083D | (893340) | 12 to 14 | D | 2 |
| 2-134x083J | (893341) | 10 to 14 | J | 3 |
| 2-134×109J | (893342) | 10 to 12 | J | 3 |
| 2-148×109J | (893343) | 9 to 12 | J | 5 |

## Copper Sleeve

| sers3-2 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| For Copper Wire |  |  |  |  |
| Catalog No. | Stock No. | B. \& S. Gage | or Use Approx. in Tool Ship. Groove Wt.per |  |
| 2-045×036B | (893309) | 17, 18 to 19, 20, 22 | 17-2 | 1/2 |
| 1-064×036C | (893310) | 14 to 19, 20, 22 | C | $11 / 2$ |
| 1-064×045C | (893311) | 14 to 17, 18 | C | $11 / 2$ |
| $1-080 \times 036 \mathrm{C}$ | (893312) | 12 to 19, 20, 22 | C | $11 / 2$ |
| 1-080x045C | (893313) | 12 to 17, 18 | C | $11 / 2$ |
| $1-080 \times 051 \mathrm{C}$ | (893314) | 12 to 16 | C | $11 / 2$ |
| 1-080×064C | (893315) | 12 to 14 | C | $11 / 2$ |
| 1-102×036C | (893316) | 10 to 19, 20, 22 | C | $11 / 2$ |
| 1-102×045C | (893317) | 10 to 17, 18 | C | $11 / 2$ |
| 1-102x051C | (893318) | 10 to 16 | C | $11 / 2$ |
| 1-102×064C | (893319) | 10 to 14 | C | $11 / 2$ |
| 1-102×080C | (893320) | 10 to 12 | C | $11 / 2$ |
| 1-114x036D | (893322) | 9 to 19, 20, 22 | D | $13 / 4$ |
| 1-114x045D | (893321) | 9 to 17, 18 | D | $13 / 4$ |
| 1-114x051D | (893323) | 9 to 16 | D | $13 / 4$ |
| 1-114×064D | (893324) | 9 to 14 | D | $13 / 4$ |
| 1-114x080D | (893325) | 9 to 12 | D | $13 / 4$ |
| 1-114x102D | (893326) | 9 to 10 | D | $13 / 4$ |
| 1-128×051E | (893327) | 8 to 16 | E | 2 |
| 1-128×064E | (893328) | 8 to 14 | E | 2 |
| 1-128x080E | (893329) | 8 to 12 | E | 2 |
| 1-128×102E | (893330) | 8 to 10 | E | 2 |
| 1-128×114E | (893331) | 8 to 9 | E | 2 |
| $1-162 \times 064 \mathrm{~J}$ | (893332) | 6 to 14 | J | $31 / 2$ |
| $1-162 \times 102 \mathrm{~J}$ | (893333) | 6 to 10 | J | $31 / 2$ |
| $1-162 \times 114 \mathrm{~J}$ | (893335) | 6 to 9 | J | $31 / 4$ |
| 1-162 128 J | (893336) | 6 to 8 | J | $31 / 4$ |
| NICOPRESS REPAIR SLEEVES |  |  |  |  |
| For Replacing Defective Joints |  |  |  |  |


| For Copper Wire |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Catalog No. | Stock No. | B. $\& S$. Gage | For Use in Tool Groove | Lgth. <br> In. | Approx. Ship. Wt. per 100 |
| R1-080C | (893296) | 12 | C | 7 | 6 |
| R1-080D | (893297) | *12 | D | 7 | $71 / 2$ |
| R1-102C | (893298) | 10 | C | $71 / 2$ | 51/4 |
| R1-114D | (893299) | 9 | D | 8 | 7 |
| R1-114E | (893300) | *9 | E | 8 | 9 |
| R1-128E | (893301) | 8 | E | 8 | $81 / 2$ |
| R1-162J | (893302) | 6 | J | 10 | $161 / 2$ | *Indicates sleeve with larger than standard outside diameter for use in a larger tool-groove.

## For "BB" Galvanized Wire

| Catalog No. | Stock No. | B.W.G. <br> Gage | For Use <br> in Tool <br> Groove | Lgth. <br> In. | Approx. <br> Ship. Wt. <br> per 100 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| R2-083C | $(893303)$ | 14 | C | 7 | 6 |
| R4-109C | $(893304)$ | 12 | C | $71 / 2$ | $51 / 2$ |
| R2-109D | $(893305)$ | $* 12$ | D | $71 / 2$ | 7 |
| R2-134J | $(893306)$ | 10 | J | $81 / 2$ | $161 / 2$ |
| R2-148J | $(893307)$ | 9 | J | 9 | 16 |
| R2-165J | $(893308)$ | 8 | J | 10 | $161 / 2$ |

*Indicates sleeve with larger than standard outside diameter for use in a larger tool-groove.

## RELIABLE ELECTRIC CO. SPLICING SLEEVES

All types of Reliable Squeez Sleeves except Squeez Taps are internally impregnated with a dispersion of fine, sharp silicon carbide particles to assist holding ability. The patented method is unique and consistent and is used by the largest communica-
tions company in the United States.
The electrical properties of a made-up joint are highly efficient. The resistance of a made-up joint is less than an equal length of wire. This high electrical efficiency is stable.


RELIABLE SQUEEZ SLEEVES

| Solid Copper Wire |  |  |  |  |  | Stranded Copper Wire |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | AWG | Tool Groove | Std. <br> Pkg. | $\begin{aligned} & \text { Ship. Wt. } \\ & \text { Lbs.Per C } \end{aligned}$ | Cat. No. | Stock No. | AWG $\begin{gathered}\text { No. of } \\ \text { Strands }\end{gathered}$ | Tool Groove | Std. <br> Pkg. | $\underset{\text { Lbs. Per C }}{\text { Ship. Wt. }}$ |
| 14-C-1 | (895448) | 14 | C | 100 | $13 / 4$ | 6 Str -J-1 | (895473) | $6 \quad 7$ | J | 100 | $43 / 4$ |
| 12-C-1 | (895449) | 12 | C | 100 | $11 / 2$ | 4 Str-M-1 | (895474) | $4 \quad 7$ | M | 50 | 6 |
| 12-D-1 | (895450) | 12 | D | 100 | 2 | 4 Str-P-1 | (895475) | $4 \quad 7$ | P | 50 | 9 |
| 10-C-1 | (895451) | 10 | C | 100 | $13 / 4$ | 2 Str-X-1 | (895476) | 27 | X | 50 | $141 / 2$ |
| 10-D-1 | (895651) | 10 | D | 100 | $13 / 4$ | $2 / 3 \mathrm{Str}-\mathrm{X}-1$ | (895477) | 23 | X | 50 | 123/4 |
| $9-\mathrm{D}-1$ | (895452) | 9 | D | 100 | $13 / 4$ | 3 No. 10-P-1 | (895478) | 3 No. 10 | P | 50 | 191/2 |
| 8-D-1 | (895453) | 9 | D | 100 | $13 / 4$ | 4/3 Str-X-1 | (895479) | 43 | X | 50 | $141 / 2$ |
| 8-J-1 | (895454) | 8 | J | 100 | $41 / 4$ | *Oversize Sleeve. |  |  |  |  |  |
| 6-J-1 | (895455) | 6 | J | 100 | $41 / 2$ |  |  |  |  |  |  |
| 4-M-1 | (895456) | 4 | M | 50 | $151 / 4$ |  |  |  |  |  |  |
| 4-P-1 | (895457) | 4 | P | 50 | 15 |  |  |  |  |  |  |
| 2-x-1 | (895458) | 2 | X | 50 | $14^{3 / 4}$ | 3-Strand Copperweld |  |  |  |  |  |
| $1-\mathrm{X}-1$ | (895459) | 1 | X | 50 | 13 |  |  |  | Tool | ${ }_{\text {Std }}^{\text {Pt }}$ | Ship. Wt. |
|  |  |  |  |  |  | Cat. No. | Stock No. | AWG |  |  |  |
|  |  |  |  |  |  | 8A-M-1 | (895480) | 8 | M | 50 | 14 |
|  |  |  |  |  |  | 8A-P-1 | (895481) | 8 | P | 50 | 163/4 |
|  |  |  |  |  |  | 6A-P-1 | (895482) | 6 | P | 50 | 171/2 |
|  | Drop, Bridle and Inside Wire Copper, Copperweld and Bronze |  |  |  |  | $6 \mathrm{~A}-\mathrm{X}-1$ | (895483) | 6 | X | 50 | 291/4 |
|  |  |  |  |  |  | 4A-X-1 | (895484) | 4 | X | 50 | $271 / 2$ |
|  |  |  |  |  |  | 3 No. 12-M-1 | (895485) | $\int 3 \text { No. } 12 \text {, }$ | M | 50 | 9 |
| 19-22-A-3 | (895460) | 19-20-22 |  | 200 |  |  |  |  |  |  |  |
| 17-18-B-3 | (895461) | 17-18 | B | 100 | 1/2 | 3 No. 12-P-1 | (895486) | $\left\{\begin{array}{l} 3 \text { No. 12, } \\ 8 \mathrm{C}, 91 / 2 \mathrm{D} \end{array}\right.$ | P | 50 | $13^{1 / 4}$ |
| 16-B-3 | (895462) | 16 | B | 100 | 1/2 | 3 No. 10-P-3 | (895487) |  | P | 50 | $16^{1 / 2}$ |
| 14-B-3 | (895463) | 14 | B | 100 | 1/2 | No. 10-P-3 | (895487) | 3 No. 10 | $P$ | 50 | 161/2 |
|  |  |  |  |  |  | Galvanized Steel Conductors |  |  |  |  |  |
|  |  |  |  |  |  | Cat. No. | Stock No. | BWG | $\begin{aligned} & \text { Tool } \\ & \text { Groove } \end{aligned}$ | $\underset{\text { Pkg. }}{\substack{\text { Std. }}}$ | Ship. Wt <br> Lbs. Per C |
|  | Solid Copperweld Wire |  |  |  |  | 14-C-2 | (895488) | 14 BB | C | 100 | $11 / 2$ |
|  |  |  |  |  |  | 14-C-5 | (895489) | 1485 | C | 100 | $11 / 2$ |
| 14-C-1 | (895448) | 14 CW | C | 100 | $13 / 4$ | 14-D-2 | (895490) | 14 BB \& 85 | D | 100 | $13 / 4$ |
| 12-D-1 | (895450) | 12 CW | D | 100 | 2 | 12-C-2 | (895491) | 12 Old | C | 100 | $11 / 4$ |
| 10-D-3 | (895464) | 10 CW | D | 100 | $21 / 2$ | 12-C-4 | (895492) | 12 BB | C | 100 | $11 / 4$ |
| 10-J-1* | (895465) | 10 CW | J | 100 | $51 / 4$ | 12-C-5 | (895493) | 12 BB \& 85 | C | 100 | $11 / 4$ |
| 9-J-1 | (895466) | 9 CW | J | 100 | 5 | 12-D-2 | (895494) | 12 BB | D | 100 | $11 / 2$ |
| 8-J-1 | (895454) | 8 CW HS | J | 100 | $41 / 4$ | 12-D-5BB | (895495) | 12 BB | D | 100 | $11 / 2$ |
| 8-J-3 | (895467) | 8 CW | J | 100 | $51 / 2$ | 12-D-5 | (895496) | 1285 | D | 100 | $13 / 4$ |
| 8-M-1* | (895468) | 8 CW | M | 50 | $91 / 2$ | 12-D-5-135 | (895497) | 12135 | D | 100 | $21 / 2$ |
| 8-P-1* | (895469) | 8 CW | P | 50 | 151/2 | 10-J-2 | (895498) | 10 | J | 100 | $61 / 2$ |
| 7-M-1 | (895470) | 7 CW | M | 50 | $101 / 2$ | 10-J-2-85 | (895499) | 1085 | J | 100 | $61 / 2$ |
| 6-P-1 | (895471) | 6 CW | P | 50 | 13 | 9-J-2 | (895500) | 9 | J | 100 | $4^{3 / 4}$ |
| 4-X-1 | (895472) | 4 CW | X | 50 | 25 | 8-J-2 | (895501) | 8 | J | 100 | $43 / 4$ |

RELIABLE REPAIR AND TRANSPOSITION SLEEVES

| Solid Copper Wire |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | AWG | $\begin{gathered} \text { Tool } \\ \text { Groove } \end{gathered}$ | Std. <br> Pkg. | $\underset{\text { Lbs.Per C }}{\text { Ship. Wt. }}$ | Cat. No. |
| 12L-C-1 | (895502) | 12 | C | 100 | 6 | 14L-C-2 |
| 12L-D-1 | (895503) | 12 | D | 100 | $71 / 4$ | 12L-C-4 |
| 10L-C-1 | (895504) | 10 | C | 100 | 53/4 | 12L-D-2 |
| 10L-D-1 | (895505) | 10 | D | 100 | 6 | 10L-J-2 |
| 9L-D-1 | (895506) | 9 | D | 100 | $61 / 2$ | 9L-J-2 |
| 8L-D-1 | (895507) | 8 | D | 100 | $71 / 2$ | 8L-J-2 |
| 8L-J-1 | (895508) | 8 | J | 100 | $163 / 4$ |  |
| $6 \mathrm{~L}-\mathrm{J}-1$ | (895509) | 6 | J | 100 | $171 / 4$ |  |

## Galvanized Steel Conductors

| Stock No. | BWG | Tool <br> Groove | Std. <br> Pkg. | Ship. Wt. <br> Lbs. Per C |
| ---: | :---: | :---: | :---: | :---: |
| $\mathbf{( 8 9 5 5 1 0 )}$ | 14 | C | 100 | 6 |
| $\mathbf{( 8 9 5 5 1 1 )}$ | 12 | C | 100 | $51 / 2$ |
| $\mathbf{( 8 9 5 5 1 2 )}$ | 12 | D | 100 | 7 |
| $(895513)$ | 10 | J | 100 | 17 |
| $(895514)$ | 9 | J | 100 | $16^{3} 1 / 4$ |
| $(895515)$ | 8 | J | 100 | $181 / 2$ |



## RELIABLE SQUEEZ DEAD-ENDS



Reliable Squeez deadends consist of a Squeez splicing sleeve with a factory-assembled loop (bail) in one end. The other end is for the line wire, and only the line wire is installed by the lineman. The loop, or bail, is a specially prepared, high strength, D-shaped stainless steel wire which is factory-assembled to onehalf of the sleeve. Thus you have a prefabricated loop deadend ready for insulator or deadend fixture. In the case of deadending on a strain insulator, these deadends may be ordered separately of the loops. The lineman can assemble the bail and sleeve on the job. The groove marked on the sleeve for the wire is to be used when compressing bail into sleeve.

## Copper Conductors

| Cat. No. | Stock No. | AWG | $\begin{gathered} \text { Tool } \\ \text { Groove } \end{gathered}$ |  | $\begin{aligned} & \text { Ship. Wt. } \\ & \text { Lbs. Per C } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DE-12-C-1 | (895618) | 12 | C | 25 | 3 |
| DE-12-D-1 | (895619) | 12 | D | 25 | 3 |
| DE-10-C-1 | (895620) | 10 | C | 25 | 3 |
| DE-10-D-1 | (895621) | 10 | D | 25 | 3 |
| DE-9-D-1 | (895622) | 9 | D | 25 | 3 |
| DE-8-J-1 | (895623) | 8 | J | 25 | 7 |
| DE-6-J-1 | (895624) | 6 | J | 25 | 7 |
| DE-6STR-J-1 | (895625) | 6-7 Str. | J | 25 | 7 |
| Copperweld Conductors |  |  |  |  |  |
| DE-12-D-1 | (895626) | 12 CW | D | 25 | 3 |
| DE-10-D-3 | (895627) | 10 CW | D | 25 | 4 |
| DE-10-J-1 | (895628) | 10 CW | J | 25 | 7 |
| DE-9-J-1 | (895629) | 9 CW | J | 25 | 7 |
| DE-8-J-3 | (895630) | 8 CW | J | 25 | $71 / 2$ |
| DE-8-M-1 | (895631) | 8 CW | M | 25 | 11 |
| DE-8-P-1 | (895632) | 8 CW | P | 25 | 7 |
| DE-7-M-1 | (895633) | 7 CW | M | 25 | 11 |
| DE-6-P-1 | (895634) | 6 CW | P | 25 | 7 |

## Galvanized Steel Conductors

| Cat. No. | Stock No. | BWG |  |  | Tool <br> Troove | Std. <br> Pkg. | Ship. Wt. <br> Lbs. Per C |
| :--- | ---: | :--- | :--- | :--- | :--- | :---: | :---: |
| DE-14-C-4 | $\mathbf{( 8 9 5 6 3 5 )}$ | 14 | BB \& 85 | C | 25 | 3 |  |
| DE-14-D-2 | $\mathbf{( 8 9 5 6 3 6 )}$ | 14 | BB \& 85 | D | 25 | 3 |  |
| DE-12-C-4 | $\mathbf{( 8 9 5 6 3 7 )}$ | 12 | BB | C | 25 | 3 |  |
| DE-12-C-5 | $\mathbf{( 8 9 5 6 3 8 )}$ | 12 | BB \& 85 | C | 25 | 3 |  |
| DE-12-D-2 | $\mathbf{( 8 9 5 6 3 9 )}$ | 12 | BB | D | 25 | 3 |  |
| DE-12-D-5(BB) | $\mathbf{( 8 9 5 6 4 0 )}$ | 12 | BB | D | 25 | $31 / 2$ |  |
| DE-12-D-5(85) | $\mathbf{( 8 9 5 6 4 1 )}$ | 12 | 85 | D | 25 | $31 / 2$ |  |
| DE-12-D-5(135) | $\mathbf{( 8 9 5 6 4 2 )}$ | 12 | 135 | D | 25 | 5 |  |
| DE-10-J-2 | $\mathbf{( 8 9 5 6 4 3 )}$ | 10 | BB \& 85 | J | 25 | 7 |  |
| DE-9-J-2 | $\mathbf{( 8 9 5 6 4 4 )}$ | 9 | BB \& 85 | J | 25 | 7 |  |
| DE-8-J-2 | $\mathbf{( 8 9 5 6 4 5 )}$ | 8 | BB \& 85 | J | 25 | 7 |  |

## RELIABLE SQUEEZ TOOLS

Reliable compression tools with integral standard dies are superbly designed toggle action tools of high quality. They are factory adjusted and have generous, comfortable handles. All critical dimensions are maintained to close tolerances. Jaws, with die grooves, and the linkages are special heat treated alloy steel. Handles are drop forged steel. The tools with standard die grooves in pairs (2 dies per tool) handle all sizes and types of sleeves and wires No. 1 Sol. to No. 22. Tools are cataloged and are available in die groove combinations to suit the user's wire size practices.


A six ounce, heat treated steel tool with comfortable plastic handle grips for use with all sleeves having " $A$ " or " $B$ " in cata$\log$ numbers.

| Cat. <br> No. | Stock No. | Grooves | Sleeves <br> Accommodated | Lgth. | Ship. <br> Wt. |
| :--- | :---: | :--- | :--- | :--- | :--- |
| 3-BA | $(895646)$ | B and A | Sleeves with A <br> or B in Cat. No. | $81 / 2^{\prime \prime}$ | 6 oz. |



A rugged toggle type tool with drop forged steel handles and special heat treated alloy steel jaws and standard die grooves. Applies pressure with ease and positive closure. For use with all sleeves having letters C, D or J in catalog numbers and available in die groove combinations CD, CJ or DJ.

| $\begin{aligned} & \text { Cat. } \\ & \text { No. } \end{aligned}$ | Stock No. | Grooves | Sleeves <br> Accommodated | Lgth. | Ship. Wt. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2-DD | (895647) | $D$ and D | Sleeves with DT-2 or D in Cat. No. | $12^{\prime \prime}$ | 3 |
| 2-DC | (895648) | $D$ and $C$ | Sleeves with C or D in Cat. No. | $12^{\prime \prime}$ | 3 |
| 2-CJ | (895649) | C and J | Sleeves with C or J in Cat. No. | $12^{\prime \prime}$ | 3 |
| 2-DJ | (895650) | $D$ and $J$ | Sleeves with D or J in Cat. No. | $12^{\prime \prime}$ | 3 |

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## SEYMOUR-SMITH NO. 12 AND NO. 11 telephone tree pruners



Strong, durable tree pruners with reinforced head. Tempered steel cutting blade. Compression coil spring. Selected spruce poles with positive locking, seamless brass, telescoping ferrule joints. Steel cable chain works through ball bearing pulley. Simple, powerful action.

For heavy duty, up to $11 / 2^{\prime \prime}$ capacity, the No. 12-18 Complete Pruner is recommended. Consists of No. 12 Pruner Head, No. 202 Head Section Pole, two No. 203 Extension Poles, and Operating Rope. For average work, up to $1^{\prime \prime}$ capacity, the No. 11-18 Complete Pruner is recommended. Consists of No. 11 Pruner Head, No. 102 Head Section Pole, two No. 103 Extension Poles, and Operating Rope.

| Cat. No. | Stock No. |  | Description | Ship. Wt. <br> Pounds |
| :---: | :---: | :--- | :---: | ---: |
|  |  |  | 19 |  |
| $\mathbf{1 2 - 1 8}$ | $\mathbf{( 8 9 2 2 0 6 )}$ | Complete Pruner with rope, 18' pole | 19 |  |
| $\mathbf{1 2}$ | $\mathbf{( 8 9 2 2 0 7 )}$ | Telephone Pruner Head only. | 4 |  |
| $11-18$ | $\mathbf{( 8 9 2 2 0 0 )}$ | Complete Pruner with rope, 18' pole | 10 |  |
| 11 | $\mathbf{( 8 9 2 2 0 1 )}$ | Telephone Pruner Head only. | $11 / 2$ |  |

For making up a very long pole, it is advisable to use the large Extension Section Poles (No. 203) for the lower sections. To join small poles to the large poles, it is necessary to use either the No. 21 Tapered Extension Section or the No. 51 Tapered Head Section Pole.

## SEYMOUR SMITH "TELEPHONE" POLE PRUNING SAW

No. 20-18 Complete Saw
An improved pole pruning saw for line clearing. Has unbreakable aluminum alloy head with extra large hook for pulling out loose branches. Also has paint brush holder. Saw blade $16^{\prime \prime}$ long of highest quality steel, taper ground, with fast-cutting needle teeth. Attached to head by bolt and thumb nut. Holes in blade end, which fit over a hardened steel screw, allow adjustment to three different positions. No weak pin to shear off.

No. 20-18 Complete Saw with 18 ft . pole. Comprised of No. 20 Saw Head, one Head Section 102, and two Extension Poles No. 103. Shipping Weight 10 lbs . Stock No. (894824)


Repair Parts and Poles
10B Cutting Blade only
10S Bolt, Wing Nut and Lock Washer
20H Head Casting only
102 Head Section Pole 6 ft
103 Extension Pole 6 ft .
NOTE: When ordering parts, please specify both Part Number and Part Name.

No. 20 Saw Head
No. 20 Saw Head only with blade. Shipping weight $11 / 2$ lbs. Stock No. (394825)


## TELEPHONE TREE PRUNER PARTS



| Repair Parts |  |
| :---: | :---: |
| For No. 12 Pruner Part No. | For No. 11 Pruner $\begin{array}{r}\text { Part No. }\end{array}$ |
| 121-Head Casting only | 111 |
| 122-Operating Lever only |  |
| 123-Lever Screw with nut and washer |  |
| 124-Blade Bolt with nut and washer | 114 |
| 125-Spring Bolt with nut and washer | 113 |
| 126-Spring with Eye Rod (2 needed p |  |
| Spring with Eye Rod. | 115 |
| 127-Cutting Blade. | 116 |
| 128-Operating Pulley with bolt and | 117 |
| 129-Socket Bolt with nut. | 118 |
| 120-Operating Chain with Ring and | Pin. . . . . . 110 |
| Short Ferrule with Rope Guide and | et. . . . . . . . 19 |
| 200-Long Ferrule with Lock and Rive | . 100 |
| 201-Short Ferrule with Rivet | 101 |



No. 700

## NO. 700 FEATHERWEIGHT TRIMMER

Our No. 700 Trimmer is designed for lighter work than the Nos. 800 and 900 . It is a very light weight tool and yet makes a $1^{\prime \prime}$ cut, and is especially adapted for topping or work in the tree. This trimmer has single action pulley design. This is an ideal tool for home owners, nurseries, tree surgeons, park departments, etc.; unit of sale is head section and end section, 10 ' overall. Additional center section can be secured. All handles are $11 / 4^{\prime \prime}$ diameter. All pulleys are ball bearings for easier operation.

## Specifications

Cat. No. 700-10' Overall, weight $43 / 4$ pounds. Stock No. (894621)

## Parts

Cat. No. 875-Center Ext. Handle 5', wt. $13 / 4 \mathrm{lbs}$. Cat. No. 750-Replacement Blade, wt. 3/8 lb. Cat. No. 885-End Ext. Handle 5', wt. 13/4 lbs.

## NO. 800 BANTAM WEIGHT TRIMMER

The Newman No. 800 Trimmer was designed for lighter work than the No. 900 would be used for and yet having the same compound leverage. This tool is light enough for horizontal use in the tree.

Cutting capacity a full inch and using $11 / 4^{\prime \prime}$ diameter handles. Unit of sale is $10^{\circ}$ overall, consisting of head or cutting section $5^{\prime}$ and end extension $5^{\prime}$. For longer use, $5^{\prime}$ center extensions may be had. All pulleys are ball bearing for easier operation.

## Specifications

Cat. No. 800-10' Overall, weight $51 / 4 \mathrm{lbs}$. Stock No. (894622)

## Parts

Cat. No. 875-Center Ext. Handle 5', wt. 13/4 lbs. Cat. No. 750 -Replacement Blade, wt. $3 / 8 \mathrm{lb}$.


No. 800 Cat. No. 885-End Ext. Handle $5^{\circ}$, wt. $13 / 4 \mathrm{lbs}$.
"EZY-CUT" LONG HANDLED PRUNER


A rugged performer for all tough clearing and brush cutting jobs. Drop forged, tempered steel cutting parts. Selected ash handles with heavy ferrules. Cuts up to $2^{\prime \prime}$ brush and limbs.

| Cat. No. | Stock No. | Description |
| :--- | :--- | :--- |
| $\mathbf{2 5}$ | $\mathbf{( 8 9 2 2 3 1 )}$ | $22^{\prime \prime}$ handles, length overall, 28" |
| $\mathbf{2 6}$ | $\mathbf{( 8 9 2 2 3 2 )}$ | $30^{\prime \prime}$ handles, length overall $36^{\prime \prime}$ |

Packed 1 doz. in shipping carton. Shipping wts. per doz. No. 25, 53 lbs .; No. 26, 78 lbs .

## NO. 900 HEAVY DUTY TRIMMER

This trimmer employs a wholly new principle in that it cuts from the top down rather than the bottom up-with the law of gravity rather than against it. Furthermore, the cutting action is a cyclic motion-point first, then heel-then the blade cleaves through the last of bark. This tool features the Newman compound leverage-plus ball bearing pulleys.

It is impossible to get this tool stuck or wedged in a limb-because there is no place for bark and sap to lodge.
Makes full $11 / 2^{\prime \prime}$ cut beccuse cutting action is from outside in rather than inside out. All handles $11^{\prime \prime} 2^{\prime \prime}$ diameter, $5^{\prime}$ long. Unit of sale head section and end extension. $10^{\circ}$ overall. Additional center sections may be had.

## Specifications

Cat. No. 900-10' Overall, weight $61 / 2$ pounds. Stock No. (894623)

## Parts

Cat. No. 975 -Center Ext. Handle 5', wt. 2 lbs. Cat. No. 950-Replacement Blade, wt. $1 / 2 \mathrm{lb}$. Cat. No. 985 -End Ext. Handle 5', wt. 2 lbs.

## NO. 1550-2 XELA ELECTRICIANS' KNIVES



A handy combination for the electrician, combining an emergency screwdriver, a knife blade for cutting or stripping wire; safely locked so that it cannot close during use. Well-tempered blade, strong joint, solid, well-proportioned, hand fitting handle and a lock to keep the blade safely open, yet promptly releasable when it is desired to close the blades.

Screwdriver blade is locked when open; to unlock press down on large blade. Stock No. (892512)

## JOSLYN FORGED STEEL BUSH HOOKS

 Single Edge - Strap Style

Built for clearing work that is too heavy for a scythe and not suited for an axe. Heavy duty, high carbon steel blades automatically tempered. Sharp beveled edges. Bright red enameled blade with blue metallic blade stamp. $36^{\prime \prime}$ oval hickory handles with beveled butt. White lacquer finish. Packed 6 per carton.

| Cat. | Stock | Head | Point | Cutting | Handle | Weight |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | No. | Weight | Size | Edge | Pattern | Each |
| 100 | $(897241)$ | $31 / 2 \mathrm{lbs}$. | $31 / 2^{\prime \prime}$ | $11^{\prime \prime}$ | $36^{\prime \prime}$ Bent | $43 / 4 \mathrm{lbs}$. |



Special steel, high grade, tuttle tooth pattern. Has extra sharp teeth, which hold edge longer due to their extra fine temper. Handle of air dried beech, Davey pattern. Extra large and roomy grip reinforced with dowel pin. Fully lacquered and polished. Fastened to handle with 3 brass screws and medallion.
Packed 6 in $\alpha$ box.

| Cat. No. | Stock No. | Lgth. | Width <br> Inches |  | Woint In. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 40 | $(892236)$ | 20 | $11 / 8$ | $51 / 2$ | 17 |
| 40 | $(892237)$ | 24 | $11 / 2$ | $61 / 4$ | 21 |

## NEWMAN DOUBLE EDGE SAW



This double edge saw provides crosscut teeth on one side and fine teeth on the other for finish stroke and barking. Blade: $18^{\prime \prime}$ long. Width at butt: $21 / 4^{\prime \prime}$. Width at point: $7 / 8^{\prime \prime}$.

| Cat. No. | Stock No. | Packaged | Weight |
| :---: | :---: | :---: | :---: |
| 118 | $(897240)$ | $1 / 3$ doz. per carton | 10 lbs. per doz. |

## NO. 22 CURVED PRUNER



Silver steel with teeth on concave edge only. Blade has smooth back. Rip teeth cut on the full, filed and set. Extra large beech handle grip, fully lacquered and polished. 3 nickeled screws. Packed 4 in a box.

| Length <br> Inches | Stock No. | Points <br> per In. | Width <br> Point In. | Width <br> Butt In. | Wt. Lb. <br> per Doz. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1 8}$ | $\mathbf{( 8 9 4 7 4 1 )}$ | 6 | $11 / 8$ | $31 / 8$ | 13 |
| $\mathbf{2 2}$ | $\mathbf{( 8 9 4 7 4 2 )}$ | 6 | $11 / 8$ | $31 / 8$ | 16 |
| $\mathbf{2 4}$ | $\mathbf{( 8 9 4 7 4 3 )}$ | 6 | $11 / 8$ | $31 / 8$ | 18 |

## GENERAL INDEX

A complete alphabetical index with cross references for all the products shown in this section or any of the other sections will be found in the center of this catalog.

## IWAN AUGER BLADES

## Less Handle

Adapted for use with Blackburn's telescope handle. These blades have two sharp cutting edges formed in such a manner as to both cut and hold the earth as they are rotated. The result is a clean-cut round hole. These may be ordered with handles.


Stock
No.

| Diam. Hole <br> Inches | Weight <br> Pounds |
| :---: | :---: |
| 5 | 4 |
| 6 | 6 |
| 7 | 7 |
| 7 | 7 |
| 10 | 8 |
| 12 | 14 |



EVERSTICK STANDARD EARTH AUGERS

## Less Handle

Adapted for use with Blackburn's telescope handle.

| Cat. | Stock <br> No. | Diam. Hole <br> Inches | Weight <br> Pounds |
| :---: | :---: | :---: | ---: |
| 8 | $(892292)$ | 8 to 14 | $281 / 2$ |
| 5 | $(892293)$ | 5 to 8 | $281 / 2$ |

## CHANCE TELESCOPIC TRIP AUGER

## Complete with Handles

An efficient, economical tool for boring holes for poles, guy anchors, etc. Every twist of the handle pulls the blades into the ground like a carpenter's auger.
The separate extension blade on the No. 812 auger is adjustable to diameters from 8 to $123 / 4$ inches, so that it is possible to bore seven different size holes to $a$ depth of 8 feet with the same auger.

## Telescoping Augers Complete with Handles

Depth of Hole, $5^{\prime}$ to $8^{\prime}$.



## PERFECTION POST HOLE DIGGERS



## Regular Pattern

## Complete with Handles

Blade is 13 gage, $131 / 2$ inches long and 7 inches wide; painted orange and black. Ash handles, lacquer finish.

| Catalog No. | Stock No. | Length Handle Ft. | Wt. Lb. |
| :---: | :---: | :---: | :---: |
| $\mathbf{4 3 9}$ | $\mathbf{( 8 9 2 2 8 2 )}$ | 4 | 10 |
| $\mathbf{4 4 0}$ | $\mathbf{( 8 9 2 2 8 3 )}$ | 7 | 12 |
| $\mathbf{4 4 1}$ | $\mathbf{( 8 9 2 2 8 4 )}$ | 8 | 13 |

ROUND POINT SHOVELS


Plain back, strap pattern. Flexteel quality, heat treated. A grade, 15 -gauge blade, X grade handles, sanded and waxed. Black finish blades. Blade approximately $9 \times 12$ inches.

| Cat. No. | Stock No. | Size No. | Description | Handle In. | Wt. Lb. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{8 2 3}$ | $\mathbf{( 8 9 2 3 3 4 )}$ | 2 | D Handle | 24 | 5 |
| $\mathbf{8 2 6}$ | $\mathbf{( 8 9 2 3 3 5 )}$ | 2 | Long Handle | $461 / 2$ | 5 |

## SHOVELS—STRAIGHT WOOD HANDLES



Plain Black-Strap Pattern
Hickory or Ash
Strap 22 inches; Blade $9 \times 12$ inches.

| Cat. No. | Stock No. | Handle Ft. | Wt. Lb. |
| :---: | :---: | :---: | :---: |
| 16 | $(892312)$ | 7 | 8 |
| 17 | $(892313)$ | 8 | 9 |
| 18 | $(892314)$ | 9 | 10 |
| 19 | $(892315)$ | 10 | 11 |

SPOONS
Plain back, strap pattern. Flexteel quality, heat treated, 13 gauge blade. XX grade handles, sanded and waxed. Black finish blades.


Hickory or Ash Handles
Strap 22 inches; Blade $91 / 2 \times 101 / 2$ inches.

| Cat. No. | Stock No. | Handle Ft. | Wt. Lb. |
| :---: | :---: | :---: | :---: |
| A55 | $\mathbf{( 8 9 2 3 3 9 )}$ | 6 | 7 |
| 55 | $(892340)$ | 7 | 8 |
| 56 | $(892341)$ | 8 | 9 |
| 57 | $(892342)$ | 9 | 10 |
| 58 | $(892343)$ | 10 | 11 |
| 58A | $(892344)$ | 12 | 13 |



Hickory or Ash Handles
Strap, 22 inches; Blade $81 / 2 \times 93 / 4$ inches.

| Cat. No. | Stock No. | Handle Ft. | Wt. Lb. |
| :---: | :---: | :---: | :---: |
| $\mathbf{4 9}$ | $\mathbf{( 8 9 2 3 4 9 )}$ | 6 | 7 |
| 50 | $\mathbf{( 8 9 2 3 5 0})$ | 7 | 8 |
| 51 | $(892351)$ | 8 | 9 |
| 52 | $(892352)$ | 9 | 10 |
| 53 | $(892353)$ | 10 | 11 |
| 54 | $(892354)$ | 12 | 13 |



A new safety innovation is the Chance Pike Pole with removable point. The point is made in a separate piece, flat on one end with a gimlet point on the other. A spring catch on the side of the point holds it in place when slipped into the end of the ferrule on the pole.

Made of Douglas or Western Fir, free from all defects, and lacquer finished. The ferrule is made of high grade malleable iron. Removable pike point is made of steel, heat treated. Ferrule and pike may be purchased separately.

| Cat. No. | Stock No. | Dia. and Length | Wt. Each |
| :--- | ---: | ---: | ---: |
| 210P | $\mathbf{( 8 9 2 4 3 1 )}$ | $2^{\prime \prime} \times 10^{\prime}$ | 8 lbs. |
| $\mathbf{2 1 2 P}$ | $\mathbf{( 8 9 2 4 3 2 )}$ | $2^{\prime \prime} \times 12^{\prime}$ | 9 lbs. |
| $\mathbf{2 1 4 P}$ | $\mathbf{( 8 9 2 4 3 3 )}$ | $2^{\prime \prime} \times 14^{\prime}$ | 11 lbs. |
| $\mathbf{2 1 6 P}$ | $\mathbf{( 8 9 2 4 3 4 )}$ | $2^{\prime \prime} \times 16^{\prime}$ | 13 lbs. |
| $\mathbf{2 1 8 P}$ | $\mathbf{( 8 9 2 4 3 5 )}$ | $2^{\prime \prime} \times 18^{\prime}$ | 15 lbs. |
| 220P | $\mathbf{( 8 9 2 4 3 6 )}$ | $2^{\prime \prime} \times 20^{\prime}$ | 17 lbs. |

## OCTAGON TAMPING AND DIGGING BARS



Double beveled cutting blade at one end; fitted with heavy iron tamping shoe, painted blue.

| Cat. No. | Stock No. | Diam. In. | Lgth. Ft. | Wt. Lb. |
| :---: | :---: | :---: | :---: | :---: |
| 408 | $(892260)$ | 1 | 7 | 20 |
| 409 | $(892261)$ | 1 | 8 | 25 |
| 411 | $(892262)$ | $11 / 8$ | 7 | 25 |
| 412 | $(892263)$ | $11 / 8$ | 8 | 30 |

## CHANCE EXPANDING AND TAMPING BAR



Wherever expanding anchors are used, the Chance Expanding and Tamping Bar should be used also because it simplifies the expanding job. The hook wraps around the anchor rod. This keeps the tar. from slipping off the anchor top plate and consequently makes expanding easier and quicker.
The base is a "Duramel" casting attached to the hard maple handle by two heavy strips of steel.

| Cat. No. | Stock No. | Length | Approx. Wt. |
| :--- | :---: | :--- | :---: |
| Each |  |  |  |

## A. T. \& T. PATTERN TAMPING BARS



Select maple handle $15 / 3$ inches in diameter, tapered at lower end; fitted with extra heavy one-piece shoe, made of $5 / 8 \times 11 / 4$ inch side straps; bottom, $11 / 4$-inch square steel. Rivets passing through the handle and shoe with heads countersunk, hold the shoe firmly in place. An extremely high grade tamper.

Tamping end dipped in creosote to prevent decay, then painted blue. Handle smoothly sand finished.

| Cat. No. | Stock No. | Length Feet | Wt. Lb. |
| :---: | :---: | :---: | :---: |
| $\mathbf{4 2 1}$ | $(892272)$ | 7 | 12 |
| $\mathbf{4 2 2}$ | $(392273)$ | 8 | 13 |

## PIKE POLES

These poles are made of selected Douglas or Western fir, free from all defects. This timber is especially adapted to pike poles. Has the strength of ash, yet is light in weight.

Pikes are of $13 / 16^{\text {-inch round crucible steel of the collar pike }}$

## Light Pattern

$\square$ ap

These poles are 2 inches in diameter, not tapered.

| Cat. No. | Stock No. | Length Feet | Wt. Lb. |
| :---: | :---: | :---: | :---: |
| 205 | $(892405)$ | 12 | 9 |
| 206 | $(892406)$ | 14 | 11 |
| 207 | $(892407)$ | 16 | 13 |
| 208 | $(892408)$ | 18 | 15 |
| 209 | $(892409)$ | 20 | 17 |

design with sharp points. They are set in creosote.
Ferrules are made of steel tubing, riveted securely, passing through ferrule and pike, holding the pike firmly in the pole.

All poles are smoothly sand finished. Metal parts painted blue.

## A. T. \& T. Pattern



Diameter at center, $21 / 2$ inches, tapering to 2 inches at ends. This gives extra strength at center where needed with very little increase in weight.

| Cat. No. | Stock No. | Length Feet | Wt. Lb. |
| :---: | :---: | :---: | :---: |
| $\mathbf{2 1 9}$ | $\mathbf{( 8 9 2 4 1 0 )}$ | 12 | 12 |
| $\mathbf{2 2 0}$ | $\mathbf{( 8 9 2 4 1 1 )}$ | 14 | 14 |
| $\mathbf{2 2 1}$ | $\mathbf{( 8 9 2 4 1 2 )}$ | 16 | 16 |
| $\mathbf{2 2 2}$ | $\mathbf{( 8 9 2 4 1 3 )}$ | 18 | 18 |
| $\mathbf{2 2 3}$ | $\mathbf{( 8 9 2 4 1 4 )}$ | 20 | 20 |



Made of selected Douglas or Western fir with malleable iron ferrule and fork in one piece, driven onto pole and secured by a rivet.

Handles are furnished in two sizes, the 2-inch are parallel and the $21 / 2$-inch are tapered to 2 inches at the ends.

Metal parts painted blue.

| Cat. No. | Stock No. | Length Feet | Diam. In. |
| :---: | :---: | :---: | :---: |
| $\mathbf{2 2 6}$ | $\mathbf{( 8 9 2 4 1 5 )}$ | 10 | 2 |
| $\mathbf{2 2 7}$ | $\mathbf{( 8 9 2 4 1 6 )}$ | 12 | 2 |
| $\mathbf{2 2 8}$ | $\mathbf{( 8 9 2 4 1 7 )}$ | 14 | 2 |
| $\mathbf{2 2 9}$ | $\mathbf{( 8 9 2 4 1 8 )}$ | 16 | $21 / 2$ |
| $\mathbf{2 3 0}$ | $\mathbf{( 8 9 2 4 1 9 )}$ | 18 | $21 / 2$ |
| $\mathbf{2 3 1}$ | $\mathbf{( 8 9 2 4 2 0 )}$ | 20 | $21 / 2$ |

## CARRYING OR LUG HOOKS



Handles of selected air seasoned hickory and hard maple with hand turned knobs, smoothly sand finished.

Hooks are crucible steel, hung in heavy malleable iron clasp and swivel. Metal parts painted blue.

## W.U. Pattern Hickory

Diameter handle, 3 inches.

| Cat. No. | Stock No. | Handle Ft. | Wt. Lb. |
| :---: | :---: | :---: | :---: |
| 112 | $(892381)$ | 5 | 12 |
| 113 | $\mathbf{8 9 2 3 8 2 )}$ | 6 | 14 |
| 114 | $(892383)$ | 7 | 16 |



Handles of selected air seasoned hickory and hard maple with hand turned knobs. Smooth sand finished.

Hooks are crucible steel with duck bill points, hung in heavy malleable iron clasp.

Toe rings are malleable iron.
Metal parts painted blue.
Diameter handle $21 / 2$ inches.
Hickory

| Cat. No. | Stock No. | Handle Ft. | Wt. Lb. |
| :---: | :---: | :---: | :---: |
| 118 | $(892393)$ | 4 | $71 / 2$ |
| 119 | $(892394)$ | $41 / 2$ | 8 |
| 120 | $(892395)$ | 5 | $81 / 2$ |

PEAVIES


## stuace troots

Handle of selected air seasoned hickory and hard maple with hand turned knobs. Smoothly sand finished. Malleable iron sockets and crucible steel hooks with duck bill points. Pikes are of crucible steel and driven in. Metal parts painted blue. Diameter handle, $21 / 2$ inches.

| Hickory |  |  |  |
| :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Handle Ft. | Wt. Lb. |
| 124 | $(892369)$ | 4 | 8 |
| 125 | $(892370)$ | $41 / 2$ | 9 |
| 126 | $(892371)$ | 5 | 10 |

CHANCE POLE TONGS


Work like giant pliers, allowing one man to guide and control the installation of a pole. Applying pressure to keep the tongs closed, $\alpha$ workman controls the forward, backward and rotation movement of a pole as it is lowered by a winch line.

The adjustable jaws permit the tong to fit securely on poles from 7 to 18 inches diameter. Seasoned hickory handles, three feet long, keep the workman well away from the pole.

| Catalog No. | Stock No. | Handle Length | Approx. Wt. |
| :---: | :---: | :---: | :---: |
| C-200-T | $(895666)$ | 3 ft. | $141 / 2 \mathrm{lbs}$. |

## NO. 5197 PAY-OUT AND TAKE-UP REELS



Designed to pay out drop wire, and also to take up wire. It is demountable and can be used in a vertical or horizontal plane when removed from the vehicle.

The outer spider is removable and adjustable with $\alpha$ plunger type lock. This permits the placing of coils as well as the removal of same from the reel.
A variable tension brake controls the paying out speed of the wire.
Made of malleable castings, and high grade steel.
It will take $\alpha$ coil of wire
having an inside diameter of 15 inches.

| Cat. No. | Stock No. | Inside Coil Diam. In. | Wt. Lb. |
| :---: | :---: | :---: | :---: |
| 5197 | $\mathbf{( 8 9 2 4 6 1 )}$ | 15 | 32 |

fSA WIRE REEL WITH METER


A machine for measuring the various sizes of Wire, Cordage, etc. It will save time and money and in a short time will demonstrate its great value.
In the meter the wire passes between two self-adjusting rollers which admit of wide range, and will measure accurately large or small sizes. The pointers are movable and readily adjusted to zero point. Takes up to $3 / 4 \mathrm{in}$.

The Reel is provided with removable cross bars, and the drum with grooves so the coil can be bound with tie wires and removed in compact form. The meter shows the number of feet in the coil and does away with measuring on the floor.

The Reel and Meter, being movable and occupying small space, can be placed where convenient for measuring and set aside when not in use.

Capacity of reel, $1,000 \mathrm{ft}$. of No. 14 B. and S. gauge. Other sizes in proportion. Stock No. (894772)

## SQUIRREL CAGE REEL



This squirrel cage reel controls stiff, stubborn wire strand cable which is difficult to handle on ordinary reels. Can be mounted on trucks either horizontally or vertically. Strong steel welded construction, light weight. Furnished with adjustable fingers, friction brake and handle for takeup.

Cat. No. 400
Stock No. (897244)

## Specifications

| Cage Did | es |
| :---: | :---: |
| Cage Inside Diameter OD | 37 inches |
| Width of Cage Diameter. | 16 inches |
| Over-all Width | . 16 inches |
| Inside Coil Adjustment. | 16 inches to 29 inches |
| Width of Coil Range. | . 3 inches to 10 inches |
| Weight | . 70 lbs . |

## STORE ROOM REEL



This Storeroom Reel takes any size of wire or cable without adjustments. It has free, easy running because of an excellent bearing arrangement. Saves time and labor. It can be easily moved because of its light weight. It will not tip as the legs are widely spaced. Strong welded smooth construction permits the wire to be pulled off without kinks or tangles, leaving a compact coil for storage. Comes equipped with attachment to hold meter.

| Cat. No. | Stock No. | Dimension | Weight |
| :---: | :---: | :---: | :---: |
| 800 | $(897243)$ | $40^{\prime \prime}$ tall, $34^{\prime \prime}$ wide | 42 lbs. |

## TAKE-UP REEL



No. 4T Reel has four short 8 in . legs on which it stands. It is equipped with 6 fingers and $\alpha$ handle crank for paying out as well as taking up wire. This type is not to be mounted but will stand on the ground or in a truck bed to pay out wire.

[^0]
## GUY WIRE DISPENSER



This dispenser feeds guy wire smoothly by eliminating whipping of the strand ends. It is simple and safe to operate. The steel dispenser will accommodate every standard type of coil.
The unit may be suspended on a truck by its ring holder or may be used in the horizontal position with equal efficiency. It may also be used for storing partially used rolls.
Coil is easily loaded into this dispenser by removing a wing nut and spreading the two top bars. After the coil is in place, replace the bars and wing nut and cut the wires binding the coil. The strand is fed from the center of the coil.

| Catalog No. | Stock No. | Description | Weight |
| :---: | :---: | :---: | :---: |
| $\mathbf{3 0 0 1}$ | $\mathbf{( 8 9 5 6 8 5 )}$ | Guy Wire Dispenser | 21 lbs. |

## DUO-SAFETY EXTENSION AND STEP LADDERS

## Type C-Step Ladders

The Type $C$ is strong, lightweight and well constructed. It is designed especially for general maintenance work featuring improved rung back construction, and has all steps trussed with steel rods.

| Cat. No. | Stock No. | Over-all Height | Work Height | Weight |
| ---: | ---: | ---: | :---: | ---: |
| 5-C | $\mathbf{( 8 9 7 2 0 3 )}$ | $5^{\prime}$ | $11^{\prime}$ | 18 lb. |
| 6-C | $\mathbf{( 8 9 7 2 0 4 )}$ | $6^{\prime}$ | $12^{\prime}$ | 22 lb. |
| 7-C | $\mathbf{( 8 9 7 2 0 5 )}$ | $7^{\prime}$ | $13^{\prime}$ | 26 lb. |
| 8-C | $\mathbf{( 8 9 7 2 0 6 )}$ | $8^{\prime}$ | $14^{\prime}$ | 30 lb. |
| 10-C | $\mathbf{( 8 9 7 2 0 7 )}$ | $10^{\prime}$ | $16^{\prime}$ | 37 lb. |
| 12-C | $\mathbf{( 8 9 7 2 0 8 )}$ | $12^{\prime}$ | $18^{\prime}$ | 45 lb. |
| 14-C | $\mathbf{( 8 9 7 2 0 9 )}$ | $14^{\prime}$ | $20^{\prime}$ | 52 lb. |
| 16-C | $\mathbf{( 8 9 7 2 1 0 )}$ | $16^{\prime}$ | $22^{\prime}$ | 60 lb. |

## Type D-Extension Ladders

A really great ladder is Duo-Safety's Type " $D$ ", suitable for all the straight or extension ladder requirements of heavy industry. Type $D$ is built in accordance with approved safety standards, has rungs of second growth hickory reinforced by steel rods, and equipped with special automatic locks and Duo-Safety ladder's famous Safety Shoes. Available in one, two and three section ladders.

## Type E-Section Ladders

Designed primarily for Telephone and Telegraph Companies, Type " $E$ " is a sectional ladder which can be easily stored in a small space in Utility trucks. Sketch shows the steel reinforcing of the dovetail pronged section ends. Type " $E$ " is an exceptionally useful and versatile ladder, built to withstand the most severe usage. Available in either special or natural finishes.

Type E Stock No. (894698)

DUO-SAFETY LADDER SHOES


NOTE: Larger Sizes available on request. Complete line of aluminum extension and step ladders available on request.

## PUTNAM NO. 105 AUTOMATIC PORTABLE LADDER



This ladder has been especially designed and used extensively in terminal rooms of telephone exchanges. The ladder rolls easily in either the open or closed position and features the automatic brake and wide face rubber wheels. When stepped on, the ladder becomes automatically locked and will not move. Stock size - six foot. Any size made to specification. Made of Oak or Beech. All metal parts pressed steel, galvanized.

Stock No. (897216)

## PUTNAM NO. 2 ROLLING LADDER ASSEMBLY

No. 2 Ceiling Ladder is a rolling type stepladder, designed for use generally in telephone central offices. Ladder is usually placed between two rows of frames in telephone offices so that either side may be served from it. Mounting of ladder is about $68^{\circ}$, making the steps parallel with floor.

A top brake is mounted on upper end of ladder, said brake equipped with trolleys to permit ladder to be suspended from, and ride in, track. Track is mounted either on ceiling or suitable brackets by means of track brackets, and sections of track are joined together by track splices. Rubber-tired wheels at bottom of ladder permit easy movement.
Ladder may be ordered in various heights, depending on track height requirements.

Catalog No. 2
Stock No. (897217)

## GENERAL INDEX

A complete alphabetical index with cross references for all the products shown in this section or any of the other sections will be found in the center of this catalog.


KLEIN'S SIDE CUTTING PLIERS


Diamond special for use on bare and insulated wire.

| Cat. No. | Stock No. | Size Inches | Wt. Lb. <br> per Doz. |
| :---: | :---: | :---: | :---: |
| $201-6$ | $(892466)$ | 6 | $51 / 4$ |
| $201-7$ | $(892467)$ | 7 | $71 / 4$ |
| $201-8$ | $(892468)$ | 8 | $113 / 4$ |
| $201-9$ | $(892469)$ | 9 | 14 |

NOS. 202-5 AND 202-6


Cuts close, the narrow head permitting its use in confined places. Knives are perfectly fitted.

| Cat. No. | Stock No. | Size Inches | Wt. Lb. <br> per Doz. |
| :---: | :---: | :---: | :---: |
| $\mathbf{2 0 2 - 5}$ | $\mathbf{( 8 9 2 4 7 9 )}$ | 5 | $33 / 4$ |
| $\mathbf{2 0 2 - 6}$ | $\mathbf{( 8 9 2 4 8 0 )}$ | 6 | 4 |

## WITH SLEEVE JOINT TWISTER



Diamond special for use on bare and insulated wire, with sleeve joint twister.

| Cat. No. | Stock No. | Size Inches | Wt. Lb. <br> per Doz. |
| :--- | :---: | :---: | :---: |
| $\mathbf{2 1 2 - 6 N E}$ | $(892474)$ | 6 | $51 / 4$ |
| $\mathbf{2 1 2 - 7 N E}$ | $(892475)$ | 7 | $71 / 4$ |
| $\mathbf{2 1 2 - 8 N E}$ | $(892476)$ | 8 | $113 / 4$ |

## NO. 245-5 OBLIQUE CUTTING PLIERS



## Lap Joint Type

For electricans, telephone men and switchboard builders. Size, 5 inches. Weight per dozen, 3 pounds. Stock No. (892477)

NO. 245-5W WITH W STRIPPING NOTCHES


For removing acetate cellulose insulation from .050 and .058 wires used on telephone distributing frames, etc.

Size, 5 inches. Weight per dozen, 3 pounds. Stock No. (892478)

ROUND NOSE N. E. TYPE


Nose and all edges rounded and shoulder of head removed.

| Cat. No. | Stock No. | Size Inches | Wt. Lb. <br> per Doz. |
| :---: | :---: | :---: | :---: |
| 201-6NE | $\mathbf{( 8 9 2 4 7 0 )}$ | 6 | 5 |
| $\mathbf{2 0 1 - 7 N E}$ | $\mathbf{( 8 9 2 4 7 1 )}$ | 7 | $71 / 2$ |
| $\mathbf{2 0 1 - 8 N E}$ | $(892472)$ | 8 | 12 |
| 201-9NE | $\mathbf{8 9 9 2 4 7 3 )}$ | 9 | $121 / 2$ |

## NO. 213-9NE HEAVY DUTY PLIERS

Similar in style and appearance to the No. 201-NE series. Designed and developed to cut high tensile 190 grade steel wire. Length is $9^{\prime \prime}$. Stock No. (895767).

## WITH W STRIPPING NOTCHES, SLEEVE OPENINGS AND SKINNING HOLE



NO. 202-5-SW
An all-purpose cutting tool for telephone installation and maintenance work. The W notches will slit acetate cellulose and other insulations from wires up to .058 o.d. A stripping hole .052 diameter is provided in blades. Sleeve openings in handles.
Size, $51 / 2$ inches. Weight, per dozen, $33 / 4$ pounds.
Stock No. (892481)

NO. 240-5


Has notch for stripping small wires placed $3 / 16$ inch from hinge and has diameter of .052 inch.

| Cat. No. | Stock No. | Size Inches | Wt. Lb. <br> per Doz. |
| :---: | :---: | :---: | :---: |
| $\mathbf{2 4 0 - 5}$ | $\mathbf{( 8 9 2 4 8 2 )}$ | 5 | 4 |
| $\mathbf{2 4 0 - 6}$ | $\mathbf{( 8 9 2 4 8 3 )}$ | 6 | $41 / 4$ |



Heavy pattern. For use where it is not necessary to reach into confined places.

Size, 6 inches. Weight per dozen, $41 / 4$ pounds.
Stock No. (892486)


## Without Cutters

Adapted for stripping the ends of insulated wire and for work in confined spaces.

| Cat. No. | Stock No. | Size Inches | Wt. Lb. <br> per Doz. |
| :---: | :---: | :---: | :---: |
| $301-5$ | $(892487)$ | 5 | $31 / 4$ |
| $301-6$ | $(892488)$ | 6 | $33 / 4$ |
| $301-7$ | $(892489)$ | 7 | $41 / 4$ |

Designed for work in restricted spaces. Equipped with cutting knives.

| Cat. No. | Stock No. | Size Inches | Wt. Lb. <br> per Doz. |
| :---: | :---: | :---: | :---: |
| $\mathbf{2 0 3 - 5}$ | $\mathbf{( 8 9 2 4 9 0 )}$ | 5 | $31 / 4$ |
| $\mathbf{2 0 3 - 6}$ | $\mathbf{8 9 2 4 9 1 )}$ | 6 | $31 / 4$ |
| $\mathbf{2 0 3 - 7}$ | $\mathbf{( 8 9 2 4 9 2 )}$ | 7 | $41 / 4$ |

## NO. 316-S LONG NOSE SLEEVE PLIERS



## Bell System Type

Jaws are 2 inches long with $1 / 16$-inch point. Has openings for No. 17 B. \& S. double tube copper sleeves. Handles 4 inches long, temper blued; polished head and jaws.

Size, 6 inches. Weight per dozen. $33 / 4$ pounds.
Stock No. (892493)

## NO. 303-6 LONG NEEDLE NOSE PLIERS



Long nose permits use in confined spaces. Has polished head and handles temper blued.

Size, 6 inches. Weight per dozen, 3 pounds. Stock No. (892494)
NO. 302-6 KLEIN'S LONG CURVED NOSE PLIERS


Angle is arranged to give full clearance and prevent skinning of knuckles.

Size, 6 inches. Weight per doz., $31 / 4$ pounds. Stock No. (892495)

NO. 305-6 LONG FLAT NOSE PLIERS


Has long wide flat nose. Inside of jaws left smooth if desired. Has polished head and handles temper blued.

Size, 6 inches. Weight per doz., $31 / 2$ pounds. Stock No. (892496)

NO. 206-6 LONG FLAT NOSE PLIERS


## Side Cutting

Has long wide flat nose and cutting knives. Smooth jaws if desired. Has polished head and handles temper blued.

Size, 6 inches. Weight per doz., $31 / 2$ pounds. Stock No. (892497)

NO. $311-51 / 2$ LONG FLAT NOSE PLIERS


Spring Adjuster
Hollow ground on outside of jaws to reach between and grasp springs easily.

Size, $51 / 2$ inches. Weight per dozen, $31 / 4$ pounds. Stock No. (892498)

NO. 313-6 HEAT-COIL PLIERS


For removing heat coils from switchboards and telephone terminals, the points of the nose being shaped to fit the coils. Also used for removing battery caps as well as holding any cylindrical object.

Size, 6 inches. Weight per doz., $33 / 4$ pounds. Stock No. (892499)

NO. 304-6 LONG DUCK BILL PLIERS


For general use. Jaws are wider and heavier than those of flat nose pliers. Has polished head and handles temper blued.

Size, 6 inches. Weight per doz., $31 / 4$ pounds. Stock No. (892501)

NO. 205-6 LONG DUCK BILL PLIERS


## Side Cutting

For general use. Jaws are wider and heavier than those of flat nose pliers. Has polished head and handles temper blued.

Size, 6 inches. Weight per dozen, 3 pounds.

> Cat. No. 205-6 Stock No. (892502)

## KLEIN PUMP PLIER



The new design provides easy one-hand operation. Firm grip in any of the four positions with a capacity of slightly over two inches. Handles lightly knurled to assure positive grip. Zinc plated. Packed 6 to a box.

| Cat. No. | Stock No. | Length | Av. Wt. Per Doz. |
| :---: | :---: | :---: | :---: |
| 510 | $(897180)$ | $91 / 2^{\prime \prime}$ | $91 / 2 \mathrm{lbs}$. |

## KLEIN PLIER GRIPS



These grips are of transparent plastic in bright maroon. To apply to plier handles, dip plastic grip into boiling water to within one inch of the closed end for 45 seconds. Then drive on plier handles. Their flexibility permits them to conform to the shape of the handles, assuring a tight fit. Eliminates practice of taping handles. Available in three sizes to fit $6^{\prime \prime}, 7^{\prime \prime}, 8^{\prime \prime}$ or $9^{\prime \prime}$ pliers.

| Catalog No. | Stock No. | Plier Length <br> Inches | Av. wt. per <br> doz. pairs, lbs. |
| :---: | :---: | :---: | :---: |
| 60 | $\mathbf{( 8 9 5 2 4 2 )}$ | 6 | 1 |
| $\mathbf{7 0}$ | $\mathbf{( 8 9 5 2 4 3 )}$ | 7 | $11 / 4$ |
| $\mathbf{8 9}$ | $\mathbf{( 8 9 5 2 4 4 )}$ | 8 or 9 | $11 / 2$ |

NO. 2100-5 XELA ELECTRICIAN'S SCISSORS
Made of high grade steel
 properly tempered.

Has screw hinge. Nickelplated finish. Size, 5 inches. Weight per dozen, 2 pounds. Stock No. (892514)

## LINEMEN'S WRENCHES NO. 3416 Bell System Type

Forged from selected bar steel and of the open end type with two openings
 of different sizes at each end. A hole also provided for turning in pole steps, etc.

| Cat. No. | Stock No. | For Hardware In. | Wt. Lb. <br> per Doz. |
| :--- | :---: | :---: | :---: |
| 3146 | $\mathbf{( 8 9 2 5 0 8 )}$ | $5 / 8$ | 21 |
| 3146A | $\mathbf{( 8 9 2 5 0 9 )}$ | $3 / 4$ | 21 |

## KLEIN ADJUSTABLE WRENCH

A high quality adjustable end wrench for any purpose. Drop forged alloy
 steel for maximum strength and lighter weight. Chrome plated. Packed 6 to $\alpha$ box.

| Cat. No. | Stock No. | Size | Capacity | Av. Wt. Per Doz. |
| :---: | :---: | :---: | :---: | :---: |
| $500-6$ | $(897181)$ | $6^{\prime \prime}$ | $3 / 4^{\prime \prime}$ | 3 lbs. |

HI WIRE STRIPPERS


Improved action gives superior performance. Single squeeze action, easy grip and sturdy construction together with razor sharp adjustable blades provides one of the finest wire strippers available.

| Catalog No. | Stock No. | Wire Sizes |
| :--- | :--- | :--- |
| HS-02 | $(897211)$ | $8-10-12-14-16-18-20-22$ |
| HS-0 | $(897212)$ | $14-16-18-20-22-24-26-28-30$ |
| HS-01 | $(897213)$ | $16-18-20-22$ |
| HS-2 | $(897214)$ | $10-12-14-16-18$ |
| HS-3 | $(897215)$ | $8-10$ |

DIAMOND B BRAID STRIPPER


This tool saves considerable time in removing the braided covering from Drop Wires. Also for holding bridging connectors while they are being installed or removed. There are three grooves for accommodating three sizes of drop wire.

| Groove | Width | Depth of Cut |
| :---: | :---: | :---: |
| A | $.270^{\prime \prime}$ | $.060^{\prime \prime}$ |
| B | $.330^{\prime \prime}$ | $.080^{\prime \prime}$ |
| C | $.375^{\prime \prime}$ | $.110^{\prime \prime}$ |

Sliding guard protects the thumb, at the same time forcing wire down on cutting blade. Blade can be rotated to new position when used section becomes dull.

Handle provided with steel wrench plate. Hexagonal opening of $3 / 8^{\prime \prime}, 7 / 16^{\prime \prime}$ and $5 / 8^{\prime \prime}$ for bridging connectors, nuts or heads.

Aluminum die-casting. Steel parts oiled. Weight $1 / 4 \mathrm{lb}$.
Catalog No. 779 Stock No. (892513)


## PARALLEL WIRE SLITTER

Designed for use with Neoprene and other tough jacketed wires. Light weight, vest pocket size-uses safety-razor blade for knife. 3 different size ports accommodate different size wires. Furnished with blade.
Weight each-2 ounces.
Catalog No. S-7508 Stock No. (895011)

WHITNEY BLAKE DROP WIRE SLITTER MODEL 1


For use with Twin Parallel Types 18TICWP and 17TIBP.
This slitter consists of two formed stampings bolted together to hold a Schick Injector razor blade.
For end slitting the two stampings provide an opening through which the wire can be forced against the blade, thus slitting the center web evenly, leaving the neoprene covering around each individual conductor. A center slit can be made by pulling the slitter along the wire with the end projection of the blade slitting the center web.

$$
\begin{array}{lc}
\text { Stock No. } & \text { Description } \\
\text { (895724) } & \text { Whitney Blake Drop Wire Slitter }
\end{array}
$$

## CHICAGO GRIPS

For Bare Wire


Main body piece and lever are forged steel. Draw parts are wrought steel. Gripping jaws are machined.

| Cat. No. | Stock No. | Description | Max. Open |  |
| :--- | :--- | :--- | :--- | :--- |
| Wt. |  |  |  |  |
| 1613-30 | $(892515)$ | For No. 6 Wire and Smaller | 2187 | $11 / 2$ |
| $1613-30 B$ | $(892516)$ | With Bronze Lined Jaws | 1875 | $11 / 2$ |
| $1613-40$ | $(892517)$ | For No. 0 Wire and Smaller | 3125 | $25 / 2$ |
| $1613-40 B$ | $(892518)$ | With Bronze Lined Jaws | 3125 | $23 / 4$ |
| $1613-50$ | $(892519)$ | For No. 0000 Wire and Smaller 50 | $71 / 2$ |  |
| $1613-50 B$ | $(892520)$ | With Bronze Lined Jaws | 50 | $71 / 2$ |

## For Messenger Strand and Heavy Cable



Forged from alloy steel heat treated. Gripping jaws are machined smooth. Rivets are machine turned.

| Cat. No. | Stock No. | For Strand | Lbs. | Max. | Wt. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Open In. | Lb. |  |  |  |  |

HAVEN'S STEEL GRIPS


Almost automatic in action. Handle and eccentric allow in stantaneous hold. A shake of the rope on the tackle disengages the grip.

| Cat. No. | Stock No. | Description |
| :---: | :---: | :--- |
| $1604-10$ | $(892527)$ | For No. 4 Wire and Finer |
| $1604-20$ | $\mathbf{( 8 9 2 5 2 8 )}$ | For $1 / 2$-Inch Wire and Fine |

NO. 1700-30 CHICAGO LINEMEN'S TOOLS


Set is combination of Chicago Grip No. 1613-30 with Howes Wire Tool No. 1702-20.
For No. 6 wire and smaller down to No. 13.
Weight, 4 pounds. Stock No. (892536)

## NO. 1625-20 IMPROVED HAVEN'S GRIPS



For plain or stranded wire No. 6 to $3 / 4$-inch diameter. Made with swing latch which engages stud on lower jaw.

Stock No. (892529)

## NO. 1702-20 KLEIN'S HOWES

 WIRE TOOLS

Strap is harness leather $1 \frac{1}{4}$ inches wide and 7 feet long. At one end $\alpha$ forged steel swivel hook is provided with opening to permit anchoring round insulator pin. Forward end has a locking device to hold load at any distance and is so arranged that a wire grip can be readily attached.

Metal parts are galvanized.
Weight per set, 2 pounds. Stock No. (892537)

## NO. 1802-30 KLEIN'S SELF-LOCKING TACKLE BLOCKS



Especially for use with Klein's Wire Grips. Furnished with 25 feet $3 / 8$-inch "Waterflex" Manila rope, $21 / 2$ pounds.

Consists of light steel shell blocks galvanized, fitted with snubbing hook to lock load in any position. To lock load, pull luff rope under hook. To release, simply pull rope. Blocks are arranged with spring guard snap hooks. When pulling up wire to make a splice, it may be used with two grips attached to snaps or with hook to anchor to an insulator pin or other convenient anchorage.. Stock No. (892538)

## KLEIN'S HAND LINES



Rope is best quality "Waterflex" Manila and does not twist. 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.

| Cat. No. | Stock No. | Description |
| :---: | :---: | :---: |
| $1803-60$ | $(892539)$ | 75 Feet of $3 / 3$-Inch Rope |
| 443 A | $\mathbf{( 8 9 2 5 4 1 )}$ | Forged Snap. Eye 1 $1 / 16$-Inch I.D. |

## CHANCE HOIST

For line construction and maintenance jobs, this tool is preferred because it was designed and developed especially for linemen. The simple controls can be operated without removing heavy work or rubber gloves. It is light in weight, well balanced and has a handle shaped for easy gripping. The ratchet type handle can be operated from either side to avoid poles, guys, conductors or other obstacles that might interfere with the lever motion.

The Chance Hoist is rated for lifting loads up to one ton. The easy operating lever action requires only a 100 -pound pull on the handle to lift $\alpha$ one-ton load.
 The chain is released to "free-wheeling" by simply flipping the control lever. This makes it easy to hook on to a load.

All working parts are fully enclosed in the housing unit to prevent damage to the hoist while eliminating danger of injury to the worker's fingers.

| Catalog <br> No. | Stock No. | Description | Standard <br> Lift | Weight, <br> lbs. |
| :---: | :---: | :---: | :---: | :---: |
| 3010 | $(895667)$ | One ton hoist | $5^{\prime} 6^{\prime \prime}$ | 12 |
| 3010 s | $\mathbf{1 8 9 5 6 6 8 )}$ | One ton hoist with | $5^{\prime} 6^{\prime \prime}$ | $121 / 8$ |
|  |  |  | Safety Latch Hook |  |



The Coffing Safety-Pull Ratchet Lever Hoist is built on the ratchet and pawl principle. The load is always locked by sprocket and ratchet pawls (cannot slip or drop load).

Automatic stops prevent handle from spinning in case hand should slip off handle. Reversible handle permits operating hoist in any position.

Safety valve handle, that is, handle will bend before chain will break or hooks will straighten out.
The safety-pull has free chain for quick load adjustment when there is no weight on the hoist.

Special designed hooks of drop-forged, heat-treated alloy steel.

Roller chain to meet Navy specifications, standard on all models.

The frame and lever parts are of certified malleable iron.
Sprockets and ratchets are of alloy steel, heat-treated and ground.

Reversing mechanism, bearing pins, etc., heat-treated alloy steel to meet their specific functions.

| Model | Stock No. | Rated Cap. Tons | Net <br> Wt. <br> Lb. | Min. Dist. Between In. |  | Lb. on Lever to Lift Rated Cap. | $\begin{aligned} & \text { Std. } \\ & \text { Lift } \\ & \text { in } \\ & \text { In. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| *AG | (892550) | 3/4 | 14 | 13 | 36 | 56 | $561 / 2$ |
| *ATG | (892551) | $11 / 2$ | 17 | 15 | 18 | 60 | 57 |
| *FG | (892552) | $11 / 2$ | 25 | 16 | 48 | 116 | $561 / 2$ |
| *FTG | (892553) | 3 | 34 | 17 | 24 | 120 | 57 |
| ZG | (892554) | 6 | 59 | 25 | 12 | 124 | 53 |

*Available with double pawl at extra cost.
The double pawl safety-pull ratchet lever hoists have decided advantages when working in close quarters where $\alpha$ full stroke of the lever is not permitted, because the load can be raised or lowered with a half stroke of the lever.

## VAN-WEB NO. 100 HYDRAULIC POLE JACK

It has a raise lift of 60 inches at the hook through the pulley that doubles the lift of the ram.

It is guaranteed to exert $\alpha 15,000 \mathrm{lb}$. pressure on end of ram.
The jack with ram depressed is 41 inches long, and weighs 60 lbs . The pump handle is 25 inches long, and folds down to the side. $A$ handle ring is mounted on the side so weight is balanced for carrying.

No special strength is required to operate the pump handle. The hook lifts $3 / 4$ inches on each stroke. A shut-off valve is located at the top of the cylinder and the ram can easily be pushed back in the cylinder when this valve is opened.

The hydraulic pump is operated with No. 10 oil, pushing against the $11 / 2$ inch diameter ram. This is sealed in, but can be replaced occasionally for operating efficiency.

The pulley yoke is mounted on a loose piston so the whole yoke can be lifted out and a pike pole set in the cup at the top of the ram, for straightening poles.

This jack is very simple to set up against a pole, requiring only $\alpha$ base laid on the ground for leverage. The hook starts at the bottom of the jack, so one pull will clear most poles.

Stock No. (894840)


For any pulling job up to 500 lbs . where the requirements are for a compact, light, really portable tool, less than $\alpha$ foot long, and weighing only $61 / 2 \mathrm{lbs}$., it is especially appreciated by the lineman. The safety-load handle warns when there is an overload; it can be used as $\alpha$ lever or $\alpha$ crank-it locks in either position.

Packed in $\alpha$ box $1111^{\prime \prime} \times 41 / 2^{\prime \prime} \times 31 / 4^{\prime \prime}$ Stock No. (894682)


## COFFING LOAD BINDERS

For booming poles, logs, pipe, etc.
Drop-forged steel hooks with swivels on both ends. The take-up is $5 / 8$ inch to each stroke of the handle.

If load becomes loose, it can be bound tight simply by drawing on lever. After load is taken off chain, both levers can be tripped at once and chain can be pulled through binder free.

Can also be used as a hoist and for stretching wire or cable.

Model A will boom a load of 3000 pounds. Weight, $111 / 2$ pounds. Stock No. (892555)

Model F will boom a load of 6000 pounds. Weight, 24 pounds. Stock No. (892556)

## SIMPLEX AERIAL CABLE AND WIRE TENSIONING JACK



No. 324 is sufficiently powerful to pull up overhead and underground cables and take up slack in trolley, guy and transport wires. Because it weighs only 13 pounds, it does not handicap a man in overhead work. The speed trigger permits instant slack "take up" at any point when the jack is not under load. The steel lever is furnished with a safety spring clip that prevents it from coming out.
The jack is easy to set up because of its non-flexible rack bar and exerts a direct line pull.
For tensioning bare wire use two bare wire grips and two wire slings. See illustration.

When used for splicing overhead cable, special equipment consisting of two double eye split cable grips, two three-bolt clamps and two wire slings, is needed.

For wire grips, cable grips and wire slings, please refer to other sections of this supply catalogue.

| Capacity Tons | Travel | Weight |
| :---: | :--- | ---: |
| 2 | $201 /{ }^{\prime \prime}$ | 13 lbs. |
| Cat. No. | Stock No. |  |
| $\mathbf{3 2 4}$ | $\mathbf{( 8 9 1 0 2 6 )}$ |  |

## SIMPLEX POLE PULLING AND POLE STRAIGHTENING JACKS

For many years Simplex Pole Pulling and Pole Straightening Jacks have been saving man hours and reducing "out of service" hours for electric power, telephone, telegraph and trolley companies.

## Nos. 1538, A1 538 Standard Pole Jacks

No. 1538 is the standard pole Jack of the Bell System. It has 15 tons capacity and will pull or straighten any size pole, large or small. The " I " beam base provides a firm foundation and the Jack will pivot on its base when the base pawl is disengaged.
A new companion model, the No. A1538 is available with an aluminum housing and base which provides lightness for easier portability without sacrifice of strength. All parts are interchangeable.


For manila rope. Loose side hooks and beckets. Can be supplied with common or roller bushings. Roller bushings will be furnished unless otherwise specified.

| Size Sheave <br> Inches | Stock No. <br> Single | Stock No. <br> Double | Stock No. <br> Triple | Size |
| :---: | :---: | :---: | :---: | :---: |
| Shell In. |  |  |  |  |
| $21 / 4 \times 1 / 2$ | $(892558)$ | $(892564)$ | $(892571)$ | 3 |
| $3 \times 5 / 8$ | $(892559)$ | $(892566)$ | $(892572)$ | 4 |
| $31 / 4$ | $(892560)$ | $(892567)$ | $(892573)$ | 5 |
| $3^{1 / 2 \times 1}$ | $(892561)$ | $(892568)$ | $(892574)$ | 6 |
| $41 / 2 \times 1$ | $(892562)$ | $(892569)$ | $(892575)$ | 7 |
| $43 / 4 \times 11 / 8$ | $(892563)$ | $(892570)$ | $(892576)$ | 8 |

One or two men can pull or straighten poles, pull butts or move loaded poles with no interruption to service and without digging, regardless of the size of the poles, or depth in the ground.

No. 325
The Simplex Junior Pole Jack is used for poles up to 30 feet in height. In addition, it is handy as a guy line tightener and for pulling underground cables. The $8^{\prime}$ pike pole furnished with the No. 325 is especially handy when it is necessary to straighten poles located beside ditches.
Recommended for rural electrification. It is single acting. ratchet lowering.

## No. 310-A



Usually thought of as an emergency all-purpose jack. It also pivots on its base, making an excellent pole pulling and straightening jack where the amount of lift is not of primary importance. Compact and husky. It is single acting, ratchet lowering. Lifts on the cap. two positions of the auxiliary shoe, the toe lift, and at any intermediate point by using the chain as a sling. Minimum toe lift height is only $21 / 4^{\prime \prime}$. It lifts vertically, and lifts or pushes from any angle. Double lever socket provides for close quarter operation.

| Cat. No. | Stock No. | Capacity <br> Tons | Height <br> Inches | Lift <br> Inches | Wt. Lb. |
| :--- | :---: | :---: | :---: | :---: | ---: |
| 310-A | $(891484)$ | 15 | $221 / 4$ | $131 / 2$ | 74 |
| $\mathbf{3 2 5}$ | $(891482)$ | 5 | 50 | 36 | 34 |
| $\mathbf{1 5 3 8}$ | $(897218)$ | 15 | $373 / 4$ | 22 | 100 |
| A1538 | $(897219)$ | 15 | $373 / 4$ | 22 | 60 |

MALLEABLE IRON PULLEY BLOCKS


Single


Double


Triple

Constructed so that manila rope cannot jam between shell and sheaves. Hooks are drop forced of special steel.

Can be furnished with either common iron or roller bushings. Roller bushings will be furnished, unless otherwise specified.

| Size Sheave <br> Inches | Stock No. <br> Single | Stock No. <br> Double | Stock No. <br> Triple | Size |
| :---: | :---: | :---: | :---: | :---: |
| $13 / 4 \times 1 / 2$ | $(892577)$ | $(892583)$ | $(892589)$ | 3 |
| $21 / 4 \times 5 / 8$ | $(892578)$ | $(892584)$ | $(892590)$ | 4 |
| $3 \times 3 / 4$ | $(892579)$ | $(892585)$ | $(892591)$ | 5 |
| $31 / 2 \times 1$ | $(892580)$ | $(892586)$ | $(892592)$ | 6 |
| $41 / 4 \times 1$ | $(892581)$ | $(892587)$ | $(892593)$ | 7 |
| $43 \times 11 / 8$ | $(892582)$ | $(892588)$ | $(892594)$ | 8 |

## KLEIN'S CLIMBER STRAPS AND PADS



Set consists of 2 calf straps $11 / 4 \times 22$ inches with $4 \times 4$-inch pads and 2 ankle straps $11 / 4 \times 22$ inches. Leather is first quality harness leather. Buckle drop forged, fitted with roller.

| Cat. No. | Stock No. | Description | Wt. Lb. per Doz. Sets |
| :---: | :---: | :---: | :---: |
| 5301-1 | (892608) | Plain Pads | 15 |
| 5301-2 | (892609) | Sheep-lined Pads | 16 |
| 5301-3 | (892610) | Felt-lined Pads | 16 |
| Straps Only |  |  |  |
| Cat. No. | Stock No. | Description | Wt. Lb. per Doz. Pair |
| 5301-4 | (892611) | in Straps, 2 Straps | 6 |

## KLEIN'S CLIMBER STRAPS AND PADS



## Bell System Type

Set consists of 2 calf straps $1 \times 22$ inches with 2 special pads and 2 ankle straps $1 \times 26$ inches.

| Cat. No. | Straps Only |  | Wt. Lb. per Doz. Pair |
| :---: | :---: | :---: | :---: |
|  | Stock No. |  |  |
| 5301-9 | (892619) | 2 Calf Straps, 1x22 In. | 6 |
| 5301-10 | (892620) | 2 Ankle Straps, 1x26 In. | 8 |
| Pads Only |  |  |  |
| Pads made of select leather, arranged with loops for climber straps and climber. Tapering $33 / 4$ inches to $23 / 4 \times 61 / 4$ inches deep. |  |  |  |
|  |  |  |  |  |
| Cat. No. | Stock No. | Description | Wt. Lb, per |
| 8203 | (892621) | Plain Leather | 4 |
| 8204 | (892622) | Sheep-Lined Leather | 5 |
| 8205 | (892623) | Felt-Lined Leather | 5 |



Pads made of select leather, arranged with loops through which to slip climber strap.

| Cat. No. | Stock No. | Description | Wt. Lb. per |
| :--- | :---: | :---: | :---: |
| Doz. Pair |  |  |  |

## BUCKINGHAM CLIMBER PADS

Only top grades of leather are used in the manufacture of Buckingham Climber pads. A wide variety of design and types has made these pads extremely popular. Provided with pads of rubberized wool or felt, or without padding, they are "tailor-made" for Buckingham climbers. Users will find them most comfortable.
 pairs, 5 lbs .


|  | Catalog No. | Stock No. |
| :--- | :---: | :---: |
| Plain Leather | 3038 | $(894418)$ |
| Felt Lined | 3238 | $\mathbf{( 8 9 4 4 1 9 )}$ |

Climber Pad No. 3039


2-Loop plain leather pad. Size $4^{\prime \prime} \times 4^{\prime \prime}$. Weight per pair, 3 ozs. Shipping weight per 12 pairs, 3 lbs .

|  | Catalog No. | Stock No. |
| :--- | :---: | :---: |
| Plain Leather | 3039 | $\mathbf{( 8 9 4 4 1 0 )}$ |
| Felt Lined | $\mathbf{3 2 3 9}$ | $\mathbf{( 8 9 4 4 1 1 )}$ |

## BUCKINGHAM CLIMBER STRAPS



## BUCKINGHAM CLIMBERS



| Cat. <br> No. | Stock No. | Description | Wt. each |
| :---: | :---: | :---: | :---: |
| 9126 | (894401) | Straight, Med. Wt. with loops | $3 \mathrm{lb} ., 3 \mathrm{oz}$. |
| 9130 | (894517) | Straight, Featherweight with <br> straps | $2 \mathrm{lb} ., 3 \mathrm{oz}$. |



## Patented Offset Shanks

The Buckingham Climber listed below is Right and Left Climber with Patented Offset Shank. Offset-shank climbers are becoming increasingly popular because of the new sense of safety, comfort and ease they give the wearer. The offset in the shank of the climber brings the gaff more in alignment with the wearer's balance when climbing, and greatly overcomes the tendency of climbers to twist and slide back of the wearer's leg.

Each climber is stamped "Right" or "Left," designating the foot for which it is intended.

Buckingham Climber No. 9131 is extremely popular with linemen weighing not over 175 pounds. It is comfortable, sturdy and light. Footstraps are attached.

| Cat. | Stock No. | Description | Wt. each |
| :---: | :---: | :---: | :---: |
| No. |  |  |  |
| 9131 | (894567) | Right and Left, Offset | $2 \mathrm{lb} ., 13 \mathrm{oz}$. |

## How to Order Buckingham Climbers

When ordering climbers it is necessary that the size (length) be given, as well as the type of climbers wanted . . . and the catalog numbers. Climbers are measured from the bottom of the stirrup, or footpiece, to the extreme end of the shank . . . see diagram and table of sizes. The top of the shank should normally extend about one-half inch below the inside low point of the knee joint.

## Climber Sizes

Buckingham Climbers are made in lengths of $14^{\prime \prime}, 141 / 2^{\prime \prime}, 15^{\prime \prime}$, $151 / 2^{\prime \prime}$, etc., in increments of $1 / 2^{\prime \prime}$ to $19^{\prime \prime} \ldots$ in Medium, Light and Featherweights. Buckingham also makes adjustable climbers.

## Climber Markings

Each climber is stamped with the size: $151 / 2,16,161 / 2$, etc., and right and left climbers are stamped: 16 Right, 16 Left.


Drop forged standard $D$ rings and buckle.
Made in sizes $36,38,40,42,44$ and 46 inches. Specify length required.

| Cat. No. | Stock No. | Width Inches | Wt. Lb. <br> per Doz. |
| :---: | :---: | :---: | :---: |
| $\mathbf{5 2 0 4}$ | $\mathbf{( 8 9 2 6 2 4 )}$ | $31 / 2$ | 32 |

NO. 5228 KLEIN'S LEATHER TOOL BELTS


Made $41 / 2$ inches wide at center of back and tapered to $31 / 2$ inches wide at front. Made of onepiece soft, pliable russet latigo leather, doubled to form comfortable rolled edges and returned at each end.
Standard D rings are single bar type solid steel drop forgings as is the buckle. Galvanized finish.
Sizes, $36,38,40,42,44$ and 46 inches. Other sizes to order. Specify length when ordering.

Weight per dozen, 45 pounds. Stock No. (892627)

## NO. 1901M KLEIN'S STANDARD WEIGHT CLIMBERS



When ordering specify length of shank desired. Measure from instep to extreme end. Other than stock sizes to order. Tested before leaving factory.

Stock sizes, $15,151 / 2,16,161 / 2,17,171 / 2$ and 18 inches.
Has punched strap loops. Packed 1 pair in $\alpha$ carton. Weight, $35 / 8$ pounds. Stock No. (892606)

## GENERAL INDEX

A complete alphabetical index with cross references for all the products shown in this section or any of the other sections will be found in the center of this catalog.

NO. 5204-TSO KLEIN'S TEXAS TOOL BELTS


Lined throughout with soft latigo leather. Made 4 inches wide at center of back for full support, tapering to $21 / 4$ inches wide at hips to permit free bend to body of wearer.
Made in sizes $36,38,40,42,44$ and 46 inches. Specify length required. Weight per dozen, 33 pounds. Stock No. (892626)

NO. 5249 KLEIN-LINE TOOL BELT


The full-floating, sliding trace $-13 / 4^{\prime \prime}$ wide-relieves chafing and undue wear on the safety strap is prevented.

The $2^{\prime \prime}$ wide belt strap is of heavy harness leather with dropforged buckle. The tool strap, $11 / 4^{\prime \prime}$ wide, has five tool loops and is riveted to the main strap. Sewing is locked stitched with hot waxed linen thread. Rivets are solid copper, hand set.
The cushion is $43 / 4^{\prime \prime}$ wide of pliable latigo leather-is pad-lined and edge-rolled for greater comfort.

Furnished with plier pocket, tape thong, and knife snap.


Made of good quality leather. Have slits through which belt is inserted. No. 5112 is the same as No. 5107 except that plier does not protrude.

Weight per dozen, $21 / 2$ pounds.

| Catalog No. | Stock No. |
| :--- | ---: |
| $\quad 5107$ | $(892636)$ |
| 5112 | $(892637)$ |
| $5118-K$ | $(894862)$ |

KLEIN ADJUSTABLE CLIMBERS


No. 1945-ADJ
Using the same pattern of extra wide stirrups and offset shanks as found in the standard Klein climbers, the No. 1945-ADJ offers the extra advantage of being adjustable to $15,151 / 2$, $16,161 / 2,17,171 / 2$, and 18 inches from instep to top of slide.

Can be bought as climbers only, or complete with No. 5301-9 Calf Straps, No. 5301-26 Ankle Straps, and No. 8207 Climber Pads.

> Cat. No. 1945-ADJ C1945-ADJ

Stock No.
(895220)
(895221)

## BUCKINGHAM ADJUSTABLE CLIMBERS

## No. 9205



Buckingham Adjustable Climbers can quickly be adjusted from size 15 to size $181 / 2$ by $\alpha$ simple and secure setting of two Allen-head set screws against a loop made from round cold-drawn steel, adjustable in $\alpha$ tubular steel socket. This extensible device gives a range of leg iron lengths that are exact-size fit for any wearer.

Buckingham Adjustable Climbers make it possible for linemen to adjust them according to the various thickness of footgear worn at different times during the year. REPLACEABLE GAFFS - The replaceable gaff is locked to the body of the climber at an angle which will not permit it to become disengaged in normal use. Pressure exerted on it when the wearer is ascending or descending tends to lock the gaff tighter into the leg iron. The angle of the gaff permits the lineman to stand closer to his work with less possibility of cut out, and also makes climbing easier.
They can be removed by using a punch or drift pin to drive out a patented "Driv-Lok" pin. Extra gaffs are available.

## Catalog No. 9205

Stock No. (894700)


## BUCKINGHAM GAFF PROTECTORS

No. 6009
These gaff protectors are made in pairs from high-grade leather and secured with binder strap. They protect the gaff from damage and prevent accidents to workmen and equipment when carried in service truck.

Weight per pair, 2 ozs.
Shipping weight per 12 pair, 2 lbs . Cat. No. 6009, Stock No. (894423)

## BUCKINGHAM SAFETY STRAPS



Leather in Buckingham safety straps and belt straps must have an ultimate breaking strength of not less than 650 pounds per inch of width. It must be free from brittleness and show no cracking or grub holes, other than slight surface checks, when bent slowly with the grain side out. This bending test is around a mandrel of 0.675 -inch diameter.

Nylon thread has a greater tensile strength than other commonly used stitching materials. It wears better, it is more elastic, it "gives" with the leather, its use is approved by utilities. Nylon thread is used in all Buckingham belts, safety straps and climber straps.

| 3042 | (894452) | $2^{\prime \prime} \times 5^{\prime} 10^{\prime \prime}$ Harness Leather | $2 \mathrm{lb} ., 15 \mathrm{oz}$. |
| :--- | :--- | :--- | :--- |
| 3142 | $(894453)$ | $13 / 4^{\prime \prime} \times 5^{\prime} 10^{\prime \prime}$ Harness Leather | $2 \mathrm{lb} ., 11 \mathrm{oz}$. |

BUCKINGHAM FABUCK (fabric)


Safety Strap No. 3542
Particularly light and flexible, this strap is made from heavy silver duck, impregnated with neoprene and built up in vulcanized plythicknesses to meet various service requirements. It has a tensile strength of 300 lbs . per square inch, per ply. Tensile strength of 3700 lbs . per square inch. Superior to leather for tower work.
The fabric is specifically designed to meet specifications for a fabric belt. Its extra width increases its flexibility, correcting a fault found in other belts of this type. There are no sharp edges to cause excessive wear. Size: $2^{\prime \prime} \times 5^{\prime} 10^{\prime \prime}$. Weight 3 lbs., 2 ozs. Shipping weight per 12 . 43 pounds.
Cat. No. 3542 Stock No. (894460)

## BUCKINGHAM TOOL POUCHES



No. 4650, tool pouch with one large, two small, and two deep ring pockets for various tools, fitted with knife snap. Size $81 / 2^{\prime \prime} \times 10^{\prime \prime}$. Made from best quality harness leather, stitched and riveted. Easily slipped on any belt not over $2^{\prime \prime}$ in width.
Weight per pouch, 11 ounces. Shipping weight per 12, 10 lbs .


No. 4652 , pouch with one large and two smaller pockets. Holds plier, rule, screwdriver or other tools. Fitted with knife snap. Size $5^{\prime \prime} \times 10^{\prime \prime}$. Stitched and riveted harness leather, this pouch can be used to good advantage on any belt not more than $2^{\prime \prime}$ wide.

Weight per pouch, 9 ozs. Shipping weight per $12,8 \mathrm{lbs}$.
Catalog No. 4650
Catalog No. 4652

Stock No. (894536)
Stock No. (894538)

BUCKINGHAM TOOL BELTS Buckingham Glider Tool Belt No. 1060


Buckingham's Glider-type Lineman's Belt No. 1060 embodies a "floating" feature that provides fuller freedom of body movement under all working conditions, $41 / 2$ inch shift, right or left without binding clothes or tools. Weight of the body does not bind, or affect in any way, the sliding-strap ease in shifting positions. The 4 inch, rolled-edge chrome leather liner further contributes to wearing and working comfort.

Belt is equipped with a two-way snap, and rings for attaching belt supporter.

Weight 4 pounds. Shipping weight per 12, 58 lbs . Catalog No. 1060 Stock No. (894531)
"Cushion Deluxe" Floating Tool Belt No. 1058


No. 1058 is a strong, durable and flexible belt made from the best leather obtainable for the purpose. It has a rolled-edge feature providing a cushion effect that affords greater working comfort for the wearer.

The tool loop strap is formed into five loops with two rivets between loops to prevent twisting and sagging.

Belt is fitted with ring, two-way snap and tape thong. Belt is $43 / 4^{\prime \prime}$ wide, sliding strap $2^{\prime \prime}$ wide.

Rigidly tested for strength and safety.
Weight 3 lbs ., 12 ozs . Shipping weight per 12, 56 lbs . Catalog No. 1058 Stock No. (894438)

## BUCKINGHAM SHARPENING GAGE

No. 6101


The Buckingham Gaff Gage is designed to guide linemen and others in the proper sharpening of gaffs for Buckingham Climbers.
The gage shows the minimum thickness and width of gaffs, as well as the minimum length allowable for safe use. The gage is packed in a leather pouch.

Weight per gage, 2 ozs. Shipping weight per 12, 2 lbs .
Catalog No. 6101 Stock No. (894408)

## NO. 6103 BUCKINGHAM THREAD CLEANER



This tool renews battered or rusted thread from $1 / 4^{\prime \prime}$ root diame. ter up to $l^{\prime \prime}$. It fits any left or right hand pipe or machine thread. Especially useful in chasing thread on the job before trying to start a nut. Tool is set to proper diameter by knurled-handle screw adjustment, held by knurled lock nuts.

| Cat. No. | Stock No. | ${ }^{2}$ Size |  | Max. | Swing |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 6103 | (894993) | $1 / 4^{\prime \prime}$ | $1^{\prime \prime}$ | $7^{\prime \prime}$ | 1 lb. |

## TOOL BELT ORDERING INFORMATION

## Use This Method in Measuring Your Size



Your Tool Belt Measurement is the measurement between the center of the buckle roller and middle punched hole. Give measurement around the body and clothing where belt will be worn.

## Dee Ring Measurement



The size of the saddle or pad on the Tool Belt is determined by measuring between the centers of the heels of the dee ring. The length to order is found by measuring the distance around the back from the prominent part of one hip bone to the prominent part of the other, at the points where the belt is to be worn, plus two inches.

Note: Make all measurements around clothing which is to be worn under the belt.
Tool Belts are manufactured and available in the following standard sizes:
Dee Ring Measurement $\quad 18^{\prime \prime} 19^{\prime \prime} 20^{\prime \prime} 21^{\prime \prime} 22^{\prime \prime} 23^{\prime \prime} 24^{\prime \prime} 25^{\prime \prime}$
Belt Strap Measurement $\quad 32^{\prime \prime} 34^{\prime \prime} 36^{\prime \prime} 38^{\prime \prime} 40^{\prime \prime} 42^{\prime \prime} 44^{\prime \prime} 46^{\prime \prime}$

Revised 1-1-57
BUCKINGHAM CANVAS BAGS


Here's a carry-all that will hold your belt, safety strap, climbers, pouches, tools, and a few extras, work clothes, etc. This zipperclosing, heavy olive drab canvas bag is reinforced in the bottom with stout binder board and fitted with heavy plated gliders. Heavy web straps are stitched to the sides and around the bottom of the bag and brought up in loops to form the carrying handles.

These web straps reinforce the bag and provide comfortable handles that won't tear or pull out. All seams are stitched to withstand the rugged service for which this bag is intended.
Cat. No. Stock No. Description $\quad$ Wt., Each
$5324 \quad$ (894550) $24^{\prime \prime} \times 101 / 2^{\prime \prime} \times 12^{\prime \prime} \quad 3 \mathrm{lb} ., 2 \mathrm{oz}$.


## NO. 1084 CANVAS BUCKET

The Bell Telephone System style. Made of No. 1 white duck, $12^{\prime \prime}$ diameter at top, $9^{\prime \prime}$ diameter at bottom, height $12^{\prime \prime}$. Bottom is $1 / 8^{\prime \prime}$ leather pressed to shape, hardened and waterproofed. Equipped with spliced $3 / 8^{\prime \prime}$ rope handle in which has been placed a heavy galvanized swivel marine snap for hoisting, suspending from wires, etc.

Stock No. (892647)


## NO. 1324 COLLAPSIBLE NON-METALLIC BUCKET

For heavy duty. Made of No. 1 white duck, diameter at top and bottom 12", $16^{\prime \prime}$ high. $1 / 2^{\prime \prime}$ non-metallic ring at top made of vulcanized hard fibre. Bottom reinforced with genuine full grain harness leather which extends up to the sides for $3^{\prime \prime}$. $3 / 3^{\prime \prime}$ rope handle spliced in heavy leather reinforcement.

Stock No. (892648)

## KLEIN'S CANVAS TOOL BAGS

Made of one piece white duck reinforced all around bottom with heavy bag leather, $31 / 4$ inches up on 5102 series, 8 inches up on 5105 series.

Bottom is made of heavy leather outside and duck inside, lock stitched all around. Bottom is protected with strong steel studs. Bottoms and sides joined together with lock stitched leather welt seams. Mouth of bag is formed by a 12-gauge steel frame. Canvas is clinched between this frame and an inside secondary steel frame. Has harness leather handles and two retaining straps with buckles.


The four trays swing out of kit smoothly and easily when lids are opened.

Leather handle, lids fastened with draw bolt hasp and staple. Three skid rails welded to bottom.
Finished in seal brown ripple baked enamel outside, with dark green smooth baked enamel trays.
Dimensions, $18 \times 10 \times 121 / 2$ inches. Each kit packed in individual carton; 6 to $\alpha$ crate.
Shipping weight per crate, 115 pounds. Stock No. (892645)

## NO. CS19 METAL TOOL KITS



Cantilever style, has smooth working tray which rests firmly when extended. Marproof green baked ripple enamel finish. Fastened with draw bolt hasp and staple, double seamed ends, full length piano (continuous) hinge, and corner irons.
Dimensions, $19 \times 7 \times 7$ inches. Each kit packed in individual carton; 6 to $\alpha$ crate.

Shipping weight per crate, 48 pounds. Stock No. (892646)

## NO. 345 1/4 INCH STANDARD HOLGUN BALL-BEARING DRILL

A perfectly proportioned

"Handful of Power" of surprising compactness and smooth lines. Pistol Grip and Trigger Switch, special ball spindle bearing, splined gear mounting, screened air inlets and full ball-bearing equipped. Available in 7 spindle speeds from high torque at 500 R.P.M. to high
speed at 5,000 R.P.M. Use Standard Holgun for regular production service; Low-speed Holgun for stainless steel and hard alloys.

## Standard Speed Model <br> Specifications

Drilling Capacity: in Steel, up to $1 / 4^{\prime \prime}$; in Hardwood, up to $1 / 2^{\prime \prime}$ Speed: No-load 1700 R.P.M.* Full-load 900 R.P.M.
Weight: Net 3 lbs . Shipping $41 / 4 \mathrm{lbs}$. Overall Length

## Spindle Offset

 $63 / 4^{\prime \prime}$$3 / 4^{\prime \prime}$
*Optional No-load Speeds (at no extra cost) 2500, 3500 or 5000 R.P.M.

## Standard Equipment

Two-pole automatic-release trigger switch and locking pin, mounted as a unit with cord protector; 3 -wire cable and plug; 3-jaw Jacobs threaded chuck and key; "universal" motor.

Equipped with No. 24449 Chuck Protector at an extra charge. Standard Voltage, 110; also available for 220 or 250 volts.
Catalog No. 345 (specify voltage) Stock No. (894763)

NO. 238 5/8 INCH STANDARD BALL-BEARING DRILL


Motor is mounted on ball bearings. Chuck spindle operates on Timken tapered roller bearings, insuring smooth power.

## Specifications

Drilling Capacity: in Steel $5 / 32^{\prime \prime}$ to $5 / 8^{\prime \prime}$; in Hardwood $11 / 4^{\prime \prime}$
Speed: No-load 300 R.P.M.; Full-load 180 R.P.M. Weight: Net 17 lbs .; Shipping $213 / 4 \mathrm{lbs}$. Overall Length

## Standard Equipment

3-wire cable and plug; $5 / 8$ " Jacobs chuck, key and chain: auto-matic-release switch with locking pin; spade handle; detachable pipe handle; "universal" motor.

Optional No. 2 Morse Taper Socket instead of chuck, no extra charge.

Standard Voltage 110; also available for 220 or 250 volts.
Catalog No. 238 (specify voltage) Stock No. (894765) NO. $3611 / 2^{\prime \prime}$ STANDARD BALL-BEARING DRILL


The most popular general purpose Electric Drill with perfect operating balance, close coupled construction, minimum spindle offset and horizontal spade handle. Spindle speed is ideal for
driving all types of twist drills, hole saws and wood augers. Deep groove ball bearing on chuck spindle with inner and outer races locked in place. Spline-mounted spindle gear increases strength, minimizes friction and wear.

Specifications
Drilling Capacity: in Steel, up to $1 / 2^{\prime \prime}$; in Hardwood, up to $1^{\prime \prime}$ Speed: No load 400 R.P.M., Full-load 275 R.P.M. Weight: Net $93 / 4 \mathrm{lbs}$.; Shipping 13 lbs . Overall Length

## Standard Equipment

Three-conductor cable and plug; 3-jaw Jacobs threaded chuck and key; automatic-release trigger switch with locking pin; spade handle with key holder; detachable pipe handle; "universal" motor.
Standard Voltage, 110; also available for 32, 220 or 250 volts. Catalog No. 361 (specify voltage) Stock No. (894764)

## NO. 103 3/4 INCH PORTABLE ELECTRIC HAMMER



Completely self-contained, operated by "universal" motors, requires no transformers nor rectifiers. Positive motor drive. through reducing gears, develops hammer action by oscillating $\alpha$ weight and spring assembly. A definite "follow-through" stroke produces high efficiency.

Use to speed up any drilling or cutting operation requiring a hammer action; drill and channel in concrete, stone and brick; caulk joints and seams; remove scale and rust; tamp and vibrate concrete forms; gouge and chisel trees, timbers.

## Specifications

Operating Range: Efficient $1 / 4^{\prime \prime}$ to $3 / 4^{\prime \prime}$; Extreme $3 / 16^{\prime \prime}$ to $11 / 8^{\prime \prime}$ Blows Per Minute 2300; Overall Length $145 / 8^{\prime \prime}$ Weight: Net $103 / 4 \mathrm{lbs}$; Shipping 22 lbs.

## Standard Equipment

One No. 22587 chuck wrench; one dust shield; one No. 7162 ( $5 / 3^{\prime \prime}$ ) star drill; 3-conductor cable and plug; trigger switch; tool retaining spring: drift key; carrying case and can of oil; "universal" motor.

Standard Voltage 110 also available for 220 or 225 volts.
Catalog No. 103 (specify voltage) Stock No. (894767)

MATTHEWS TELEHEIGHTS
Type CW


A handy, practical instrument that will save time in quickly and accurately figuring heights of poles, trees, wires, buildings, etc.

Based on a well-known geometric axiom, it puts in the pocket of the lineman or outside plant man the necessary tools for making an accurate measurement that otherwise would require the services of a surveyor.

Easy to operate, no moving parts. Length, 5 inches.
Furnished with instruction sheet; and leather carrying case. Weight, 2 ounces.

Stock No. (892103)

HOME UTILITY ELECTRIC DRILLS


These are well built tools with ample motor, husky housings, full sized gears and bearings. Drills holes in a jiffy in metal, wood or plastics. Can also be used to drive grinding, sanding and polishing attachments and for sharpening tools. Excellent for drilling out rusted bolts and studs.

Immediately available in the two sizes shown below:
$1 / 4$ " Home Utility Drill, Stock No. (894761)
$1 / 2^{\prime \prime}$ Home Utility Drill, Stock No. (894762)

DILLON BISECTORS


An easily operated anchor hole locator. Scientifically spots the location where an anchor pole or anchor should be placed The accuracy with which it bisects the angles and determines the center of the lines of force takes the guesswork out of this phase of line construction.

Length, $121 / 2$ inches; depth, $15 / 8$ inches; and width, $7 / 8$ inch. Complete instructions accompany each instrument.

Shipping weight, 1 pound. Stock No. (893406)

## ELECTRIC SOLDERING IRONS

The core of the heating unit is made of solid steel rod. Around this steel core is wound chrome-nickel ribbon resistance wire, the various layers of which are insulated with mica of the best grade obtainable for the purpose.

Each of the below irons is equipped with a baffle plate, at the shank, to prevent free conduction of heat to the handle.


NO. 3138 Designed primarily for production and maintenance in radio, telephone, telegraph, ignition switchboard and telephone installation work and similar industrial applications.


NO. 3158 For the same purposes as the No. 3138 but for work requiring an iron of greater capacity.
NO. 3178 For use on still heavier work; for light commutators and service and production work. A very useful iron for general purposes.
NO. 3198 For heavy work of all kinds. Supplies a large volume of heat at high temperature. Used by manufacturers in many different lines; for shop, service, production work, etc.

## Specifications

Made in standard voltages and for 32 volts.
No. 3138 also made for $6,12,24$ and 55 volts.
Nos. $3138,3158,3178,3198$ can be equipped with three-conductor cord, one wire grounded, at slight additional charge.
Separate heat-insulating stand supplied with each iron.

| Cat No. | Stock No. | Diameter <br> of Tip | Watts | Net <br> Weight | Length <br> Over All | Casing <br> Diameter |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3138 | $(890818)$ | $3 / /^{\prime \prime}$ | 100 | 16 oz. | $127 / s^{\prime \prime}$ | $7 / 8^{\prime \prime}$ |

## COPPER SOLDERING TIPS



These copper tips are made from commercially pure, drawn bar, copper rod. Each tip is designed to fit into, and to the full length of, core of heating unit of the particular iron for which it is intended. Maximum area of contact between the tip and heating unit is thus assured. Tips are of uniform diameter throughout their entire length. Each tip is held in place in core of heating unit by $\alpha$ recessed set-screw. Standard shaped tips with which the various models are equipped are shown in the illustration; but pyramidal, instead of chisel type, and vice versa, can be supplied when so specified without additional charge.

| Cat. No. | 3738 | 3758 | 3778 | 3798 |
| :--- | :---: | :---: | :---: | :---: |
| Stock No. | $(890822)$ | $(890823)$ | $(890824)$ | $(890825)$ |

TEMPERATURE REGULATING STANDS


This is $\alpha$ thermostatically controlled device for the regulation of the temperature of an electric soldering iron while at rest. When placed on this stand, soldering iron is maintained at working temperature, ready for instant use or, if desired, at a lower temperature. Through an adjustment on bottom of the stand, thermostat may be set for the maintenance of any desired temperature -from very low, or warm, to full working temperature. Body of stand is of molded plastic. Soldering iron cradle proper is of metal. Stand is equipped with cord and altachment plug-cap for connection to current and with a receptacle for connection of the electric soldering iron. It is designed for use with electric soldering irons up to 660 watts capacity and on circuits up to 240 volts.

$$
\begin{array}{ccc}
\text { Cat. No. } & \text { Stock No. } & \text { Net Weight } \\
475 & (894673) & 27 \mathrm{oz} .
\end{array}
$$

## WELLER SOLDER GUNS



The Weller Solder Gun heats in 5 seconds, thus saving time and power. The prefocused spotlight throws light where you need it as you work; like having an extra hand. The inexpensive readily replaceable loop tip gets in between wiring easily. This tip can be bent to meet the requirements of any particular job. Greater terminal length gets down farther into the switchboard or chassis. Comfortable pistol grip.

Model D-440 has dual heat-100 watts normal heat on first switch position, 150 watts instantaneous on second.

| Cat. No. | Stock No. |  | Watts Cycles | Volts |  |
| :--- | :--- | :--- | :--- | :--- | ---: |
| S-400 | $\mathbf{( 8 9 5 2 6 7 )}$ | Single, | 100 | 60 | 115 |
| D-440 | $\mathbf{( 8 9 5 2 6 8 )}$ | Dual, | $100 / 150$ | 60 | 115 |

## Replacement Tip for Weller Solder Guns

[^1]
## Revised 1-1-57

## HEXACON BATTERY SOLDERING IRONS

Recommended for soldering in remote areas wherever batteries are available, these soldering irons will generate any degree of heat required for soldering lightest or heaviest work.

These irons will do three times heavier work than the sizes indicate because the ele-


Battery Type Soldering Iron ments are embedded in the tips. The tips are small to permit the finest kind of soldering work.

A switch in the handle controls the amount of heat needed for a particular job. Only $6 \%$ of the wattage is required to melt solder; the balance of $94 \%$ of power is available for quickheating and extra soldering capacity.

These soldering irons are available in two classes. One operates on either a 6 or 12 volt battery, the other works on a 12 or 24 volt battery. Both irons are identical in size, shape and weight. Both feature hermetically sealed nickel-chromium heating elements that are as easy to replace as lamp bulbs. Each is equipped with a twelve foot rubber heating cord, battery clips and a non-breakable plastic handle.
$\left.\begin{array}{ccccccc}\text { Cat. } & & & & & \begin{array}{c}\text { Battery } \\ \text { No. }\end{array} & \text { Stock No. }\end{array} \begin{array}{c}\text { Weight } \\ \text { Voltage }\end{array}\right)$

## KEMODE QUICK-SHOT SOLDERING IRON



Kemode cartridge-heated soldering iron needs no electricity, no flame or external heat of any kind. Reaches working temperature in twenty seconds and maintains soldering temperature for 6 to 8 minutes. Peak wattage rating exceeds 250 watts. Accepts $1 / 4^{\prime \prime}, 3 / 8^{\prime \prime}, 5 / 8^{\prime \prime}$ or $1^{\prime \prime}$ tips.

| Catalog No. | Stock No. |
| :--- | ---: |
| Model QS $-1 / 4$ | $(897245)$ |
| Model QS $-3 / 8$ | $(897246)$ |
| Model QS $-5 / 8$ | $(897247)$ |
| Model QS -100 | $(897248)$ |

## KEMODE QUICK-SHOT CARTRIDGES

The cartridge contains 10,000 calories of heat energy supplied by a thermit mixture sealed in a steel shell. It is non-inflamable, non-explosive and has long shelf life. Packaged 12 in a carton.

## WALL MFG. CO. SOLDERING GUNS



The Wall Mfg. Co. soldering guns feature instant heat without the aid of heavy transformers. Thermostatic action is present but without thermostats of any kind. Available in three types, each feature interchangeable tip and element assemblies. Two of the models have a spotlight and switch to furnish light when and where it is needed. The tips are steel clad and give long service.

| Cat. No. | Stock No. | Approx. <br> Tip Size <br> (in.) | Max. Watt Input | Min. <br> Watt <br> Input | Wt. Each w/o cord, (oz.) | $\begin{aligned} & \text { Ship. } \\ & \text { Wt. } \\ & \text { (Lbs.) } \end{aligned}$ | $\underset{\text { Ptdg. }}{\text { Std }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 214 T | (895659) | $1 / 4$ | 400 | 150 | 12 | 2 | 24 |
| 214 TN | (895660) | $1 / 4$ | 400 | 150 | 14 | $21 / 8$ | 24 |
| 212 LT | (895661) | 1/2 | 650 | 300 | 24 |  | 24 |

## PENCIL TYPE SOLDERING IRONS



Ideally suited for fine, close work such as terminal strips, these soldering irons are available in two sizes - $1 / 8^{\prime \prime}$
tip and $1 / 4^{\prime \prime}$ tip. Both types feature thermostatic action to give steady heat.

|  |  |  |  | Tip. Size | Max. Watt |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. Stock No. | Min. Wat. <br> (in.) | Wach <br> Input | Input | (oz.) Cord |  |
| 14T | $\mathbf{( 8 9 5 6 6 3 )}$ | $1 / 4$ | 125 | 40 | $11 / 2$ |
| 18 T | $\mathbf{1 8 9 5 6 6 2 )}$ | $1 / 8$ | 90 | 25 | 1 |

## KEMODE SOLDERING TIPS <br> For Quick-Shot Irons


$11 / 4^{\prime \prime} \dot{3}{ }^{3 / 8^{\prime \prime} \text { and }} 1 / 8^{\prime \prime}$ Pyramid TYpe

$3 / 8^{\prime \prime}$ and $5 / 8^{\prime \prime}$ Chisel Type

$1^{\prime \prime}$ Chisel

Soldering tips are available in $1 / 4^{\prime \prime}, 3 / 8^{\prime \prime}$ and $5 / 8^{\prime \prime}$ pyramid and $3 / 8^{\prime \prime}, 5 / 8^{\prime \prime}$ and $1^{\prime \prime}$ chisel design.

| Stock No. | Description | Stock No. | Description |
| :--- | :---: | :---: | ---: |
| (897249) | $1 / 4^{\prime \prime}$ Pyramid | $\mathbf{( 8 9 7 2 5 2 )}$ | $3 / 8^{\prime \prime}$ Chisel |
| (897250) | $3 / 8^{\prime \prime}$ Pyramid | $\mathbf{( 8 9 7 2 5 3 )}$ | $5 / 8^{\prime \prime}$ Chisel |
| (897251) | $5 / 8^{\prime \prime}$ Pyramid | $\mathbf{( 8 9 7 2 5 4 )}$ | 1 $^{\prime \prime}$ Chisel |

## PREST-O-LITE 5-in-1 OUTFIT



Five distinct outfits for a multitude of uses where it is necessary to apply the proper flame and exactly the right amount of heat to $\alpha$ job. Includes No. 402 Torch Handle, Tank Union for B and MC Tanks, four Torch Stems in graduated sizes, and No. 8 Soldering Iron. Also 6 ft . of hose, and metal carrying case.

Does not include Pressure Regulator, but this may be ordered separately. (See description on this page.)

Catalog No. $30 \times 03$

Description
Stock No. (890905) 5-in-1 Standard Outfit (replaces 0-6109)

PREST-O-LITE 4-in-1 OUTFIT


The 4-in-1 Outfit has the same No. 402 handle and open flame stems as the 5 -in-1, but omits the soldering iron. Used in the same manner for heating, soldering and light brazing. Comes in a waterproof carrying roll of vinylite, with separate pockets for each part.

Does not include Pressure Regulator, but this may be ordered separately.
Catalog No.
$30 \times 06$

> Description
> 4-in-1 Standard Outfit
> (replaces 0-6343)

## Note

The illustrations above show the Precision Models of the 5-in-1 and 4-in-1 Outfits. The only difference between the models illustrated and the Standard Model is that the Precision Model uses No. 401 Handle with shut-off valve (see below), and comes with a Pressure Regulator which is not included in the Standard Model.


No. 402 Standard Torch Handle


No. 401 Precision Handle

## R-411 ACETYLENE <br> REGULATOR

The Prest-O-Lite R-411 Acetylene Pressure Regulator is $\alpha$ fully adjustable type which may be set for precisely the correct working pressure regardless of how much gas is in the tank. The gauge shows at a glance the contents of the tank. Often saves its cost by eliminating use of excessive pressures. Pressure adjustment screw regulates pressure from 1 to 13 lb . per sq. inch.

Catalog No.
R-411-MC

Stock No. (895197)


## PREST-O-LITE STYLE MC ACETYLENE TANKS

Prest-O-Lite Gas is available in steel shell tanks which deliver pure acetylene at the turn of a valve. In these tanks it is freeze-proof and of guaranteed purity. Refills can be obtained for the price of the gas alone.

| Style | Capacity <br> No. | Height <br> Cubic Ft. | Dia. <br> Inches | Weight <br> Inches | Stock No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MC | 10 | 15 | 4 | $91 / 2$ | (890907) |

## PREST-O-LITE EXTRA STEMS

Prest-O-Lite Torch Stems, as used in the $5-\mathrm{in}-1$ and 4 -in-1 Outfits are available separately on special order.



## WALL DREADNAUGHT SAFETY SHIELDS

Most efficient shields on the market. Meet rigid government specifications.
Each panel measures $17^{\prime \prime}$ wide by $23^{\prime \prime}$ high. Two-way hinges permit compact folding for easier carrying. Made from 22 gauge galvanized steel with $1 / 4^{\prime \prime}$ galvanized steel reinforcing rod rolled in around edges. Convenient carrying handles. Grates and brackets on No. 320G are made of heavy gauge steel. Over-all panel locks hold panels in place. No. 320G closes to $21 / 2^{\prime \prime}$ thick. No. 579 closes to $11 / 2^{\prime \prime}$ thick.


320G
579

Stock No.
(897257)
(897258)

Shipping Weight
29 lbs.
18 lbs .

## NO. 41 AND 42 UTILITY BLOW TORCH



The Burner Casting surrounds fuel vein of extra heavy steel tubing assuring complete generation, intense heat and long life. It is equipped with windshield and is not affected by the coldest and windiest weather. Cleaner pin in end of valve cannot enlarge orifice. Orifice block is replaceable if damaged. Bakelite control wheel stays cool.

Tank is drawn from heavy gauge cold rolled steel and bottom is electrically seam welded to the shell. All fittings are flanged and brazed. Angle handle most convenient to operator. Pump has blow-proof construction originated by Wall. Long stroke and positive action provide ample pressure quickly. Check valve is completely enclosed, cannot become injured. Finish: Attractive gold bronze color, trimmed with glossy red handle.

Shipping weight each $5 \frac{1}{2}$ pounds. Packed 12 per case weighing 68 pounds.

| Cat. No. | Stock No. | Capacity | Fuel |
| :---: | :---: | :---: | :---: |
| 41 | $(897259)$ | 1 qt. | Gasoline |
| $\mathbf{4 2}$ | $(897260)$ | 1 qt. | Kerosene |

## WALL SUPERIOR BLOW TORCHES

## No. 331 Superior Blow Torch



Tank-Drawn from heavy gauge sheet steel, bottom electrically seam welded to tank shell. Fills through funnel shaped bottom.
Burner - Cannon type, cast from special alloy bronze that resists heat fatigue. Delivers extremely hot blue blast. Attractive in appearance.
Needle Valve - Square shoulder seat on valveshaft prevents orifice enlargement. Slender pin-type cleaning needle automatically cleans orifice. Black bakelite valve wheel stays cool.

Pump - Has blow-proof construction originated by Wall. Long stroke and positive action provide ample pressure quickly. Check-valve completely enclosed, cannot become injured.
Handle - Has plenty of hand-room, correctly pitched for perfect balance. Pisto-Grip design. Regular handles available on request.
Inlets - Pump, burner and filler inlets brazed into place.
Shipping weight each 4 pounds. Packed 12 per case weighing 48 pounds.

| Cat. No. | Stock No. | Capacity | Fuel |
| :--- | :---: | :---: | :---: |
| 331 | $\mathbf{( 8 9 7 2 6 1 )}$ | 1 qt. | Gasoline |
| 331S with Shield | $\mathbf{( 8 9 7 2 6 2 )}$ | 1 qt. | Gasoline |



The design represents a departure from previous existing furnace practice and is a direct result of study of the needs of the splicer. It has been tested under the most severe weather conditions and has been adopted as standard equipment by $\alpha$ number of the largest TELEPHONE and POWER Companies. The tank has extremely wide base to give greater stability.

The flue completely surrounds the burner assembly, is reinforced with heavy bands at top and bottom, has two hinged doors for ready access to burner, and is held in place at back of tank by special hinge and in front with wing nuts and flue catches.

Burner assembly includes the DREADNAUGHT patented furnace burner, pressed steel drip cup and overflow saucer, and a scientifically designed heat dissipator mounted on the valve housing. This supply valve is $\alpha$ brass forging.

Pump shell is of seamless drawn brass construction with patented check valve. Pump handle is forged brass T type permanently fastened to pump rod. Filler Plug is forged steel.

Quickly melts large quantities of solder, compound or paraffin.


Specifications

Tank Capacity ................................................ 1 Gal.
Height without Hood. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 15"
Hood Diameter at Top (Tapered). . . . . . . . . . . . . . . . . . . . . . . .97/8"
Hood Diameter at Base (Tapered). . . . . . . . . . . . . . . . . . . . . . . $71 / 2^{\prime \prime}$
Hood Height . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $6^{\prime \prime}$
Straight Hoods. . . . . . . . . . . . . . . . . . . . . . . . $71 / 2^{\prime \prime}$ dia. x 6 " height
Maximum Tank Diameter. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1011/2"
Shipping Weight Each, Lbs. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 27
Made for Kerosene or Gasoline use. State fuel to be used.
1 to a Standard Shipping Case -22 lbs .
Cat. No. 50
Stock No. (897255)

## WALL NO. 55 FURNACES



The No. 55 furnace is a low price tool with burner that assures efficient operation and maximum heat. Drawn steel tank with all inlets brazed and bottom electrically seam welded into tank shell.

Wide base, minimum height. Burns gasoline only.

| Cat. No. | Stock No. | $\underset{\substack{\text { Tapacity } \\ \text { Gal. }}}{\text { Cal }}$ | Height Without Hood | Max. <br> Hood <br> Diam | Max. <br> Tank <br> Diam. | Weight <br> Pounds | $\begin{gathered} \text { No. } \\ \text { to } \\ \text { Case } \end{gathered}$ | Shipping <br> Wt. Each Pounds |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 55 | (897256) | 1 | $12^{\prime \prime}$ | $73 / 4{ }^{\prime \prime}$ | 9 ' | 11 | 1 | 13 |

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## STROMBERG-CARLSON

## Chairs, Booths, Pay Stations



Comfortable, scientifically constructed Sturgis Posture Chairs; handsome, acoustic telephone booths in either wood or metal; Pay Stations adapted to any line for that extra income.

## CONTENTS section $\bigcup$

## CHAIRS, BOOTHS, PAY STATIONS

Posture Chairs$3 u$Folding Door Telephone Booths ..... $5 u$
Outdoor Telephone Booths ..... $6 u$
Wall Type Telephone Booths ..... $8 u$
Pay Station Signs ..... $8 u$
Self-Contained Pay Stations ..... $10 u$
Pay Station Accessories ..... $13 u$

## STURGIS POSTURE CHAIRS

Sturgis chairs are designed and built by chair specialists to give day-long comfort. They are ideal for telephone operators and any others whose work requires $\alpha$ high base chair with $\alpha$ firm but flexible back.

Chairs shown are representative of this well-known line.


No. SC-500-7

## No. SC-500 Leather Operator's Chairs

All models feature tubular steel frames, foam rubber seats covered with either elastic Versilan ( $\alpha$ vinyl plastic) or deep buff genuine leather, and adjustable padded backrests. Genuine leather seat will be furnished unless otherwise specified.

The hub and spindle on each chair are threaded with 4 pitch Acme thread which provides greater bearing surface for a longer life as well as making possible faster adjustments to proper seat heights. Approximate seat height adjustment range is 4 inches.

Rubber cushioned steel glides are standard.
The backrest is adjustable through an approximate 4 inch range, Sturgis "Follow-Flex" springs provide constant support even though the occupant may be in various positions.

Seat cushions of $21 / 2$-inch foam rubber are molded to provide relief at the base of the spine.

| Catalog No. | Stock No. | Minimum Height | Maximum Height <br> Approx. |
| :---: | :---: | :---: | :---: |
| SC-500-1 | $(897330)$ | $18^{\prime \prime}$ | $22^{\prime \prime}$ |
| SC-500-3 | $(897332)$ | $20^{\prime \prime}$ | $24^{\prime \prime}$ |
| SC-500-5 | $(897334)$ | $24^{\prime \prime}$ | $28^{\prime \prime}$ |
| SC-500-7 | $(897336)$ | $28^{\prime \prime}$ | $32^{\prime \prime}$ |

## GENERAL INDEX

A complete alphabetical index with cross references for all the products shown in this section or any of the other sections will be found in the center of this catalog.

Legs and supports are made of welded steel for strength and stability, and "Bonderized" for permanence of enamel. All surfaces are smooth, with rounded corners. The very finest upholstery or caning is used. Warm enamel colors are perfectly matched and infra-red baked in new modern ovens.


No. SC-500-8

## No. SC-500 Cane Seat Operator's Chairs

With the exception of the seat itself, all other features of this chair are the same as those on the leather operator's chair.

The cane seat is made from closely woven cane of the finest grade obtainable, mounted on a hard maple frame with a front rail contoured to minimize discomfort resulting from pressure on thighs.

| Catalog No. | Stock No. | Minimum Height | Maximum Height <br> Approx. |
| :---: | :---: | :---: | :---: |
| SC-500-2 | $(897331)$ | $18^{\prime \prime}$ | $22^{\prime \prime}$ |
| SC-500-4 | $(897333)$ | $20^{\prime \prime}$ | $24^{\prime \prime}$ |
| SC-500-6 | $(897335)$ | $24^{\prime \prime}$ | $28^{\prime \prime}$ |
| SC-500-8 | $(897337)$ | $28^{\prime \prime}$ | $32^{\prime \prime}$ |

Sturgis Chairs are made in several seat height adjustments to fit varying keyshelf or desk heights. The table below will help to make the proper selection; adjustment within range limits can be made easily and quickly without any tools whatsoever.

| Floor to Top <br> of Keyshelf | Order Chair with <br> Adjustment Height | Floor to Top <br> of Footring |
| :--- | :---: | :---: |
| $31^{\prime \prime}$ or less | $18^{\prime \prime}$ to $22^{\prime \prime}$ | $53 / 8^{\prime \prime}$ |
| $31^{\prime \prime}$ to $34^{\prime \prime}$ | $20^{\prime \prime}$ to $24^{\prime \prime}$ | $538^{\prime \prime}$ |
| $34^{\prime \prime}$ to $38^{\prime \prime}$ | $24^{\prime \prime}$ to $28^{\prime \prime}$ | $8^{13 / 16^{\prime \prime}}$ |
| $40^{\prime \prime}$ or more | $28^{\prime \prime}$ to $32^{\prime \prime}$ | $13^{3 / 16^{\prime \prime}}$ |

Revised 5-1-57


Cane Seat

## Cane Seat Operator's Chairs

The finest grade cane available is closely woven on a comfortdesigned hard maple frame. Cane seats are popular because they are cool and clean. Pleated posture curved backrests are cushioned with four individual natural latex, foam rubber pads. The seat frame is turquoise color to match the nylon Bedford Cord upholstery on the backrest. The steel frame is of the same construction and color as that of the upholstered chairs shown in the adjacent column.

| Catalog No. | Stock No. | Minimum Height | Maximum Height |
| :---: | :---: | :---: | :---: |
| List 4 | $(897339)$ | $18^{\prime \prime}$ | $22^{\prime \prime}$ |
| List 8 | $(897341)$ | $20^{\prime \prime}$ | $24^{\prime \prime}$ |
| List 10 | $\mathbf{( 8 9 7 3 4 3 )}$ | $24^{\prime \prime}$ | $28^{\prime \prime}$ |
| List 12 | $\mathbf{( 9 8 7 3 4 5 )}$ | $28^{\prime \prime}$ | $32^{\prime \prime}$ |



Low Base Chair No. 624


Upholstered Seat

## Upholstered Foam Rubber Operator's Chairs

These chairs are available in four heights as shown in the chart below. The frames of these chairs are of steel, accurately cut and welded at all joints, providing a construction designed to withstand twenty-four hour a day punishment. Cushioned with natural foam rubber latex, the seat is designed to relieve pressure at the base of the spine. The pleated posture curved backrest is cushioned with four individual natural latex foam rubber pads. Both the backrest and the seat are covered with extra long wearing nylon Bedford Cord in turquoise. The footring is oval in shape for greater security and foot-comfort. Both the footring and the steel frame are heavily coated with a mahogany-color plastic.

| Catalog No. | Stock No. | Minimum Height | Maximum Height |
| :---: | :---: | :---: | :---: |
| List 3 | $(897338)$ | $18^{\prime \prime}$ | $22^{\prime \prime}$ |
| List 7 | $(897340)$ | $20^{\prime \prime}$ | $24^{\prime \prime}$ |
| List 9 | $\mathbf{( 8 9 7 3 4 2 )}$ | $24^{\prime \prime}$ | $28^{\prime \prime}$ |
| List 11 | $(897344)$ | $28^{\prime \prime}$ | $32^{\prime \prime}$ |

## Low Base Operator's Chair No. 624

## (Shown at Left)

This chair is for use with switchboards whose keyshelf is low enough for the operator to rest her feet comfortably on the floor. Also widely used by stenographers and office workers at regular desks.

Seat cushion is constructed of coil springs topped with foam rubber covered with genuine leather. A large back is mounted to the back posts by Follow Flex back spring.

Available with glides or casters. One size only.
Catalog No. SC-624
Stock No. (894600)


No. 1200 -G

## The Executive Swivel Chair

The Executive 1200 Series Swivel Chair offers beauty, efficiency and perfect posture support together with steel frame construction and hand tailored upholsteries. Well cushioned backrest and coil spring seat give complete seating comfort. The fiber glass base is virtually immune to all normal office abuse. Scuffs and blows simply will not disfigure or dent it. It is noncorrosive and will never need refinishing throughout its life. The fiber glass base is noiseless and self-leveling regardless of the unevenness of the floor and is available in one of five colors-gray, walnut, charcoal, light green and dark green. The upholstery is Deep Buff Leather: offered in green, brown, maroon and black.

| Catalog No. | Stock No. | Minimum Height | Maximum Height |
| :---: | :---: | :---: | :---: |
| $1200-\mathrm{G}$ | $\mathbf{( 8 9 7 3 4 6 )}$ | $17^{\prime \prime}$ | $20^{\prime \prime}$ |



No. 840-G

## The All Purpose Clerical or Office Chair

The No. 840-G all purpose chair was designed not only for looks but also to provide posture-correct and comfortable seating for the user. It is big in every way-big in the back, in the seat and in its plus value features. With one adjustment, that of seat height, this chair will provide comfortable seating for most women.

Foam rubber is used throughout, providing the ultimate in seating comfort and posture. The chair swivels on a scuff-proof, noiseless, and self-leveling fiber glass base that harmonizes with the color of the metal parts. The upholstery is Deep Buff Leather: offered in green, brown, maroon and black.

| Catalog No. | Stock No. | Minimum Height | Maximum Height |
| :---: | :---: | :---: | :---: |
| $840-\mathbf{G}$ | $(897347)$ | $16^{\prime \prime}$ | $20^{\prime \prime}$ |

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## CHURCHILL TELEPHONE BOOTHS

## With Folding Door



No. 100
A self-contained booth designed for single or multiple installations. It effects $\alpha$ pleasing appearance from all angles.
Furnished without a floor.
Standard equipment includes: Automatic door switch for lights and electric ventilator, silent electric ventilator, complete automatic lighting equipment, complete metal lining. Acoustically designed.
Dimensions: Height, $841 / 2$ inches; width, $301 / 2$ inches; depth, $301 / 2$ inches.
Shipped knocked down and crated.
Seats obtainable at extra cost.

|  | With Glass in Door Only |  |
| :---: | :---: | :---: |
| Cat. No. | Stock No. | Description |
| 100-A | (893419) | Of Oak, Light or Medium Oak Finish with <br> Soft Wood Back. |
| 100-B | (893420) | Of Birch, Light or Medium Mahogany finish <br> with soft Wood Back. |

## MODEL A-1 HANDI-BOOTH



A new design in an inexpensive outdoor booth which requires no high-cost installation. Supplied with a $61 / 2$ foot steel mounting post which can be set in a post-hole filled with concrete. Avcilable also with solid aluminum back for wall mounting. Plastic lighted top increases night revenue. Patented waterproof aluminum and safety-glass construction -keeps bugs, dust and dirt out. Everything rust-proof comes complete with plastic top, light, mounting post, and shatterproof safety glass. Wiring enters through base. Dimensions: $18^{\prime \prime}$ long x $13^{\prime \prime}$ deep $\times 30^{\prime \prime}$ high. Shipping weight 86 lbs . Directory chain supplied. Aluminum panels may be submitted for any of the clear glass panels. These will be incorporated without charge if specified when booth is ordered.

| Cat. No. | Stock No. | Description | Shipping Wt. |
| :--- | :---: | :---: | :---: |
| A-1 | $(897263)$ | Post type, clear back | 86 lb. |
| A-1-A | $(897264)$ | Post type, solid back | 86 lb. |
| A-1-8 | $(897265)$ | Wall type, solid back | 86 lb. |

CHURCHILL OUTDOOR TELEPHONE BOOTHS


Glass Door<br>and Sides<br>No. 500

The new Churchill No. 500 Outdoor Telephone Booth is sturdily constructed, manufactured from California Redwood. With its large, clear "Telephone" sign on all four sides of the booth and with nine large quarter inch plate glass reinforced windows, this booth will serve faithful ly in all kinds of weather.

These booths are especially useful near gas stations, sports arenas, parking lots and highway intersections.
The No. 500 booth features photo-electronic night lighting which goes on at dusk and turns off at dawn. Folding doors and brilliant interior lighting are additional features. There is a full size writing shelf along with ample space for mounting a pay station telephone. Entrance ducts for both telephone and electric wires are provided.

Slate grey, orange or blue are the standard colors offered. Special color combinations are available at a slight additional cost.

Size $30^{\prime \prime} \times 30^{\prime \prime} \times 86^{\prime \prime}$. Shipped crated, set up and ready for use.
Catalog No. 500
Stock No. (895864)


## MODEL 211

Burgess Model 211 AcoustiBooth of heavy-duty all-steel construction, for use in power stations, factories, or other places requiring sturdy construction. Durable black wrinkle finish. Outside dimensions: 31 in . wide, $791 / 4 \mathrm{in}$. high, $381 / 2$ in. deep. Inside dimensions: 24 in . wide, $761 / 4 \mathrm{in}$. high, 35 in. deep. Shelf: 24 in . by $81 / 4$ in. Net weight 350 pounds. Shipping weight 410 pounds. Stock No. (894680)

## SHERRON ACOUSTIC STEEL TELEPHONE BOOTHS



Model 18-S

Sherron Acoustic Booths are available for either indoor or outdoor use. All models are of rigid fire-proof steel construction, $30^{\prime \prime} \times 30^{\prime \prime}$ in area. Indoor booths have acoustic panels backing the perforated steel lining. All outdoor booths except Model 15-S, are available in flat, peaked or Astra-Dome roofs.
Booths feature adjustable backboard and shelf. Weatherproof fittings are provided for incoming wires. Ceiling lights and automatic door switches are included.
Extras include linoleum covered seat assembly, Lite-O-Matic photo-electric control switch (on Models 17-S and 25-S only), and ventilating or air conditioning unit.

## MODEL 18-S INDOOR BOOTH

Linoleum covered steel stands only $1 / 2^{\prime \prime}$ above floor. Finished in baked synthetic enamel: interior, gray; exterior, light brown, dark brown or maroon.

| Model | Stock No. | Height | Ship. Wt. Packed |
| ---: | :--- | :---: | :---: |
| $18-5$ | $(893433)$ | $833 / 4^{\prime \prime}$ | 500 Lbs. |

## MODEL 15-S OUTDOOR BOOTH

Zinc coated steel construction. Rigid base with safety plate floor. Half panel construction - lower half steel, upper half wire glass. Decal "Telephone" sign. Peaked roof. Flame red color.

| Model | Stock No. | Height | Ship. Wt. Packed |
| :--- | :---: | :---: | :---: |
| 15-S, Type 1 | $(895865)$ | $891^{1 / 4^{\prime \prime}}$ | 500 Lbs. |

## MODELS 17-S OUTDOOR BOOTHS



Model 17.S Type 2

Available in three types - Types 1, 2, and 7. Colors on all types are: red, orange, yellow, green.
Type 1 has half section panels - lower half is steel and upper half is wire glass. Flush incandescent ceiling light. "Telephone" is stenciled on front. Recessed directory unit is extra.

Type 2 has quarter section panels-lowest quarter is steel and remaining quarters are safety glass. Steel panels can be substituted for glass in any location.

Type 7 is similar to Type 1 but has translucent "Telephone" signs appearing on three sides whereas Type 1 has only one stenciled "Telephone" sign.

| Model | Stock No. | Height | Ship. Wt. Packed |
| :--- | :---: | :---: | :---: |
| 17-S, Types 1 \& 7 | $(895185)$ | $891 / 4^{\prime \prime}$ | 650 Lbs. |
| 17-5, Type 2 | $\mathbf{( 8 9 5 8 6 6 )}$ | $891 / 4^{\prime \prime}$ | 650 Lbs. |

## MODELS 25-S OUTDOOR BOOTHS

Type 1 is similar to Model 17-S, Type 1, in styling but is of stainless steel construction.

Type 2 is similar to Model 17-S, Type 2, in all respects but is offered in stainless steel.

Both offered in choice of colors: red, orange, yellow, green.

| Model | Stock No. | Height | Ship. Wt. Packed |
| :--- | :---: | :---: | :---: |
| 25-S, Type 1 | $\mathbf{( 8 9 5 1 8 6 )}$ | $891 / 4^{\prime \prime}$ | 650 Lbs. |
| 25-S, Type 2 | $\mathbf{( 8 9 5 8 6 7 )}$ | $891 / 4^{\prime \prime}$ | 650 Lbs. |

 OUTDOOR TELEPHONE BOOTHS

These telephone booths are made with safety glass and enameled steel panels that are attractively arranged in lightweight aluminum frames. All materials resist stain and remain bright and shiny even after years of use and weather.

Benner Nawman booths feature safety, convenience and durability. The doors are mounted with semiconcealed hinges which eliminate the possibility of pinching even $\alpha$ child's finger. Self-closing doors may be provided on request. The booths are naturally ventilated both at top and bottom.
The booths are shipped, knocked-down, in five cartons. They can be easily installed by one man with no special training in less than an hour. The panels are self-locking; the foot mountings accommodate inaccurate drillings in the floor. The booth may be levelled without shims on floors that may be as much as $13 / 4$ inches out of level. Incoming wires may be brought into the booth at the top, bottom or through the floor.
Shipping weight -326 pounds. Plated steel floors are available for all models at extra cost.

## Model - Type A

Has safety glass panels in top half of side sections and metal panels on bottom half of sides and both top and bottom halves of the back section. It also has switch controlled interior light and a $71 / 2$-watt lamp that burns at all times. No illuminated signs.

## Model - Type B

Has safety glass in both halves of the side sections and an allmetal rear section. Otherwise it is the same as Type A.

## Model - Type C

Has same panel arrangements as Type A but with illuminated sign. One fluorescent lamp illuminates the booth as well as the ground around the booth.

## Model - Type D

Same panel arrangements as Type B but with illuminated top sign as Type C.

To order these booths,
Specify type desired
Stock No. (895784).

## ALCOA OUTDOOR TELEPHONE BOOTHS

Made of extruded aluminum with Alumilite finish, these booths offer roomy, comfortable service and feature large shelf spaces for customers to deposit their bundles while making calls. These booths are made up of six interchangeable subassemblies which interlock into solid structures. If $\alpha$ traffic accident damages one side of the booth, the damaged portion may be easily removed and replaced with another section.
The panels are interchangeable and are offered in two combinations. One combination has 9 safety glass pan-
 els and 3 porcelain enameled colored panels to be used on three sides of the booth. The other combination is made up of 6 safety glass panels and 6 porcelain enameled panels. Red is the standard color for the enameled panels. All panels are the same size.

Each panel, whether colored or safety glass is cushioned in weather resistant synthetic rubber and held in place by interlocking aluminum retaining strips and one screw.

Each door is of the equal leaf, folding type with safety glass panels and kick plates. Hardware is Alumilite finished aluminum and stainless steel. Also included are an adjustable door closing device and a spring door stop to hold the door ajar.

Upkeep is low. Pencil marks and grease smudges are easily removed by wiping or washing. The booth never needs to be repainted and it never rusts for all parts are either aluminum or stainless steel.

Good ventilation is provided at both top and bottom. Accumulation of rain and melted snow is directed toward the rear of the booth by a gutter system.

The standard floor is a concrete pad which is to be supplied by the purchaser. However, $\alpha$ heavy aluminum alloy floor plate is available at extra cost.

Interior wiring for booth illumination is supplied. Inlets for power and telephone leads are also provided at both top and bottom. Four glass telephone signs are furnished and are illuminated by twin fluorescent lamps which also light the booth.

When booth is completely assembled, it is equipped with $\alpha$ removable steel cross brace at the bottom and is mounted on a wooden skid. It is then crated for domestic shipment. Booths may also be furnished in six knocked-down sub-assemblies that can easily be assembled.

$$
\begin{aligned}
& \text { A booth weighs } 360 \text { pounds when it is erected. } \\
& \text { Size of each booth is } 331 / 2^{\prime \prime} \times 33^{1 / 2^{\prime \prime}} \times 861 / 8^{\prime \prime} \text {. } \\
& \text { Stock No. (895783). }
\end{aligned}
$$

## BURGESS INDOOR BOOTHS

## MODEL 45



All the privacy of a full length booth is offered in this half-length Model 45 Acousti-Booth. The unique design of these booths offer several ways in which they can be mounted - from straight line to circular arrangement.

Outside noise is reduced $50 \%$ which results in approximately 14 db attenuation inside the half length booth. The high efficiency of this booth is due to its configuration and its patented acoustic construction. The walls are made of thick sound-absorbing material that is protected on both sides by steel paneling. This provides $\alpha$ quiet, restful place to hear well. Conversations are clear and private; outside noises fade away.

The booth's modern style will combine with most decorating schemes. It has a silver-gray, ham-mered-enamel finish to give maximum durability as well as a pleasing appearance. A single shelf provides a large writing surface and an armrest for comfort. A light fixture is supplied only on request and at additional cost. Model 45 Stock No. (895700)

## FLOOR STAND FOR MODEL 45

Floor stand for the Model No. 45 for use where it is desired to have a full length booth, and for those locations where wall mounting is not convenient. Same finish as booth.

Net Weight: 72 lbs . Shipping Weight: 100 lbs .
Stock No. (897266)

## BURGESS ACOUSTI BOOTH MODEL 601



Burgess "Scout" Model 601 Acousti- Booth is ideal for busy public places where space is limited. Reinforced plywood construction with rich walnut stain exterior finish. Outside dimensions: 28 in . wide, 32 in . high, 26 in . deep. Shelf: $231 / 2$ in. wide by 17 in . deep. Net weight 60 pounds. Shipping weight 80 pounds.

Stock No. (894677)

## BURGESS ACOUSTI BOOTH MODEL 602

Burgess "Scout" Model 602,
 similar to Model 601, but of rigid all-steel construction. Heavy-gauge perforated steel sheets protect the acoustic material. Durable black wrinkle exterior finish. Outside dimensions: 28 in . wide, 32 in . high, 26 in . deep. Shelf: 24 in . wide by 17 in. deep. Net weight 85 pounds. Shipping weight 120 pounds.

Stock No. (894678)

## TELEPHONE BOOTH MASTS



Model TBM Service Entrance Masts provide complete service entrance facilities for out door booths. It is easy to install and will fit any booth. The mast is heavy gauge steel tubing and available in lengths of $12,14,16$ or 18 feet.

These masts can be moved easily to any location. Simply remove the entire unit from the ground sleeve, drive new ground sleeve at new location and install mast.

All units are equipped with Type C meter sockets. Other types furnished on request. Masts that are equipped with meter socket and circuit breaker have letter " S " in their catalog number. Letter " $L$ " in the catalog number shows unit is equipped with time clock and flood lights. Letters "SL" show unit has combination of above equipment. Numerals indicate length of mast from ground level.

| Catalog No. | Stock No. <br> TBM-12 | (895868) |
| :--- | :--- | :--- | Complete Unit | Complion |
| :--- |
| TBM-14 |

## GLADWIN ILLUMINATED TELEPHONE BOOTH ROOF



The Glo-Dome is made of all weather acrylic plastic making it an ideal roof for replacement or new installations on outdoor telephone booths. Lettering is actually inside to prevent it from weathering. Positive fit prevents slipping, and makes it completely water and bug proof. Transmits more light so it can be seen, and readily identified.

Stock No. (897267)
Shipping Weight $251 / 2$ pounds.

## GLADWIN TRI-DIRECTIONAL SIGN



The Tri-Directional Sign is an illuminated public telephone sign carrying the standard size emblems. The face of this sign is acrylic plastic with the colored copy on the inside to protect it from damage. It is lighted with a 22 -watt standard circline fluorescent lamp. The sign is furnished complete ready for installation.

| Cat. No. | Stock No. | Size | Description | Weight |
| :---: | :---: | :---: | :---: | :---: |
| T-1145 | $\mathbf{( 8 9 7 2 6 8 )}$ | $11 \times 11$ | USITA emblem | 11 lbs. |
| T-1146 | $\mathbf{( 8 9 7 2 6 9 )}$ | $18 \times 18$ | USITA emblem | 23 lbs. |
| T-1149 | $\mathbf{( 8 9 7 2 7 0 )}$ | $11 \times 11$ | Telephone Receiver emblem | 11 lbs. |
| T-1150 | $\mathbf{( 8 9 7 2 7 1 )}$ | $18 \times 18$ | Telephone Receiver emblem | 23 lbs. |

INDEPENDENT PAY STATION TELEPHONE SIGNS


No. 1

| List No. | Stock No. | Trade No. | Size Inches |
| :---: | :---: | :---: | ---: |
| 1161 | $(893506)$ | 1 | $17 \times 18$ |
| 1163 | $(893507)$ | 2 | $8 \times 18$ |

These signs are unlike the lithographed steel signs.

The enamel is fused into the steel (18 gage) with a blast furnace in $1500^{\circ}$ heat. Guaranteed never to fade or tarnish from effects of the weather.

In colors red, white, and blue.

PUBLIC TELEPHONE SIGNS


IR-2

These signs are of porcelain enamel, permanently fused to special enameling iron or steel, and are colorful, durable, nonfading and economical. They are guaranteed to last ten years under all service conditions - indoors or outdoors.

The square sign has blue letters on a white background and measures eleven inches on a side. The rectangular sign has the same colors and measures $121 / 8^{\prime \prime} \times 51 / 2^{\prime \prime}$. The circular sign also has the same colors and is $7^{\prime \prime}$ in diameter.

The square sign has its own mounting bracket, while the other two are provided with holes so that they may be nailed to convenient posts or walls.


IR-1


IR-3

| Catalog <br> Nos. | Stock <br> Nos. |
| :---: | :---: |
| IR-1 | $(895734)$ |
| IR-2 | $(895735)$ |
| IR-3 | $(895736)$ |


| Description | Size <br> (inches) |
| :--- | :---: |
| "Public Telephone"- |  |
| double faced |  |$\quad 11 \times 11{ }^{\text {"Public Telephone"- }}$| with arrow double faced |
| :--- |$\quad 121 / 8 \times 51 / 2$.

# POST PAYMENT ATTACHMENT TYPE PAY STATIONS 

## Non-Electrical - For Local or Central Battery Service

The operation of these pay stations is accomplished without the aid of moving parts or electrical connections, the signals being produced by the coins striking gongs or chimes, the sound of which is transmitted to the central office operator through the transmitter of the telephone at which the pay station is located. In view of the simplicity and reliability of these pay stations, their maintenance cost is extremely low.
In the case of handset type pay stations, the signals are picked


This popular station is designed to attach to any wall type telephone set in present use. It is connected to the telephone by means of a mounting plate, which is included with the station.

Dimensions: 9 inches high, $41 / 2$ inches wide, 3 inches deep.
Approximate shipping weight, 13 pounds.
Catalog No. 11
Stock No. (893478)

## NO. 11-J UNIVERSAL HANDSET TYPE

This pay station is similar to the No. 11, but it is arranged for use with a wall type or desk type handset telephone set. The universal mounting plate is arranged for either wall or shelf mounting and a sig. nal transmitter is mounted within the box to pick up the coin signals. It is not necessary to mechanically connect the pay station to the telephone set, but the signal transmitter must be cut into the handset transmitter circuit. A 2 -conductor cord is required for this purpose. The No. LD-72 signal transmitter is included with the pay station as standard equipment.
Dimensions: 9 inches high, $41 / 2$ inches wide, 3 inches deep.
Approximate shipping weight, 16 pounds.
Catalog No. 11-J
Stock No. (893479)
up by a special signal transmitter mounted within the box. These pay stations cannot be used for pre-payment service, as the coin is not under the control of the central office operator.

Pay stations are complete with locks but less any telephone parts.

When specified, any of the pay stations requiring Transmitter, Receiver, Cords or Dials will be equipped with these parts at regular catalogue prices.

NO. 23-J COMPACT HANDSET TYPE
This station is similar to the No. 23-D, but it is arranged for a handset. It includes the switchhook and hook switch springs and requires only the usual bell box and handset with associated cords.

The universal mounting plate on this station allows for either shelf or wall mounting.
The No. LD-72 signal transmitter is included as part of the standard equipment.

Dimensions: $101 / 2$ inches high, 6 inches wide, $41 / 4$ inches deep.

Approximate shipping weight, 20 pounds.
In ordering state the type and make of handset and ringer box to be used.

Catalog No. 23-J Stock No. (893484)

Note: The Type 23-J pay station is not convertible to automatic, to reverse battery, or to pre-pay operation. See following pages for equivalent pay stations with handset and employing these other types of operation.

## Ringer Boxes

For use with Type 23 Pay Stations, Stromberg-Carlson no. 1260 Desk Set Box is recommended. This includes ringer, induction coil and capacitor, housed in a modern plastic case, ready to be wired in directly. With the Type 90 Pay Stations, which contain an induction coil, Stromberg-Carlson No. 1261-B straight line or No. 1261-BZ straight line biased extension ringers are suitable.

Note-Special wiring diagrams for connecting these ringers in the pay station circuits are available upon request from Stromberg-Carlson's main office at Rochester.

## ACCESSORIES FOR PAY STATIONS



With this receptacle, the coin opening in the cover is automatically locked when the receptacle is removed from the pay station. The collector does not handle any money but merely replaces the full receptacle with an empty one, which has had the cover sealed in place by the Company office.

No. 6001-A is the plain type of receptacle.
No. 6001-B is of the latest design. The tray is expanded at every possible point to obtain the maximum coin capacity. A wire handle permits easy removal from the pay station.
Catalog No. 6001-A Stock No. (893501) Capacity $\$ 25.00$
Catalog No. 6001-B Stock No. (893502) Capacity $\$ 30.00$

## Type P-50197 Lead Seals

Used for extra safety with the No. 6001 self-locking coin receptacles. Sold in packages of 100.

Catalog No. P-50197 Stock No. (894934)


The Anti-Stuffing Coin Return device will prevent the blocking of coin chutes with gum or paper. A Special kit is available for converting present pay stations. The kit consists of AntiStuffing Coin Return, modified refund chute, coil spring, hinge pin, and $\alpha$ return escutcheon. A special drill jig is required to properly locate the hinge pin.

| Cat. No. | Stock No. | Description |
| :--- | :---: | :---: |
| P-70293 | $(897201)$ | Anti-Stuffing Coin Return Kit |
| P-70294 | $\mathbf{( 8 9 7 2 0 2 )}$ | Anti-Stuffing Coin Return Drill Jig |

## Type P-50649 Sealing Tools

Used with P-50197 Lead Seals on the self-locking coin receptacles. They can be supplied engraved with the telephone company's designation when specified.

Catalog No. P-50649 Stock No. (894935)

Type 2-A Coin Receptacle
Non-locking. Standard box which is supplied unless another is specified. Capacity $\$ 30.00$.

Catalog No. 2-A
Stock No. (893500)

## No. 139-A Shelf Bracket



No. 139- $\Lambda$


No. 153-A Corner Bracket
This bracket is used to mount any of the Standard Pay Stations in the corner of $\alpha$ telephone booth or other constricted space. Approx. ship. wt., 17 pounds.

Shelf Bracket, Includes Screws
153-A (893504) Corner Bracket, includes


No. 153.A

## GENERAL INDEX

A complete alphabetical index with cross references for all the products shown in this section or any of the other sections will be found in the center of this catalog.

## HOW TO ORDER PAYSTATIONS—HELPFUL SUGGESTIONS

1-Specify the type of service desired-either automatic prepay or semi-postpay.

2-Specify the type or make of telephone components (handset, dial, etc.) with which the paystation is to be equipped.

3-Specify type or make of extended number plate desired - the "Letter-Number" type having red numbers, black letters, and "Operator" in " 0 " space; or the " 1 " to " 0 " type having numbers only (with "Operator" in the " 0 " space).

4-Specify "self-locking coin receptacle," if open type is not desired. The self-locking receptacle automatically locks as it is withdrawn from the paystation. The collector neither sees nor handles any money-he merely removes one locked coin receptacle from the paystation and replaces it with an empty one.

5-Card holder, coin signal transmitter, locks, etc., will be furnished where required; they need not be specified.

## Example of Correct Ordering

4 No. 96-10 Semi-Post Pay Paystations, each equipped with:

Stromberg-Carlson No. 23-W Handset
Stromberg-Carlson CE-209-44 Dial,
Metropolitan type (letters and figures)
Stromberg-Carlson No. 1261-B Ringer Box
4 No. 6001-B Coin Receptacles

1 Kit to convert No. 92 Paystation to 10-cent Operation.

## STROMBERG-CARLSON

## Meters



Volt meters, ohm meters, Wheatstone Bridges, current flow and transmission test sets for general use inside or outside the office supplement the more specialized test equipment shown in a previous section.

## METERS

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Multi-Purpose Meters ..... $4 v$
Wheatstone Bridges ..... $6 v$
Dynamometers ..... $6 v$
Current Flow Test Sets ..... 7v
Transmission Test Sets ..... 7v
Telefault Test Set ..... $8 v$

## STERLING POCKET METERS <br> Direct Current

Useful in all kinds of battery testing, automotive ignition work, servicing radios, gas engines, motor-boats, doorbells, telephones, and in low-voltage electrical work generally. Serve as polarity indicators.
Has calibrated scale, durable, clearly marked dial, and full nickel-finished case, $21 / 4$ inches in diameter and $5 / 8$-inch thick. Equipped with flexible cord and spur for making connections. Packed individually, 10 to $\alpha$ standard package.
Shipping weight per standard package, 4 pounds.

## NO. 24 AMMETERS



For testing No. 6 dry cells.
Scale is 0.35 amperes, 1 ampere divisions.
Stock No. (892100)
NO. 34 VOLTMETERS


For 6-volt batteries, dry or storage.
Scale is $0-10$ volts, $1 / 5$-volt divisions.
Stock No. (892101)
NO. 44 VOLTAMMETERS


For storage batteries and dry cells.
Scale is $0-35$ amperes, 1 -ampere divisions; $0-10$ volt scale, $1 / 5$. volt divisions.
Stock No. (892102)

## STEWART MIDGET DETECTO-METER

Model D-1
The lineman's companion; extremely handy and light in weight. A pocket sized voltmeter. This meter is used for rapidly locating poor joints, crosses, shorts, grounds and other line and cable troubles.

The unit has a $0-10,000$ ohms scale, powered by a self-contained \#2 flashlight battery. Resistance is measured by connecting the two clips across the unknown circuit or faulty line.

Furnished in two voltage ranges: 0-1.5 and 0-60. Comes in hardwood case with bakelite ends. Furnished complete with battery, two line leads and clips. Size $13 / 4^{\prime \prime} \times 3 \times 6$. Weight, $11 / 4$ pounds.

| Catalog No. | Scale | Stock No. |
| :--- | :--- | :--- |
| Model D-1 | $0-60$ | $(894665)$ |
| Model D-1 | $0-1.5$ | $(892069)$ |

STEWART TEST SET


## Model H

The Stewart Test Set tells which way and how far the trouble is from the tester without opening the line or cutting the wire. The Detecto or pickup coil works with either insulated or bare wire.

A light indicates by its brilliance the approximate distance from fault to tester. The Detecto coil, coupled with the distinctive tone and clarity of signal of the Test Set will quickly determine the direction of the fault from the pickup coil.

Provided with talking circuit which may be used on common or local battery systems; valuable when two men are working together. Unit has self-contained batteries for talking.

Housed in an oak case with leather top and carrying strap. Complete with self-contained generator, batteries, pickup coil, head phone and test cords.

| Size | Weight | Stock No. |
| :--- | ---: | ---: |
| $9^{\prime \prime} \times 9^{\prime \prime} \times 5^{\prime \prime}$ | 11 pounds | $\mathbf{( 8 9 2 0 7 3 )}$ |

## STEWART EXPLORING COIL

## Amplifier, Model E

A new pocket-sized amplifier to be used with pickup coil test sets in testing or locating buried pipes and cable. The Exploring Coil Amplifier increases the signal strength of the pickup coil, in Cable Testers or Tester and Locator sets; and makes it audible where, without its amplification, it would be difficult or impossible to determine and locate a fault.

The voltage gain is approximately 50 . Input and output imped. ances are matched for $40-100$ ohm pickup coil and $40-100$ ohm phone. Self-contained A and B batteries, with a volume control on panel.
Size
$5^{\prime \prime} \times 3^{\prime \prime} \times 2^{\prime \prime}$
Weight
Stock No.
$11 / 2$ pounds
Stock No.
(895222)

## STEWART CABLE TESTER



## Model L-1

Easy to use and reliable in operation, the Stewart Cable Tester is unique in having an Exploring Coil which is neutral to the tone on the sheath and messenger. This "tone test" feature and the patented Exploring Coil register in the head phone the pair which is at fault.
The Stewart Model L-1 Cable Tester uses two \#6 Dry Cells and comes complete with pick-up coil and head phones, housed in a sturdy wood carrying case.
$113 / 4^{\prime \prime} \times 10^{1 / 2^{\prime \prime}} \times 4^{\prime \prime}$
Weight
10 pounds
Stock No.
$(892070)$

STEWART TESTER AND LOCATOR


## Model A

This Tester and Locator has all the outstanding features of the Model L-1, and in addition a special Depth coil provides the means to locate and measure the depth of buried pipe and cable.
Especially valuable in finding old conduits for which the records have been lost. The Stewart Model A Tester and Locator uses four \#6 dry cells and comes complete with Exploring Coil, Depth Coil, head phone and cord, all self-contained in a sturdy wood carrying case.
Size
$11^{\prime \prime} \times 12^{1 / 2^{\prime \prime}} \times 71 / 4^{\prime \prime}$
Weight
Stock No.
(892071)

## VOLT-OHM-MIL-AMMETER MODEL 625-NA

The widest range tester of its type. A long mirror scale for improved reading accuracy; resistance ranges now to 40 Megohms; D.C. Voltage ranges with dual sensitivity ( 10,000 and 20,000 ohms per volt) provide for double the number of full-scale readings given by the average tester.

## 18 Voltage Ranges

Six D.C. Volts
Six D.C. Volts
Six A.C. Volts

0-1.25-5-25-125-500-2500 at 20,000 ohms/Volt 0-2.5-10-50-250-1000-5000 at 10,000 ohms/Volt $0-2 \cdot 5-10-50-250-1000-5000$ at 10,000 ohms/Volt

## Six Current Ranges

D.C. Microamperes
D.C. Milliamperes
0.1-10-100-1000 $0-10$ at 250 millivolts
D.C. Amp at 250 mi

## Three Resistance Ranges

Ohms $\quad 0-2000-200,000 \quad$ (12-1200 at center scale)
Megohms $\quad 0-40 \quad(240,000$ ohms at center scale)

## Six Decibels Ranges

$-30,+3.0,+15,+29,+43,+55,+69$. (Reference level " $O$ " DB at 1.73 V . on 500 ohm line.)

Output
Condenser in series with A.C. Volt ranges.

## General Description

MOLDED, INSULATED CASE-Black molded $21 / 2^{\prime \prime} \times 5 \frac{1}{2 \prime} \times 6^{\prime \prime}$ with removable black leather strap handle.
PANEL-Black molded with white markings.
CONNECTORS-Two banana jacks on front panel for V-O-MA, A, and COM., and one on left side of panel for 2500 and 5000 volts. LONG-SCALE INSTRUMENT-The large $6^{\prime \prime}$ indicating instrument is adjusted to 50 microamperes at 250 millivolts with separate internal housing for protection of mechanism during battery replacement.
LONG MIRROR SCALE- 5 inches long at top arc. Excellent readability. Black on white except A.C. markings which are red on white and ohms which are green on white.
WEIGHT-Approximately 3 pounds, complete with battery.
BATTERY-Self-contained. One 15V Mini-max Eveready No. 411 or equivalent, and one $11 / 2 \mathrm{~V}$ Eveready No. 935 or equivalent.
LEADS-50 inches long. Test prods with removable alligator clips at one end. Banana plugs for connecting to tester jacks at other end. Catalog No. 625-NA Stock No. (894802)


## MODEL 666-HH

A precision-manufactured marvel of compactness that provides a complete miniature laboratory for voltage, resistance and direct current analyses.

## Ranges

| D.C. Volts | $0-10-50-250-1000-5000$ | at 1,000 ohms/Volt |
| :--- | :--- | :--- |
| A.C. Volts | $0-10-50-250-1000-5000$ | at 1,000 ohms/Volt |
| D.C. Milliamperes | $0-10-100-500$ | at 250 Millivolts |
| Ohms | $0-2,000-400,000$ | $(12-2400$ at center scale) |

## General Description

MOLDED, INSULATED CASE-Black Molded $31 / 6^{\prime \prime} \times 57 / 8^{\prime \prime} \times 29 / 16^{\prime \prime}$. PANEL-Black Molded with engraved white markings.
CONNECTORS-Three banana jacks at the top of the panel reduce possibility of connecting leads falling over scale or controls.
INSTRUMENT- $3^{\prime \prime}$ meter, integral with panel, adjusted to 400 microamperes and 250 millivolts.
SCALE- $29 / 32^{\prime \prime}$ long at top arc. Black on white except A.C. markings which are red on white.
WEIGHT- $11 / 2$ pounds complete with battery.
BATTERY-Self-contained plug-in. One $11 / 2$ volt Eveready No. 935 or equivalent.
LEADS- 50 inches long. Test prods with removable alligator clips at one end. Banana plugs at the other end for connecting to tester jacks.
Catalog No. 666-HH Stock No. (894801)

MODEL 564 WESTON VOLT-OHMMETERS

## Type 3C

Has a useful selection of voltage
 and resistance ranges.
A self-contained, $41 / 2$-volt battery provides the necessary potential for the ohmmeter ranges. Changes in battery potential are compensated for by short-circuiting the resistance pin jacks of any range and adjusting pointer to zero ohms by turning the battery adjustment knob.
Size, $433 / 64 \times 345 / 64 \times 29 / 16$ inches. Voltage ranges; $3 / 30 / 300 /$ 600 d.c., all 1000 ohms per volt. Resistance ranges; $1000 / 10,000 / 100$, 000 /and $1,000,000$ ohms, full scale. Ranges are available from engraved pin jacks moulded internally with the panel. A toggle switch connects meter in circuit as a voltmeter or ohmmeter. Complete with pair of 4 -foot test leads. Approximate weight, $13 / 4$ pounds.

| Type | Stock No. | Model |
| :---: | :---: | :---: |
| 3C | (892087) | 564 |
| Leather Carrying Case |  | Stock |
| No. (892086) |  |  |

MODEL 689 WESTON OHMMETERS
Designed for the service man who relies upon resistance and continuity tests in checking circuits. Type 1 E scale is calibrated with a double range and resistance readings are available from 0-5000 and 0-50000 ohms; Type 1 F with ranges 10 and 1000 ohms.

A $11 / 2$-volt No. 2 unit-cell battery. mounted inside the case, makes it independent of an outside source of potential.

A magnetic shunt provides convenient adjustment to compensate for variation in battery voltage. This adjustment may be made before each series of tests, thus assuring accurate resistance readings.
Complete with battery and a long pair of test leads.

| Type | Stock No. |
| :---: | :---: |
| 1E | $(892084)$ |
| 1F | $(892085)$ |

## MODEL 4300 TELOHM



For testing and locating line, telephone and switchboard trouble, high resistance joints, shorts, grounds and opens; also open circuits on coils of all kinds, partially shorted coils, high resistance transmitters, cut-outs in cords, contacts, etc.

Equipped with Weston O-3 volt direct reading ohmmeter with $0-10,000$ ohm scale and glass protector, 2 flashlight cells, switch, cords and test clips. Mounted in a solid walnut case, $13 / 4 \times 31 / 2 \times 6$ inches.

Weight, $11 / 4$ pounds.
Model 4300 Stock No. (892088)

SIMPSON VOLT-OHM-MILLIAMETER Model 260


An all-purpose tester which combines ruggedness with sensitivity. All connections are short and direct, reducing short circuits. Pin jacks are recessed. Letters and figures are molded into the bakelite panel and filled with durable white for greater legibility.

The extremely low current consumption assures dependable voltage readings. DC current readings may be taken from 2 microamperes up to 10 amperes. Resistance readings can be made all the way from $1 / 5 \mathrm{ohm}$ up to 20 megohms.

## Ranges

20.000 Ohms per volt DC, 1000 Ohms per volt AC Volts. AC and DC: $2-5 ; 10 ; 50 ; 250 ; 1,000 ; 5.000$. Output: $2-5 ; 10 ; 50 ; 250$; 1.000. Milliamperes, DC: $10 ; 100 ; 500$. Amperes, DC: 10 . Ohms: $0-2000$ ( 12 ohms center); 0-200,000 (1200 ohms center); 0-20 meg. ohms ( 120,000 ohms center). Size: $5^{1 / 4^{\prime \prime}} \times 7^{\prime \prime} \times 31 / 8^{\prime \prime}$. Shipping Wt. 5 lbs.

Model 260 Stock No. (894976)

## SIMPSON OHMMETER Model 372

A complete self-contained instrument with batteries. Ohms adjuster compensates for variations in battery voltages. Wire wound and matched resistors are used throughout.

## Ranges

0-500 (5 ohms center); 0-5000 (50 ohms center); 0-50,000 ( 500 ohms center); $0-500,000$ ( 5,000 ohms center): 0.5 Megohms ( 50,000 ohms center): $0-50$ Megohms ( 500,000 ohms center). Size $3^{\prime \prime} \times 57 / 8^{\prime \prime} \times 21 / 2^{\prime \prime}$. Ship. ping Wt. 3 lbs .

Stock No. (894977)

## SIMPSON VOLT-OHMMETER

Midgetester Model No. 355

Practical shirt-pocket volt-ohmmeter, the Midgetester measures only $2^{3} 4^{\prime \prime} \times 4^{1 / 2^{\prime \prime}} \times 1^{\prime \prime}$. Has a sensitivity of 10,000 ohms per volt on both AC and DC. The core movement is selfshielded permitting use near steel or other magnetic metals or fields without adverse effect.

Accuracy of this instrument is $3 \%$ DC and $5 \%$ AC of full scale voltages. Is also within $3 \%$ of arc from absolute value of resistance being measured. Range is $0-1200$ volts, AC or DC. DC resistances can be measured from 0-10 megohms.
Handy ohms zero-adjust thumb wheel. All contacts are recessed slightly below the face of the instrument. Automatic circuit and range selection by inserting leads into desired contacts. A set of probe leads is provided.
Weight: 7 ounces.

| Catalog No. | Stock No. | Description |
| :---: | :---: | :--- |
| 355 | $(895768)$ | Midgetester |
| 6355 | $(895769)$ | Leather carrying case |

## MODEL AN DILLON DYNAMOMETERS



This dynamometer makes it possible to obtain correct tension on telephone leads and thus insure freedom from wind, sleet and snow failures.
When used with block and tackle, it registers in pounds the strain load placed on wire, messenger or guy strand during initial installation or in maintenance work. Prevents overstrain and the resultant breakdowns, and eliminates guesswork.
Withstands full shock recoil; and mechanism cannot be injured by overload. The main indicator hand is white, and the maximum indicator hand is red. Dial is protected by $1 / 4$-inch shatterproof safety glass, properly sealed to prevent the entry of dust or dirt.

Accuracy of 2 per cent plus or minus.

|  | Description |  | Stock No. |
| :--- | ---: | ---: | :--- |
| 0 to | 500 Pounds, | 5-Pound Divisions | $(893409)$ |
| 0 to | 1000 Pounds, | 10-Pound Divisions | $(893410)$ |
| 0 to | 2500 Pounds, | 50-Pound Divisions | $(893411)$ |
| 0 to | 3500 Pounds, | 50-Pound Divisions | $(893412)$ |
| 0 to | 5000 Pounds, | 50-Pound Divisions | $(893413)$ |
| 0 to | 7500 Pounds, | 50-Pound Divisions | $(893414)$ |
| 0 to 10000 Pounds, | 100-Pound Divisions | $(893415)$ |  |
| 0 to 15000 Pounds, | 125-Pound Divisions | $(893416)$ |  |

## L AND N WHEATSTONE FAULT LOCATION bRIDGE TEST SETS

## No. 5430-A-Type U

A portable Wheatstone bridge especially adapted for locating faults in communication circuits.

Ratio dial has multiplying values of $1 / 1000$, $1 / 100,1 / 10,1 / 9,1 / 4,1 / 1$, $10 / 1$ and $100 / 1$ for resistance measurements and for Varley Loop tests; also settings of M1000, M100 and M10 for ratios in Murray Loop tests.
Rheostat has 4 decades, $10(1+10+100)+9 \times 1000$ ohms + infinity. Limit of error in ratio resistors $\pm 0.05 \%$; In rheostat arm: resistance change from zero settings of dials equals dial settings $\pm$ ( 0.1 per cent +0.01 ohm $)$. Includes pointer galvanometer of 1 -megohm sensitivity, 4.5 volt battery and keys for galvanometer and battery. Hilborn Loop test can be made, using internal galvanometer.
Furnished in oak case, $87 / 8 \times 73 / 8 \times 57 / 8$ inches, with metal protecting corners, removable lid and carrying strap. Weight, 8 pounds.

| Cat. No. | Stock No. | Description |
| :---: | :--- | :--- |
| 5430-A | $(892097)$ | Type U |
| 5431 | $(892098)$ | Leather Case |

No. 5300-Type S


For ordinary resistance testing and for locating faults in communication circuits.
Ratio dial has multiplying values of $0.001,0.01,0.1,1,10,100$ and 1000 for resistance measurements and for Varley Loop tests; also settings for M1000, M100 and M10 for ratios in Murray Loop tests. Rheostat has 4 decades $9(1+10+100+1000)$ ohms. Limit of error in ratio resistors $\pm$ $0.05 \%$; In rheostat arm: resistance change from zero settings of dials equals dial settings $\pm$ ( 0.1 per cent +0.01 ohm ). Includes pointer galvanometer of 1 -megohm sensitivity, 4.5 volt battery and keys for galvanometer and battery.

Furnished in oak case, $87 / 8 \times 73 / 8 \times 55 / 8$ inches, with hinged lid and carrying strap.

[^2]| Cat. No. | Stock No. | Description |
| :---: | :--- | :--- |
| 5300 | $(892099)$ | Type S |
| 5431 | $(892098)$ | Leather Case |



NO. 695 SHALLCROSS CURRENT FLOW TEST SETS


Provides $\alpha$ convenient and rapid means for testing the flow of current through relays and other apparatus commonly found in telephone and telegraph equipment.

Range: Accuracy $\pm 2 \%$ of full scale value Current: D.C. 0-15-75-150 Milliamps
Voltage: D.C. 0-7.5-15-75 Volts
Variable resistors for setting of relay current $3 \times 5,000$ ohms continuously adjustable.

Catalog No. $695 \quad$ Stock No. (892096)

## NO. 614-A SHALLCROSS TELEPHONE SERVICE METERS

Designed to provide facilities for the telephone man in making the wide range of electrical measurements that are encountered in the telephone field.

Particularly useful for tests of subscriber set output, dry cells, transmitter current, receiver resistance, capacity of condensers, ringer impedance, magneto, output, and magneto impedance; central office commercial supply voltage, ringing machine voltage, battery charging current, etc.

Ranges: Accuracy for DC. $\pm 2 \%$; for A.C. $\pm 5 \%$
Voltage: D.C. 0-6-30-150-300 Volts
A.C. $0-6-30-150-300$ Volts

Current: D.C. 0-15-150-300 Milliamps. 0-6 Amps
Resistance: D.C. $0-500-50,000$ Ohms
Impedance: A.C. $25-3,000,000 \mathrm{Ohms}$
Inductance: A.C. 1-100-1,000-10,000 Hen.
Capacitance: A.C. 0.001-0.1-1-10 Mfd.
Power Level: A.C. $-6,0,+9 \mathrm{db}$.
Artificial Load 600 Ohms for $6-30$ V, A.C.
Catalog No. 614-A Stock No. (894816)

## SHALLCROSS CABLE FAULT LOCATION BRIDGE

A portable instrument having a variable ratio arm arranged for the Murray and Varley Loop tests for locating faults, grounds, and crosses.

Steps of multiplier switch for use as Wheatstone Bridge: x0.001-x0.01-x0.1-x1-x10-x100-x1,000 Ohms
and for Murray test:
x1-x10-x100-x1,000 M
Rheostat arm: 11,110 ohms variable in steps of 1 ohm
Range: 0.1-11,110,000 Ohms
Provision made for using bridge in Varley \& Murray tests Catalog No. 629 Stock No. (894817)

## NO. 692 SHALLCROSS TRANSMISSION TEST SETS



In this instrument are combined:

1. Tone Generator, 1,000 cycles, Part No. $691-\AA 1,000$ cycles/ second. Vacuum tube oscillator operating from 110-115120 V. A.C. or D.C. Output variable from $0-18 \mathrm{db}$.
2. Transtester Part No. 690, Decibel Meter range $-10,0$, $+6 \mathrm{db}, 600$ ohms.
3. Attenuation pads, Part No. 355 , variable from 0 to 35 db in 5 db steps.

Catalog No. 692 Stock No. (892091)

## SHALLCROSS TRANSMISSION TEST EQUIPMENT

Developed to provide a simple, economical and modern method of measuring transmission losses.

No. 691-A


Has 1000 cycle generator. Total power, 18 db at 600 ohm impedance.

In metal case.
Catalog No. 691-A Stock No. (892092)
No. 355


Attenuation H pad. Total of 35 decibels, in 5 decibel steps, 600 ohms impedance. In metal case.

Catalog No. 355 Stock No. (892093)

No. 690


Decibel meter calibrated minus ( - ) 10 decibels, to plus $(+) 6$ decibels. Zero level, 1 milliwatt at 600 ohms impedance.

In oak carrying case.
Catalog No. 690
Stock No. (892094)

## MATTHEWS WOODPECKER TELEFAULTS <br> Type L

This instrument will locate shorts of all kinds-damp spots, crosses, grounds, split pairs, etc. Compact, convenient, and
 simple to operate. Does not noise up other pairs, because of the inductive field created.

With the instrument connected, the exploring coil is moved along the cable until the point is reached where the woodpecker tapping tone cannot be heard in the earphone, indicating the exact location of fault.

The woodpecker tapping tone is very distinct and cannot be
confused with other inductive noises.
Operates on one dry cell. Maximum voltage, under 5 volts.
Wt. Lb. Each
Type L Woodpecker Telefault, Complete. . . . . . . . . . . . . . . . . 15
Extra Exploring Coil, Only . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2
Extra Receiver Only, with Cord 2

## STROMBERG-CARLSON

## Meters



Volt meters, ohm meters, Wheatstone Bridges, current flow and transmission test sets for general use inside or outside the office supplement the more specialized test equipment shown in a previous section.

## METERS

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## STERLING POCKET METERS

## Direct Current

Useful in all kinds of battery testing, automotive ignition work, servicing radios, gas engines, motor-boats, doorbells, telephones, and in low-voltage electrical work generally. Serve as polarity indicators.
Has calibrated scale, durable, clearly marked dial, and full nickel-finished case, $21 / 4$ inches in diameter and $5 / 8$-inch thick.

Equipped with flexible cord and spur for making connections.
Packed individually, 10 to $a$ standard package.
Shipping weight per standard package, 4 pounds.
NO. 24 AMMETERS


For testing No. 6 dry cells.
Scale is $0-35$ amperes, 1 ampere divisions.
Stock No. (892100)


For 6-volt batteries, dry or storage.
Scale is 0.10 volts, $1 / 5$-volt divisions.
Stock No. (892101)
NO. 44 VOLTAMMETERS


For storage batteries and dry cells.
Scale is $0-35$ amperes, 1-ampere divisions; $0-10$ volt scale, 1/5volt divisions.

Stock No. (892102)

## STEWART DETECTO-METER

## Model D-1

The linemen's companion-extremely handy -light weight. A pocket size volt ohmeter. The Stewart Detecto-meter has a multitude of uses for rapidly determining line and cable troubles. It will locate poor joints, crosses, shorts and grounds.
The unit has a $0-10,000$ ohms scale, powered by a self-contained No. 2 flashlight battery.
Resistance is measured by connecting the two clips across the unknown circuit or faulty line.

Furnished in either of two voltage ranges $0-1 / 5$ volts or $0-60$ volts. The case is of highly finished hard wood with bakelite ends and so constructed as to stand the hard service given it.

Comes complete with battery, two line leads and clips.

| Cat. No. | Stock No. | Size | Weight |
| :--- | :---: | :---: | :---: |
| D-1-60 | $(894665)$ | $13 / 4^{\prime \prime} \times 3^{\prime \prime} \times 6^{\prime \prime}$ | $11 / 4 \mathrm{lbs}$. |
| D-1-1.5 | $(892069)$ | $13 / 4^{\prime \prime} \times 3^{\prime \prime} \times 6^{\prime \prime}$ |  |

## STEWART TEST SET Model H



The Stewart Test Set tells which way and how far the trouble is from the tester without opening the line or cutting the wire. The Detecto or pickup coil works as well with insulated or bare wire. Saves time in not having to cut wire or insulation.

The unit is so arranged that $\alpha$ light will indicate by its brilliance the approximate distance from fault to tester.
The Detecto coil coupled with the distinctive tone and clarity of signal of the Test Set will quickly determine the direction from the pickup coil, the fault is located.

The unit is also provided with a talking circuit which may be used on common or local battery systems; a valuable feature when two men are working together.

The unit is housed in an oak case with a leather top and carrying strap. Complete with self-contained generator, batteries, pickup coil, head phone and test cords.
Stock No.
(892073)

$$
\begin{aligned}
& \text { Size } \\
& 9^{\prime \prime} \times 9^{\prime \prime} \times 5
\end{aligned}
$$

## STEWART EXPLORING COIL

## Amplifier, Model E

A pocket-sized amplifier to be used with pickup coil test sets in testing or locating buried pipes and cable. The Exploring Coil Amplifier increases the signal strength of the pickup coil, in Cable Testers or Tester and Locator sets; and makes it audible where, without its amplification, it would be difficult or impossible to determine and locate a fault.

The voltage or signal strength gain of the Amplifier is approximately 50. Input and output impedances are matched for use with $\alpha 40-100$ ohm pickup coil on the input and $40-100$ ohm phone on the output.

| Stock No. | Size | Weight |
| :--- | :---: | :---: |
| (895222) | $5^{\prime \prime} \times 3^{\prime \prime} \times 2^{\prime \prime}$ | $11 / 2$ pounds |

Weight
$11 / 2$ pounds

## STEWART CABLE TESTER

## Model L-1

Trouble that might ordinarily take hours to find can be located with the Stewart Cable Tester in only a few minutes. It is simple to use, saves time, more accurately locates cable faults. It will locate shorts, crosses, grounds and wet spots to the inch.

This highly reliable instrument is the only Cable Tester having an Exploring Coil, which is neutral to the tone on the sheath and messenger. This "tone test" feature and the patented Fish Tail Exploring Coil with pickup neutral to the fields around the messenger and sheath which are balanced out, the tone heard in the head phone is only that of a pair which is at fault.
The Stewart Model L-1 Cable Tester uses two No. 6 dry cells and comes complete with Fish Tail pickup coil and head phones.

| Stock No. | Size | Weight |
| :--- | :---: | :---: |
| $(892070)$ | $113 / 4^{\prime \prime} \times 10^{1 / 2^{\prime \prime}} \times 4^{\prime \prime}$ | 10 pounds |

## STEWART TESTER AND LOCATOR

## Model A



The Stewart Tester \& Locator has all of the outstanding features of the Model L-1 and in addition by the use of the special Depth Coil provided with the instrument, may be used to locate and tell the depth of buried pipe 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 and for which records have been lost. It will also eliminate the possibility of danger and injury from probing for a lost cable.
The Stewart Model A Tester \& Locator uses four No. 6 dry cells and comes complete with Fish Tail and Depth Coils, head phone and cord, all self-contained.

$$
\begin{array}{lrr}
\text { Stock No. } & \text { Size } & \text { Weight } \\
\text { (892071) } & 11^{\prime \prime} \times 121 / 2^{\prime \prime} \times 71^{\prime \prime} & 17 \text { pounc }
\end{array}
$$

## STEWART TRANSISTOR OSCILLATOR Model J <br> 

A self-contained, battery powered Transistor Oscillator with battery operating life of over 700 hours.

Output 1000 cycles into 600 ohm line at $0,-13$ and -16 dbm . Low distortion, stable sine wave output.

| Stock No. | Size | Weight |
| :--- | :---: | :---: |
| $\mathbf{( 8 9 7 1 9 9 )}$ | $214^{\prime \prime} \times 3^{\prime \prime} \times 4^{\prime \prime}$ | 10.3 ounces |

## STEWART DUAL ELECTROLYSIS VOLTMETER <br> Model G



Double meter.
Upper - 2.5-5-10-50-100-500 millivolts at 2000 ohms per volt.
Lower - .3-1-3-10-20-100-300 volts at 50,000 ohms per volt
Clear plastic cases for easy reading. Permits simultaneous readings of fluctuating voltages and currents.
Zero center avoids lead changing for polarity reversals.
Eliminates need for potentiometer.

| Stock No. | Size | Weight |
| :--- | :---: | :---: |
| $\mathbf{( 8 9 7 2 0 0 )}$ | $9^{\prime \prime} \times 10^{\prime \prime} \times 41 / 2^{\prime \prime}$ | 6 pounds |



## VOLT-OHM-MIL-AMMETER MODEL 625-NA

The widest range tester of its type. A long mirror scale for improved reading accuracy; resistance ranges now to 40 Megohms; D.C. Voltage ranges with dual sensitivity ( 10,000 and 20,000 ohms per volt) provide for double the number of full-scale readings given by the average tester.

## 18 Voltage Ranges

Six D.C. Volts
Six D.C. Volts
Six A.C. Volts
$0-1.25-5-25-125-500-2500$ at 20,000 ohms/Volt $0-2.5-10-50-250-1000-5000$ at 10,000 ohms/Volt $0-2.5-10-50-250-1000-5000$ at 10,000 ohms/Volt

## Six Current Ranges

D.C. Microamperes
D.C. Milliamperes
D.C. Amperes

0-50
0.1-10-100-1000
$0-10$
at 250 millivolts at 250 millivolts at 250 millivolts

## Three Resistance Ranges

## Ohms

Megohms
0-2000-200,000
(12-1200 at center scale)
( 240,000 ohms at center scale)

## Six Decibels Ranges

$-30,+3.0,+15,+29,+43,+55,+69$. (Reference level " O " DB at 1.73 V . on 500 ohm line.)

## General Description

MOLDED, INSULATED CASE-Black molded $21 / 2^{\prime \prime} \times 51 / 2^{\prime \prime} \times 6^{\prime \prime}$ with removable black leather strap handle, white markings on panel. CONNECTORS-Two banana jacks on front panel for V-O-MA, A, and COM., and one on left side of panel for 2500 and 5000 volts. LONG-SCALE INSTRUMENT-Instrument is adjusted to 50 microamperes at 250 millivolts with separate internal housing for protection of mechanism during battery replacement.
LONG MIRROR SCALE- 5 inches long at top arc. Excellent readability. Black on white except A.C. markings which are red on white and ohms which are green on white.
WEIGHT-Approximately 3 pounds, complete with battery.
BATTERY-Self-contained. One 15V Mini-max Eveready No. 411 or equivalent, and one $11 / 2 \mathrm{~V}$ Eveready No. 935 or equivalent. LEADS-50 inches long. Test prods with removable alligator clips at one end. Banana plugs for connecting to tester jacks at other end. Catalog No. 625-NA Stock No. (894802)

MODEL 666-HH


A precision-manufactured marvel of compactness that provides a complete miniature laboratory for voltage, resistance and direct current analyses.

| Ranges |  |  |
| :--- | :--- | :--- |
| D.C. Volts | $0-10-50-250-1000-5000$ | at 1,000 ohms/Volt |
| A.C. Volts | $0-10-50-250-1000-5000$ | at 1,000 ohms/Volt |
| D.C. Milliamperes | $0-10-100-500$ | at 250 Millivolts |
| Ohms | $0-2,000-400,000$ | $(12-2400$ |
|  | General Description |  |
|  |  |  |
| MOL |  |  |

MOLDED, INSULATED CASE-Black Molded $31 / 6^{\prime \prime} \times 57 / 8^{\prime \prime} \times 2 \% / 16^{\prime \prime}$. PANEL-Black Molded with engraved white markings.
CONNECTORS-Three banana jacks at the top of the panel reduce possibility of connecting leads falling over scale or controls.
INSTRUMENT- $3^{\prime \prime}$ meter, integral with panel, adjusted to 400 microamperes and 250 millivolts.
SCALE- $29 / 32^{\prime \prime}$ long at top arc. Black on white except A.C. markings which are red on white.
WEIGHT- $11 / 2$ pounds complete with battery.
BATTERY-Self-contained plug-in. One $11 / 2$ volt Eveready No. 935 or equivalent.
LEADS-50 inches long. Test prods with removable alligator clips at one end. Banana plugs at the other end for connecting to tester jacks.

## Catalog No. 666-HH Stock No. (894801)

## MODEL 564 WESTON VOLT-OHMMETERS

## Type 3C

Has a useful selection of voltage
 and resistance ranges.

A self-contained $41 / 2$-volt battery provides the necessary potential for the ohmmeter ranges. Changes in battery potential are compensated for by short-circuiting the resistance pin jacks of any range and adjusting pointer to zero ohms by turning the battery adjustment knob.
Size, $433 / 64 \times 345 / 64 \times 29 / 16$ inches. Voltage ranges; $3 / 30 / 300 /$ 600 d.c., all 1000 ohms per volt. Resistance ranges; $1000 / 10,000 / 100$,$000 /$ and $1,000,000$ ohms, full scale.
Ranges are available from engraved pin jacks moulded internally with the panel. A toggle switch connects meter in circuit as a voltmeter or ohmmeter. Complete with pair of 4 -foot test leads. Approximate weight, $13 / 4$ pounds.

| Type | Stock No. | Model |
| :---: | :---: | :---: |
| 3C | (892087) | 564 |
| Leather Carrying Case |  | Stock No. (892086) |

## MODEL 689 WESTON OHMMETERS

Designed for the service man who relies upon resistance and continuity tests in checking circuits. Type IE scale is calibrated with $\alpha$ double range and resistance readings are available from 0.5000 and 0.50000 ohms; Type $1 F$ with ranges 10 and 1000 ohms.

A $11 / 2$-volt No. 2 unit-cell battery. mounted inside the case, makes it independent of an outside source of potential.

A magnetic shunt provides convenient adjustment to compensate for variation in battery voltage. This adjustment may be made before each series of tests, thus assuring accurate resistance readings.

Complete with battery and a long pair of test leads.

## $\begin{array}{cc}\text { Type } & \text { Stock No. } \\ 1 \mathrm{E} & \mathbf{( 8 9 2 0 8 4 )}\end{array}$ 1 F (892085)

## MODEL 4300 TELOHM



For testing and locating line, telephone and switchboard trouble, high resistance joints, shorts, grounds and opens; also open circuits on coils of all kinds, partially shorted coils, high resistance transmitters, cut-outs in cords, contacts, etc.

Equipped with Weston O-3 volt direct reading ohmmeter with 0-10,000 ohm scale and glass protector, 2 flashlight cells, switch, cords and test clips. Mounted in a solid walnut case, $13 / 4 \times 31 / 2 \times 6$ inches.

Weight, $11 / 4$ pounds.
Model 4300 Stock No. (892088)

## SIMPSON VOLT-OHMMETER Midgetester Model No. 355

Practical shirt-pocket volt-ohmmeter, the Midgetester measures only $23 / 4^{\prime \prime} \times 4^{1 / 2^{\prime \prime}} \times 1^{\prime \prime}$. Has a sensitivity of 10,000 ohms per volt on both AC and DC. The core movement is selfshielded permitting use near steel or other magnetic metals or fields without adverse effect.

Accuracy of this instrument is 3\% DC and $5 \% \mathrm{AC}$ of full scale voltages. Is also within $3 \%$ of arc from absolute value of resistance being measured. Range is $0-1200$ volts, AC or DC. DC resistances can be measured from
 0-10 megohms.

Handy ohms zero-adjust thumb wheel. All contacts are recessed slightly below the face of the instrument. Automatic circuit and range selection by inserting leads into desired contacts. A set of probe leads is provided.

Weight: 7 ounces.

| Catalog No. | Stock No. | Description |
| :---: | :---: | :--- |
| 355 | $(395768)$ | Midgetester |
| 6355 | $(895769)$ | Leather carrying case |

## SIMPSON VOLT-OHM-MILLIAMETER Model 260



An all-purpose tester which combines ruggedness with sensitivity. All connections are short and direct, reducing short circuits. Pin jacks are recessed. Letters and figures are molded into the bakelite panel and filled with durable white for greater legibility.
The extremely low current consumption assures dependable voltage readings. DC current readings may be taken from 2 microamperes up to 10 amperes. Resistance readings can be made all the way from $1 / 5$ ohm up to 20 megohms.

## Ranges

20,000 Ohms per volt DC, 1000 Ohms per volt AC Volts, AC and DC: $2-5 ; 10 ; 50 ; 250 ; 1,000 ; 5,000$. Output: $2-5 ; 10 ; 50 ; 250$; 1,000. Milliamperes, DC: 10; 100; 500. Amperes, DC: 10. Ohms: $0-2000$ ( 12 ohms center); 0-200,000 (1200 ohms center); 0.20 meg. ohms ( 120,000 ohms center). Size: $5^{1 / 14^{\prime \prime}} \times 7^{\prime \prime} \times 31 / 8^{\prime \prime}$. Shipping Wt. 5 lbs.

Model 260 Stock No. (894976)

## SIMPSON OHMMETER Model 372



Model 372 A complete self-contained instrument with batteries. Ohms adjuster compensates for variations in battery voltages. Wire wound and matched resistors are used throughout.

## Ranges

$0-500$ ( 5 ohms center); 0-5000 (50 ohms center); 0-50,000 ( 500 ohms center); $0-500,000$ ( 5,000 ohms center); 0.5 Megohms ( 50,000 ohms center); 0.50 Megohms ( 500,000 ohms center). Size $3^{\prime \prime} \times 57 / 8^{\prime \prime} \times 21 / 2^{\prime \prime}$. Ship. ping Wt. 3 lbs .

Stock No. (894977)

## MODEL AN DILLON DYNAMOMETERS



This dynamometer makes it possible to obtain correct tension on telephone leads and thus insure freedom from wind, sleet and snow failures.

When used with block and tackle, it registers in pounds the strain load placed on wire, messenger or guy strand during initial installation or in maintenance work. Prevents overstrain and the resultant breakdowns, and eliminates guesswork.
Withstands full shock recoil; and mechanism cannot be injured by overload. The main indicator hand is white, and the maximum indicator hand is red. Dial is protected by $1 / 4$-inch shatterproof safety glass, properly sealed to prevent the entry of dust or dirt.

Accuracy of 2 per cent plus or minus.

|  | Description |  | Stock No. |
| :---: | :---: | :---: | :---: |
| 0 to | 500 Pounds, | 5-Pound Divisions | (893409) |
| 0 to | 1000 Pounds, | 10-Pound Divisions | (893410) |
| 0 to | 2500 Pounds, | 50-Pound Divisions | (893411) |
| 0 to | 3500 Pounds, | 50-Pound Divisions | (893412) |
| 0 to | 5000 Pounds, | 50-Pound Divisions | (893413) |
| 0 to | 7500 Pounds, | 50-Pound Divisions | (893414) |
| 0 to | 10000 Pounds, | 100-Pound Divisions | (893415) |
| 0 to | 15000 Pounds, | 125-Pound Divisions | (893416) |

## L AND N WHEATSTONE FAULT LOCATION BRIDGE TEST SETS

No. 5430-A-Type U

A portable Wheatstone bridge especially adapted for locating faults in communication circuits.

Ratio dial has multiplying values of $1 / 1000$. $1 / 100,1 / 10,1 / 9,1 / 4,1 / 1$, $10 / 1$ and $100 / 1$ for resistance measurements and for Varley Loop tests; also settings of M1000, M100 and M10 for ratios in Murray Loop tests.


Rheostat has 4 decades, $10(1+10+100)+9 \times 1000$ ohms + infinity. Limit of error in ratio resistors $\pm 0.05 \%$; In rheostat arm: resistance change from zero settings of dials equals dial settings $\pm$ ( 0.1 per cent +0.01 ohm $)$. Includes pointer galvanometer of 1 -megohm sensitivity, 4.5 volt battery and keys for galvanometer and battery. Hilborn Loop test can be made, using internal galvanometer.

Furnished in metal case, $97 / 16^{\prime \prime} \times 71 / 2^{\prime \prime} \times 65 / 3^{\prime \prime}$ high. With removal lid, bumpers, plastic handle and lock.
Weight $83 / 4 \mathrm{lbs}$.

| Cat. No. | Stock No. | Description |
| :---: | :--- | :--- |
| $5430-A$ | $(892097)$ | Type U |
| 5431 | $(892098)$ | Leather Case |

No. 5300-Type S


For ordinary resistance testing and for locating faults in communication circuits.

Ratio dial has multiplying values of $0.001,0.01,0.1,1,10,100$ and 1000 for resistance measurements and for Varley Loop tests; also settings for M1000, M100 and M10 for ratios in Murray Loop tests. Rheostat has 4 decades $9(1+10+100+1000)$ ohms. Limit of error in ratio resistors $\pm$ $0.05 \%$; In rheostat arm: resistance change from zero settings of dials equals dial settings $\pm$ ( 0.1 per cent +0.01 ohm ). Includes pointer galvanometer of 1-megohm sensitivity, 4.5 volt battery and keys for galvanometer and battery.

Furnished in oak case, $87 / 8 \times 73 / 8 \times 55 / 8$ inches, with hinged lid and carrying strap.
Weight, 8 pounds.

| Cat. No. | Stock No. | Description |
| :---: | :--- | :--- |
| 5300 | $(892099)$ | Type S |
| 5431 | $(892098)$ | Leather Case |



## NO. 695 SHALLCROSS CURRENT FLOW

 TEST SETS

Provides $\alpha$ convenient and rapid means for testing the flow of current through relays and other apparatus commonly found in telephone and telegraph equipment.

Range: Accuracy $\pm 2 \%$ of full scale value Current: D.C. 0-15-75-150 Milliamps
Voltage: D.C. 0-7.5-15-75 Volts
Variable resistors for setting of relay current $3 \times 5,000$ ohms continuously adjustable.

Catalog No. $695 \quad$ Stock No. (892096)

## NO. 614-A SHALLCROSS TELEPHONE SERVICE METERS

Designed to provide facilities for the telephone man in making the wide range of electrical measurements that are encountered in the telephone field.

Particularly useful for tests of subscriber set output, dry cells, transmitter current, receiver resistance, capacity of condensers, ringer impedance, magneto, output, and magneto impedance; central office commercial supply voltage, ringing machine voltage, battery charging current, etc.

Ranges: Accuracy for DC. $\pm 2 \%$; for A.C. $\pm 5 \%$
Voltage: D.C. 0-6-30-150-300 Volts
A.C. $0-6-30-150-300$ Volts

Current: D.C. 0-15-150-300 Milliamps. 0-6 Amps
Resistance: D.C. $0-500-50,000$ Ohms
Impedance: A.C. $25-3,000,000 \mathrm{Ohms}$
Inductance: A.C. 1-100-1,000-10,000 Hen.
Capacitance: A.C. $0.001-0.1-1-10 \mathrm{Mfd}$.
Power Level: A.C. $-6,0,+9 \mathrm{db}$.
Artificial Load 600 Ohms for 6-30 V, A.C.
Catalog No. 614-A Stock No. (894816)

## SHALLCROSS CABLE FAULT LOCATION BRIDGE

A portable instrument having a variable ratio arm arranged for the Murray and Varley Loop tests for locating faults, grounds, and crosses.

Steps of multiplier switch for use as Wheatstone Bridge: x0.001-x0.01-x0.1-xl-x10-x100-x1,000 Ohms
and for Murray test:
x1-x10-x100-x1,000 M
Rheostat arm: 11,110 ohms variable in steps of 1 ohm
Range: 0.1-11,110,000 Ohms
Provision made for using bridge in Varley \& Murray tests Catalog No. 629 Stock No. (894817)

## Revised 1-1-57

## SHALLCROSS TRANSMISSION TEST EQUIPMENT

Developed to provide a simple, economical and modern method of measuring transmission losses.
No. 691-A


Has 1000 cycle generator. Total power, 18 db at 600 ohm impedance.

In metal case.
Catalog No. 691-A Stock No. (892092)
No. 355


Attenuation H pad. Total of 35 decibels, in 5 decibel steps, 600 ohms impedance. In metal case. Catalog No. 355 Stock No. (892093)

No. 690


Decibel meter calibrated minus ( - ) 10 decibels, to plus $(+) 6$ decibels. Zero level, 1 milliwatt at 600 ohms impedance. In oak carrying case.

Catalog No. 690 Stock No. (892094)

## NO. 692 SHALLCROSS TRANSMISSION TEST SETS



In this instrument are combined:

1. Tone Generator, 1,000 cycles, Part No.691-A 1,000 cycles/ second. Vacuum tube oscillator operating from 110-115120 V, A.C. or D.C. Output variable from 0-18 db.
2. Transtester Part No. 690, Decibel Meter range $-10,0$, $+6 \mathrm{db}, 600$ ohms.
3. Attenuation pads, Part No. 355, variable from 0 to 35 db in 5 db steps.

Catalog No. 692
Stock No. (892091)

## MATTHEWS WOODPECKER TELEFAULTS

## Type $L$

This instrument will locate shorts of all kinds-damp spots, crosses, grounds, split pairs, etc. Compact, convenient, and
 simple to operate. Does not noise up other pairs, because of the inductive field created.

With the instrument connected, the exploring coil is moved along the cable until the point is reached where the woodpecker tapping tone cannot be heard in the earphone, indicating the exact location of fault.

The woodpecker tapping tone is very distinct and cannot be confused with other inductive noises.

Operates on one dry cell. Maximum voltage, under 5 volts.

## Description

Wt. Lb. Each
Type L Woodpecker Telefault, Complete................... . . . 15
Extra Exploring Coil, Only . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2
Extra Receiver Only, with Cord . . . . . . . . . . . . . . . . . . . . . . . . 2

Stock No. (892075)

## NORTHEAST TRANSMISSION TEST SETS



## MODEL O

Transmission Test Set operates at 1000 cps . It is provided with internal switching for either "Straightaway" or "Loop-insertion" loss measurements. A "Calibrate-0" switch position disconnects the oscillator from the terminals and permits adjustment of the oscillator level to give 0 dbm in 600 ohms. An additional "Calibrate" position checks the internal impedance of the oscillator. Blocking condensers permit use of the unit on circuits carrying DC voltages; provisions for "holding" subscriber dial circuits during measurements are incorporated. An additional meter range is incorporated to detect AC voltages, which might cause meter burnout, on lines to be tested. It is equipped with a BufferAmplifier to insure greater stability of the output impedance. This also results in an ouiput level which can be adjusted continuously. Dimensions, $7^{\prime \prime} \times 5^{\prime \prime} \times 4^{\prime \prime}$; weight $21 / 2 \mathrm{lbs}$. A removable metal cover or a felt-lined leather carrying case can be provided at extra cost.

Model O Stock No. (897169)

## MODEL IA and MODEL IB



This transistorized, self-powered, lightweight, multi-frequency Transmission Test Set is provided with internal switching permitting rapid measurement of "straightaway" and "loop insertion" losses and of levels on a "bridging" or "terminated" basis. It also contains the Volt-Ohm-Milliammeter scales commonly needed in telephone systems. Model 1A is for use on 600 ohm circuits, Model 1B for use on 900 ohm circuits.

## Oscillator

Delivers low distortion output at 0 dbm at frequencies of 250 -$500-1000-1500-2000$ and 2500 cps . A "Calibrate-0" switch position disconnects the oscillator from the terminals and permits leveladjustment to provide 0 dbm in 600 ohms (for Model 1A; into 900 ohms for Model 1B). An additional "Calibrate" position checks the oscillator output impedance. The output attenuator provides steps of $0-5 \cdot 10-15 \mathrm{db}$ between oscillator and output terminals. Self-contained blocking condensers permit use on circuits carrying DC voltages.

## Meter

Measures power levels from -12 dbm to +18 dbm . It can be used in 600 ohm termination ( 900 ohm for Model 1B), or "bridging" at an input impedance in excess of 5000 ohms. As a Volt-Ohm-Milliammeter, the following ranges are provided: AC-1.1V$11 \mathrm{~V}-110 \mathrm{~V}$; DC-110V-440V; Ohms: $0-1000$ ohms and $0-40,000$ ohms. For AC and level measurements, built-in blocking condensers permit measurements on circuits carrying DC voltages.

## Mechanical

The unit is housed in a box $7^{\prime \prime} \times 11^{\prime \prime} \times 3^{\prime \prime}$ and weighs $51 / 2 \mathrm{lbs}$. A removable hinged cover or a felt-lined leather carrying case can be provided at extra cost. Rated battery life is 400 hours.

| Model 1A | Stock No. (897170) |
| :--- | :--- |
| Model 1B | Stock No. (897171) |



The Model-3 Transmission Test Set provides transmission measurements over a wide range of audio frequencies and levels. It uses transistors in both the oscillator and the level-measuring amplifier circuits and is equipped with internal switching permitting rapid measurements of "straightaway" and "loop-insertion" losses. In addition it also contains the volt-ohmmeter scales commonly needed in telephone systems.

## Oscillator

A level-stabilized-oscillator buffer-amplifier circuit is used; it provides 24 frequencies ranging from 75 cps to 12 kc . The output level is continuously adjustable up to +5 dbm and the output impedance is 600 ohms. Send attenuators for $5,10,15$, and 20 db are provided. In addition one "Calibrate" position disconnects the oscillator from the terminals and permits setting of the 0 dbm reference level in a self-contained 600 ohm resistor; an additional "Calibrate" position is used to normalize the amplifier gain prior to usage. The unit can be used on circuits carrying up to 50 volts DC; a center tap on the "Send" circuit is brought out to a terminal.

## Meter

A precision meter can be connected to the "send" and "receive" terminals and to the amplifier output. In the "TR send" position the meter monitors the transmitted level when switches to "TR receive"; the oscillator is disconnected, and the meter reads received level. In the "RM amplifier" position, the amplifier is connected to the RM terminals and the meter to the RM output.

The meter also provides the following volt-ohm-milliammeter ranges: $0-1.10 \mathrm{~V}$ AC, $0-11.0 \mathrm{~V}$ AC, $0-110 \mathrm{~V}$ AC, $0-440 \mathrm{~V}$ AC/DC, $0-110 \mathrm{~V}$ DC, $0-110 \mathrm{~mA}$ DC, $0-1000$ ohms, $0-4000$ ohms.

## Amplifier

A 2-stage transistor amplifier permits reading of low levels on either a 600 ohm or 10,000 ohm basis. The following amplifier ranges can be selected by the amplifier switch and are available at either 600 or 10,000 ohms impedance: $+10,+5,0,-5$, $-10,-15,-20,-25$. In addition level ranges of -40 and -50 are available at an impedance of 600 ohms. A "Calibrate" position is provided to permit normalizing of the amplifier gain.

## Size and Weight

Dimensions are $14^{\prime \prime} \times 10^{\prime \prime} \times 61 / 2^{\prime \prime}$; its weight is 15 lbs . A protective cover is provided. Normal battery life of the unit is 125 hours of operation.

> Model-3 Stock No. (897172)

## GENERAL INDEX

A complete alphabetical index with cross references for all the products shown in this section or any of the other section will be found in the center of this catalog.

## NORTHEAST TRANSMISSION TEST SETS

## NORTHEAST CARRIER TEST SET

Model 1037-A and 1037-B
The Model 1037 Test Sets were developed to provide $\alpha$ high-precision instrument operating from selfcontained batteries. The set contains a continuously variable carrier oscillator, an audio oscillator having 6 fixed frequencies in the audio band, and switches to connect either of these to the "send" jack through balanced H attenuators, adjustable to 40 db in 1 db steps. The same switches also provide audio-modulated and dial-interrupted carrier outputs through these attenuators. Model 1037-A covers 10 kc to 100 kc in 2 ranges; Model 1037-B provides overlapping ranges from 100 cps to 100 kc . Calibrate keys and level adjustments are provided for both oscillators.
The set also contains an amplifier-detector permitting direct reading of levels from +20 to -40 dbm . A switch permits reading of levels on a bridging or terminated basis as well as insertion of a demodulator; in the latter case the audio modulation of a modulated carrier is read on the meter. A high-pass filter to suppress power frequency components can be switched in ahead of the amplifier; an additional amplifier stage is used for feeding the earphone monitor jacks. Dimensions are $17^{\prime \prime} \times 11^{\prime \prime}$ x $15^{\prime \prime}$. Weight approximately 40 lbs . Rated battery life is in excess of 100 hours.

These items are made on special order.

| Cat. No. | Stock No. |
| :---: | :---: |
| Model 1037-A | $(897178)$ |
| Model 1037-B | $(897178)$ |

## NORTHEAST MILLIWATT POWER METER

Model 1041-A


Model 1041-A provides precise measurement of the 1 milliwatt "reference" power level. It uses a special thermocouple which can be calibrated by self-contained circuits and $\alpha$ galvanometer referring it to the voltage of $\alpha$ Weston standard cell. Level variations of .01 db can be readily observed. The input impedance is 75 ohms; the frequency range is from 0 cycles to well over 10 MC .

Model 1041-A is mounted on a standard $19^{\prime \prime}$ relay rack panel 7" high.

## Model 1041-B Adapter

Model 1041-B contains an adapter to use the instrument at +10 dbm in a balanced 600 ohms circuit, as well as split-pads and protective attenuators for both 75 ohm and 600 ohm .

Model 1041-B is mounted on a $514^{\prime \prime}$ high panel.
These items are made on special order.

| Cat. No. | Stock No. |
| :---: | :---: |
| Model 1041-A | $(897176)$ |
| Model 1041-B | $(897177)$ |

NORTHEAST ARTIFICIAL LINES Model 1060-A and Model 1060-B


These units can be switched and patched to simulate proposed transmission circuits, thus permitting immediate measurement of transmission for different conditions of loading, matching, amplification, etc. They were developed to reduce engineering time required for computing such circuits.

Both models contain 6 separate sections. A single rotary switch in each individual section adjusts the section to represent any of the following types of cable: AWG's-13-16-19-22-24-26. Input and output of all sections can be picked up and isolated from other sections by plugging into "terminating" jacks; "bridging" jacks are also provided. Model 1060-A has 6 sections of $3000^{\prime}$ each. Each section contains 6 series-resistor and 2 parallelcondenser branches; the series branches contain inductance elements corresponding to the unloaded cable parameters. The individual values of these branches are varied according to the switch position. Model 1060-B has 4 sections of $1000^{\prime}$ each containing 6 series-resistor and 2 parallel-condenser branches, and 2 sections of $500^{\prime}$; each containing one parallel-condenser and 4 series-resistor branches. These values are changed by a rotary switch according to the wire gauge selected.
The standard unit provides a choice of 6 cable gauges. Units simulating fewer or different gauges or units providing special combinations of $3000^{\prime}, 1000^{\prime}$ or $500^{\prime}$ sections can be provided on special order. Resistor tolerances are better than $5 \%$; units using $1 \%$ precision resistors can be supplied.

The unit is mounted in a standard $19^{\prime \prime}$ relay rack panel; panel height is $51 / 4^{\prime \prime}$.

Model 1060-A
Stock No. (897174)
Model 1060-B
Stock No. (897175)

## NORTHEAST BLEEPER

## Model I



This transistorized unit transmits short bursts or "bleeps" of audio tone, markedly different from all tone-dialing and other signals used in telephone systems. To trace circuits or locate faults in cables, main frames, central office equipment, etc., this unit is connected to the circuit. The circuit carrying the bleeper tone is approximately IV peak-to-peak in a 600 ohm load.

Dimensions: $41 / 4^{\prime \prime} \times 21 / 4^{\prime \prime} \times 11 / 2^{\prime \prime}$. Weight, $1 / 2 \mathrm{lb}$. Battery life in excess of 200 hours.

```
Model I
```

Stock No. (897168)

## NORTHEAST TACHOLITE



The Model 1 Tacholite is a variable frequency STROBE-light used to study objects in motion such as telephone dials, stepping switches, rotating machinery, etc., and to obtain their speed by
"stopping" the strobe-light picture observed under the strobelight. The unit covers $\alpha$ frequency range of 10 to 100 /pulses per second. Other frequency ranges, for instance $8-20 \mathrm{cps}$ for dial speed adjustment, or multirange combinations can be provided on special order. To obtain high-precision frequency measurements of objects in motion, pulses, of proper shape and amplitude to drive an electronic counter, are provided at a set of output terminals.

Stock No. (897179)

## NORTHEAST REFERENCE GENERATOR

## Model 1



This unit provides $\alpha$ source of standardized audio voltage having a 600 ohm internal impedance, adjusted to provide $\alpha$ level of $0-\mathrm{dbm}$ in $\alpha 600$ ohm load resistance. The unit is fully transistorized. A level stabilized master-oscillator buffer-amplifier circuit is used. Normally the output voltage appears on terminals at the rear; a switch is provided to disconnect the oscillator circuit from these terminals and transfer it to a built-in 600 ohm load resistance for calibration purposes. In this switch position the oscillator output is also available on a panel-jack. A level meter, permanently connected to the oscillator output, is used to normalize the output level.

The oscillator frequency can be switched to 300,1000 and 3000 cps . Other or additional frequencies or units for 900 ohm circuits can be provided on special order. The output terminals can be connected to toll-board jacks; it can also be connected to a special number in a dial exchange. In the latter case it is possible to make transmission measurements from distant locations by dialing this number.

The unit derives its power directly from the 48 Volt station battery; its current drain is 160 MA . One, two or three of these units may be connected in series; the necessary dropping resistors are built-in and selected by connecting to the proper supply terminals. The unit is mounted in a standard $19^{\prime \prime}$ relay rack panel and is $31 / 2^{\prime \prime}$ high.

TCI Library www.telephonecollectors.info

## STROMBERG-CARLSON

## Miscellaneous



Signals, fire extinguishers, Calculagraphs, lamps, connectors, filing cabinets, tape, tacks, toggle bolts and screws - these and other necessities are grouped in this section.

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# BENJAMIN FACTORY NON-WEATHERPROOF HOWLERS 



Single Bell Projector


Double Bell Projector

Suitable for use in all locations where signals of weatherproof construction are not required.

The signal housing is of heavy gauge pressed steel, while projectors and grilles are durably constructed. Clamping band is of electroplated copper; rubber gasket seals the joint between the housing and horn assembly.

Operates on either series or multiple circuits. A.C. howler has no contacts; vibrations follow cycles of a.c. Pitch is double frequency of current used.

Housing has one $1 / 2$-inch size conduit knockout at the back and one at the side and two sets of mounting holes, spaced on $23 / 4$ and $31 / 2$-inch centers. Double projector type is used with No. 8731 adapter plate.

Baked light gray enamel finish; red enamel finish, when specified.

|  | With $71 / 2$-inch Bell TYpe |  | With Double Bell TYpe |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Projector |  |  |  |  |
| Projector |  |  |  |  |$\quad$ Stock No. $\quad$ Cat. No. $\quad$ Stock No.


|  | Projector-Less Type <br> Grille Front |  |
| :--- | :--- | :--- |
| +12 | $8741-12 V$ A.C. | (892135) |
| +24 | $8741-24 V$ A.C. | $(892136)$ |
| 110 | $8741-110$ V A.C. | $(892137)$ |
| 220 | $8741-220 V$ | A.C. |

t Unsuitable for use with low voltage signals. Signaling transformers are required.

25 -cycle, in all voltages, supplied when specified at 60 -cycle prices.

## BENJAMIN HEAVY-DUTY WEATHERPROOF HOWLERS



Single Bell Weatherproof Projector


Ideal for effective calling or warning in industrial and commercial locations. Can be used on circuits containing practically any type of signals without affecting operation.

The threaded ring separable construction and plug-in type of wiring connection, assures quick, simple installation. Operates on either series or multiple circuits.

Supplied with a $71 / 2$-inch seamless bell type projector, a 14 . inch seamed conical projector, or a double bell type projector, $191 / 2$ inches over-all. Identical outlet box housings and union attaching rings are supplied on all signals, assuring complete interchangeability of projectors.

The outlet box housing is a heavy metal casting to which the projector assembly is attached by the cast aluminum threaded union ring. The joint between these two assemblies is sealed by a rubber gasket.
A.C. howler has no contact; vibrations follow cycles of a.c.; pitch is double frequency of current used. Operates on 60 cycles, $12,24,110$ or 220 volts; 25 cycles can be furnished when specified.
Baked light gray enamel finish; red enamel finish when specified.

When ordering, specify voltage and frequency.

|  | With $71 / 2$-inch Bell Type |  | With Double Bell Type |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Projector | Projector |  |  |  |
| Volts | Cat No. | Stock No. | Cat. No. | Stock No. |
| *12 | $8546-12 \mathrm{~V}$ | $(892111)$ | $8590-12 \mathrm{~V}$ | $(892119)$ |
| *24 | $8546-24 \mathrm{~V}$ | $(892112)$ | $8590-24 \mathrm{~V}$ | $(892120)$ |
| 110 | $8546-110 \mathrm{~V}$ | $(892113)$ | $8590-110 \mathrm{~V}$ | $(892121)$ |
| 220 | $8546-220 \mathrm{~V}$ | $(892114)$ | $8590-220 \mathrm{~V}$ | $(892122)$ |

* The low capacity of bell ringing transformers makes howler unsuitable for use with low voltage signals. Signaling transformers are required.

25 cycle, in all voltages, supplied when specified at 60 -cycle prices.

# BENJAMIN WEATHERPROOF FIRE ALARM HOWLERS 

## Listed by Underwriters' Laboratories



For use on fire alarm systems operating under stringent regulations.
The threaded ring separable construction, and plug-in type of wiring connection, assures quick, simple installation. A.C. howler has no contact; vibrations follow cycles of a.c. Pitch is double frequency of current used. The diaphragm is sealed by $\alpha$ gasket; diameter, $43 / 8$ inches.

Operates on 60 cycles, 110 or 220 volts; 25 cycles can be furnished, when specified.
The horn assembly consists of a $71 / 2$-inch seamless bell type steel projector permanently attached to a pressed steel cover on which is mounted the horn mechanism. Baked red enamel finish.
When ordering, specify voltage and frequency.

| Volts | Cat. No. | Stock No. | Ship Wt. Lb. |
| :--- | :---: | ---: | :---: |
| 110 | $8566-110$ V A.C. | $(892143)$ | $63 / 4$ |
| 220 | $8566-220 V ~ A . C$. | $(892144)$ | $63 / 4$ |

60 -cycle standard. 25 -cycle in all voltages, supplied at 60 -cycle prices.


BENJAMIN MINE TYPE HOWLERS Listed by Underwriters' Laboratories

This sturdily constructed howler is effectively sealed against dust and moisture.

Operates on either series or multiple circuits. A.C. howler has no contacts; vibrations follow cycles of a.c. Pitch is double frequency of current used. Diaphragm is $43 / 8$ inches in diameter.
Separable type construction, with the plug-in type of wiring connection. Sealed against moisture with 8 -inch insulated wire leads which enter the housing through $\alpha$ water tight bushing.
The detachable horn assembly consists of a $71 / 2$-inch, drawn steel bell projector welded to a gasketed steel cover on which is mounted the signal mechanism. This assembly is joined to the housing by a metal clamping band.

Baked battleship gray enamel finish.
When ordering, specify voltage and frequency.

| Volts | Cat No. | Stock No. | Ship Wt. Lb. |
| :--- | :---: | :---: | :---: |
| $* 12$ | $8652-12 V$ A.C. | $(892139)$ | 4 |
| $* 24$ | $8652-24 V$ A.C. | $(892140)$ | 4 |
| 110 | $8652-110$ V A.C. | $(892141)$ | 4 |
| 220 | $8652-220 V$ A.C. | $(892142)$ | 4 |

*Require signal transformers, as bell ringing type does not have sufficient capacity.
60 -cycle standard. 25 -cycle in all voltages supplied at 60 -cycle prices.

## BENJAMIN TELECODE RELAYS

Listed by Underwriters' Laboratories
For telephone ringing extension and closed circuit alarm systems in factories, mines, quarries, foundries, machine shops and similar places where great volume of noise makes it difficult to hear ordinary telephone bell.

Supplied with contacts arranged for open circuits, contacts open until coil is energized; with contacts arranged for closed circuits, contacts closed until the relay is actuated by current flowing through the coils; and with locking armatures, special winding on coils locks the contacts when the relay is operated. giving continuous operation to signals until signal circuit is broken by a release switch. Contacts are of tungsten steel; coils are form wound with moisture-proof coverings.

Rated .8 ampere at 110 volts, sufficient to operate 5 vibrating type howlers. Standard coil windings are 1000 ohms for operation on 90 volts, 18 to 30 cycles.

Light gray enamel finish.
When ordering, specify resistance of telephone bell ringer coils, or voltage and frequency of ringing circuit.

Relays with condensers should be specified for use with common battery telephone lines.


## With Explosion Proof Box

The box has a cast iron base. threaded to take a cast red brass cover. The joint between the cover and base of the box is close fitting deep flanged and of sufficient depth to prevent the escape of flames to the surrounding atmosphere in the event of internal explosion.
Base has 2 mounting lugs and 2 hubs equipped with conduit stops.
The main section is $51 / 2$ inches in diameter and tapped $1 / 2$-inch straight through standard; tapped $3 / 4$-inch, when specified.

| Less Condenser |  |  |  |
| :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Description | Ship. Wt. Lb. |
| 8319-P | (892153) | Open Circuit | 101/2 |
| 8319-C | (892154) | Closed Circuit | 101/2 |
| 8319-L | (892155) | Locking Armature | $101 / 2$ |
| *With Condenser |  |  |  |
| 8320-P | (892156) | Open Circuit | $111 / 4$ |
| 8320-L | (892157) | Locking Armature | $111 / 4$ |

For special resistance windings add $\$ .65$ per Relay.
*Condenser rated 2 mf .

## BENJAMIN TELECODE RELAYS (Cont.)

## With Pressed Steel Box

For general use indoors.
The box is approved steel construction with $\alpha$ hinged cover. $6 \times 6 \times 4$ inches in size. With $1 / 2$-inch knockouts on all 4 sides.

| Less Condenser |  |  |  |
| :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Description | Ship. Wt. Lb. |
| 8315-P | (892148) | Open Circuit | $51 / 4$ |
| 8315-C | (892149) | Closed Circuit | $51 / 4$ |
| 8315-L | (892150) | Locking Armature | $51 / 4$ |
| *With Condenser |  |  |  |
| 8316-P | (892151) | Open Circuit | 6 |
| 8316-L | (892152) | Locking Armature | 6 |
| Special resistance windings on special order. |  |  |  |
| *Condenser rated 1 mf . |  |  |  |

## With Water Tight Box

Same type as the explosion proof box, but has cast aluminum cover with a rubber gasket sealing the deep threaded joint between the base and cover.

| Less Condenser |  |  |  |
| :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Description | Ship. Wt. Lb. |
| 8322-P | (892158) | Open Circuit | $71 / 2$ |
| 8322-C | (892159) | Closed Circuit | $71 / 2$ |
| 8322-L | (892160) | Locking Armature | $71 / 2$ |
| *With Condenser |  |  |  |
| 8323-P | (892161) | Open Circuit | $81 / 4$ |
| 8323-L | (892162) | Locking Armature | 81/4 |
| Special resistance windings on special order. |  |  |  |
| *Conden | ed 1 mf . |  |  |

FARADAY MARLO BELLS AND BUZZERS DOUBLE MAGNET, ADJUSTABLE


Excellent small signals to do big jobs. High quality at moderate cost. Has pivoted armature and double lock spring tension adjustment. Mechanism fully insulated from frame. Built for hard service. Black case and gong. Operate on $6-8$ volt A.C. 60 cycle or $3-6$ volt D.C.

Special coil voltages and resistances can be furnished.

| Catalog No. | Stock No. | TYpe | Standard <br> Number | Package <br> Ship. Wt. |
| :--- | :---: | :--- | :---: | :---: | :---: |
| $\mathbf{5 7 1}$ | $(894806)$ | $21 / 2^{\prime \prime}$ Bell | 10 | $63 / 4 \mathrm{lbs}$. |
| $\mathbf{5 7 2}$ | $(894807)$ | $3^{\prime \prime}$ Bell | 10 | $73 / 4 \mathrm{lbs}$. |
| $\mathbf{5 7 3}$ | $(894808)$ | $4^{\prime \prime}$ Bell | 10 | $93 / 4 \mathrm{lbs}$. |
| $\mathbf{5 7 0}$ | $(894809)$ | Buzzer | 10 | 5 lbs. |

## LOUD RINGING BELLS



A rigidly made bell, designed for outdoor and indoor service. Stamped steel case, heavily enameled; and 6-inch gongs are pressed steel, heavily galvanized.
Ringer coils are treated with weatherproof insulating varnish.

In ordering specify resistance required. Standard is less condenser. For use on common battery lines condenser should be specified.

Gongs of $6^{\prime \prime}$ pressed steel.
Illustrated with cover removed.

| Cat. No. | Stock No. | Description |
| :--- | :--- | :---: |
| 53-A | $(896071)$ | 1000 ohms less condenser |
| 53-C | $(896072)$ | 1600 ohms less condenser |
| 53-F | $(896073)$ | 2500 ohms less condenser |
| 53-A | $(896074)$ | 1000 ohms with condenser |
| 53-C | $(896075)$ | 1600 ohms with condenser |
| 53-F | $(896076)$ | 2500 ohms with condenser |

## 6" LOUD RINGING BELLS Tuned Frequencies



These bells are available in 1000,1600 , and 2500 ohm impedances. These are tuned to harmonic, synchromonic and decimonic frequencies which covers the range of $16,162 / 3,25$, $30,33 \frac{1}{3}, 40,42,50,54,60$, 66 and $662 / 3$ cycles. The heavy duty ringer movement provides an exceptionally loud, vibrant ring on the 6 -inch, deep skirted, specially tempered gongs. When ordering, specify frequencies and impedances desired.

Catalog No. 198 Stock No. (897326)

## OASIS DEHUMIDIFIER

Oasis Air Dryer provides safe, sure protection from costly dampness. Keeps moisture under control in equipment rooms.

Size is $13^{\prime \prime}$ wide, $16^{\prime \prime}$ high and $19^{\prime \prime}$ long. Its weight is 55 lbs . This air dryer will remove three gallons of water from air in twenty-four hours. Size of average space serviced is 10,000 cubic ft . Catalog No. J-20-B
 Stock No. (895161)

## MINNEAPOLIS-HONEYWELL H-44A DEHUMIDIFIER CONTROL



This dehumidifier control is specially designed for automatic operation of portable dehumidifiers. It eliminates the inconvenience and guesswork of manual dehumidifier operation. The combination receptacle-plug of the H-44A inserts in any standard 115 volt outlet and receives the dehumidifier plug. Finish: Silver bronze. Differential: Non-adjustable, $5 \%$ relative humidity at midscale. Electrical rating: 2.6 amperes full load at 115 volts A.C. Cat. No. Stock No. Range Dimensions Weight H-44A (897237) 20 to $80 \%$ R.H. $47 / 8^{\prime \prime} \mathrm{H} \times 21 / 2^{\prime \prime} \mathrm{w} \quad 1.5 \mathrm{lbs}$. x $11 / 2^{\prime \prime} \mathrm{d}$.


Ideal for unattended and small exchanges, Armco steel buildings are economical, safe and long lasting. These buildings are designed on the basis of a 16 -inch modular unit that affords a wide range of sizes.

Two types of buildings are offered - shed roofed and gable roofed buildings. Standard non-ventilated, horizontal-pivoted or commercial projected type windows are supplied as desired. Single swing, double swing or sliding doors can be placed at almost any location.

Additional accessories such as foundations, steps, rails are to be supplied by the purchaser.

To order these buildings, contact your nearest StrombergCarlson representative.

## FIRE EXTINGUISHERS NO. CIIP 1-PINT STORED PRESSURE

Kills gasoline, oil, grease fires. Safe on electrical fires. Will not damage furnishings. Only two basic pieces - top and shell. The shell is metal and the top is sturdy plastic with brass valve assembly and nozzle molded in. Push button is protected by metal clip to prevent accidental operation. Comes filled, complete with attractive wall bracket.

Catalog No. C11P Stock No. (895961)


## PYRENE C-O-TWO PRESSURIZED DRY CHEMICAL TYPE



Now available in either 5 or 10 pound size. To operate simply pull out locking pin and squeeze. The discharge nozzle has a special dry chemical diffuser built into the outlet which renders maximum range and highly efficient fire extinguishing application of dry chemical.

| Cat. No. | Stock No. | Size |
| :--- | ---: | ---: |
| PDC-5P | $\mathbf{( 8 9 7 2 7 2 )}$ | 5 lb. |
| PDC-10P | $\mathbf{( 8 9 7 2 7 3 )}$ | 10 lb. |

## PYRENE FIRE EXTINGUISHERS



Safe for use on electrical fires of all kinds as the liquid is non-conductive and will not injure electrical equipment.
The contents will not freeze at $50^{\circ}$ below zero. Needs no recharging until used.
The 1 and $11 / 2$-quart sizes are labeled by the Underwriters' Laboratories.
Made of brass and equipped with bracket.

NO. C-21
Capacity, 1 quart.
Packed 6 in a carton.
Shipping weight per carton, 45 pounds.
Catalog No. C-21
Stock No. (893509)

## PYRENE FIRE EXTINGUISHER LIQUID

Anti-freezing, non-corroding, and non-conducting.

| Cat. No. | Stock No. | Size Can | No. in | Ship. <br> Carton |
| :--- | :---: | :---: | :---: | ---: |
| Wt. Lb. |  |  |  |  |

## STOCK FORM TOLL TICKETS

There are many forms which can be supplied upon request if sufficient quantities are ordered.
Among these are:
"Out" Tickets, "In" Tickets, "Sent" Tickets, "Through" Tickets and also Subscribers Bills, Toll Bills, Rental Receipts, Daily Work Report Blanks, Stock Record Blanks, Voucher Blanks, Pay Roll Blanks, Voucher Checks, Orders on Treasurer, Letterheads and Envelopes, Monthly Check Report Blanks, Bank Checks, Subscribers' Ledgers, General Ledgers, Cash Journals, Voucher Records, Lease and Rental Records, Cash Books, Toll Journals.


## NEOPRENE LATEX CLOTHING

Used by public utility and industrial workers for any job requiring protection against water, acid, grease or paint. Unusually light in weight (approximately half the weight of the old-style rubber garments). No seams to open, as all garments are first sewn and then hand brushed inside and out with Neoprene. These garments will not become tacky in warm climates nor extremely stiff in cold temperatures. All patterns are cut extra full to allow complete freedom for the wearer.

| Marked Sizes: | 00 | 0 | 1 | 2 | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Chest for Jackets: | : $46^{\prime \prime}-48^{\prime \prime}$ | 44" | 42" | $38^{\prime \prime}-40^{\prime \prime}$ | $36^{\prime \prime}$ |
| Waist for Pants: | $46^{\prime \prime}-48^{\prime \prime}$ | $44^{\prime \prime}$ | 42" | $38^{\prime \prime}-40^{\prime \prime}$ | $36^{\prime \prime}$ |
| Cat. No. St | Stock No. |  |  | cription |  |
| 534-L 18 | (894865) | Neo | ene | nemen's | cket |
| 530-L 18 | (894866) | Neop | ene | nemen's | ts |
| 661 (8) | (894867) | Bun | Rubb | Lineme | Hat |
| G-E HAND | Y ELECTRI MODEL N |  | $\begin{aligned} & \text { ANEF } \\ & -1 \end{aligned}$ | AND P |  |



G-E Telephone Switchboard Cleaners are specially designed "nonconductors," and are used by telephone and radio station engineers for cleaning switchboards and other difficult-to-clean electric equipment. Includes extension hose, shoulder strap, fiber shield, and various brushes.

Heavy-duty 1-hp blower. Universal-type, ball bearing motor, AC/DC. Maximum vacuum 40/5" (water gage). Volume, 220 CFH. Weight, 16 lb .
Catalog No. P-1 50
Stock No. (895690)

## LYON METAL TELEPHONE EQUIPMENT CABINETS



## No. 5401 7-Compartment Locker

This all steel ventilated locker is made of heavy gauge metal, arc welded for extra sturdiness. It accommodates the personal effects and wraps of seven persons in a minimum of floor space. Small compartments for hand bags and small personal packages each have an individual flat key lock. The key for each separate compartment also fits the lock on the large coat locker but no other compartment in the section, thus assuring privacy with $\alpha$ minimum of effort. Number plates are provided for the seven individual compartments (specify numbering on order).

The large compartment takes seven full-length overcoats; the floor has small perforated vents, and with the double set of louvres on the door permits circulation of air for drying out wet coats. This compartment has a built-in coat hanger rod rather than hooks. Doors have three-point locking, with recessed hinge pins which cannot be forced out.

Overall Size: $36^{\prime \prime}$ wide, $20^{\prime \prime}$ deep, $78^{\prime \prime}$ high.
Finished in Lyon Green baked-on enamel.
Shipped set up as illustrated.
Catalog No. 5401 7-Compartment Locker Stock No. (894992)

There are many other Lyon Steel Cabinets and Adjustable Shelves which have application in telephone offices. Let your Stromberg-Carlson representative advise with you on a suitable installation for your particular needs.

## LYON METAL TELEPHONE EQUIPMENT CABINETS (Contd.)

## WIRE CHIEF CABINETS

Wire Chief's Cabinets are made of heavy gauge metal with corners rounded off; the frame is arc welded to insure rigidity and sturdiness. Flat extension under feet permits bolting down if desired. Feet brackets are adjustable in height to offset any unevenness of floor. Shelves are removable, and may be adjusted on $11 / 2^{\prime \prime}$ centers with simple studs and clips. No tools required for changing shelf heights. Dimensions: $15^{\prime \prime}$ wide, $15^{\prime \prime}$ deep, and $78^{\prime \prime}$ high over-all. Height includes $6^{\prime \prime}$ legs. Recessed handles are fitted with number plates (specify numbering on order). Built-in flat key lock with two keys. Finished in Lyon Green baked-on enamel.

## Cord Cabinet No. EX1 279

A sturdy ventilated cabinet with full-length door which has three-point locking. Hinges have a recessed pin which cannot be forced out. Designed especially for cord storage, it has also proved useful for a variety of storage needs. Seven cord hooks $6^{\prime \prime}$ long-three on each side and one at the back will accommodate several cords on each hook. Two clips on each side to hold wedge blocks. Cabinet shipped all set up as shown.
Catalog No. EX1279
Stock No. (894988)

## Material Cabinet No. EX1278

Five shelf openings-one $9^{\prime \prime}$ high-two $8^{\prime \prime}$ high-two $4^{\prime \prime}$ high. Shelf heights may be changed easily without use of tools. Nine drawers, all $11-7 / 16^{\prime \prime}$ wide and $123 / 4^{\prime \prime}$ deep, as follows:
one $1-5 / 32^{\prime \prime}$ high, 15 Compts. $3-3 / 4^{\prime \prime} \times 2-33 / 64^{\prime \prime}$
two $1-5 / 32^{\prime \prime}$ high, 9 Compts. $3-3 / 4^{\prime \prime} \times 4-7 / 32^{\prime \prime}$
two $3-5 / 32^{\prime \prime}$ high, 9 Compts. $3-3 / 4^{\prime \prime} \times 4-7 / 32^{\prime \prime}$
two $5-5 / 32^{\prime \prime}$ high, 9 Compts. $3-3 / 4^{\prime \prime} \times 4-7 / 32^{\prime \prime}$
two $5-5 / 32^{\prime \prime}$ high, 4 Compts. $6-21 / 64^{\prime \prime} \times 5-41 / 64^{\prime \prime}$
Catalog No. EX1278
Stock No. (894987)

## Material Cabinet No. EX1615-D

Has 48 shelf boxes $511 / 16^{\prime \prime} \times 1712^{\prime \prime} \times 45 / 8^{\prime \prime}$. Each box has three adjustable dividers. Each shelf containing boxes is equipped with two box guides.

All shelves are adjustable. Two bottom shelves are equipped with $3^{\prime \prime}$ high bin fronts. Each section has closed base to fill space between bottom shelf and floor.

Over-all dimensions: $36^{\prime \prime} \times 18^{\prime \prime} \times 84^{\prime \prime}$. Finished in green bakedon enamel. Shipped knocked down.

Illustration shows two No. EX1615-D units equipped with sliding doors. Sliding doors are extra and can only be used on two adjacent sections. These doors roll smoothly on ball bearing rollers at the top and are guided by channels at the bottom.

NOTE: Each cabinet includes only one Rack End. One closed Rack end must be ordered to end each cabinet whether it consists of one, two, three or more sections.
Catalog No. EX1615-D
Stock No. (894989)


No. EX1279
Cord Cabinet


No. EX1278 Material Cabinet


Material Cabinet

## STEELMASTER FILING CABINETS

 binder stations and available storage spaces.


The Mobiler Directoire showing 4 binder stations and storage compartment in the bottom.

Available in two models - the "Directoire" and the "Mobiler Directoire," these cabinets assist in giving better telephone procedures - faster call service-faster fact checking service. Records and figures are at finger-tip control. Standard colors are gray and green.
The "Directoire" is a highly engineered, top working unit. The housing is made of best grade furniture steel. Its binders are made of non-rust, stainless steel, mat finish and heavy lifetime pressboard hinged covers that lay flat when in working position. The lower portion of the cabinet features a large storage space with an adjustable shelf and double doors. There are two open storage bins - one on each side of the binders.

The "Mobiler Directoire" is similar in appearance to the "Directoire" with the exception of size and mobility. This cabinet is smaller and is mounted on silent speed casters to make it easy to move from one place to another.
Three styles of "Directoire" binders are available. These styles are mentioned below.


The "Directoire" completes a perfect Telephone Office as a handy tool for directory or catalog reference file. Is also ideal for use in inventory, parts control and fast fact finding systems.

## Ordering Information

| Cat. No. <br> *JD4 | Stock No. <br> $(895975)$ | Description <br> Mobiler <br> Directoire |
| :--- | ---: | :---: |
| D6 | $\mathbf{( 8 9 5 9 7 6 )}$ | Directoire |

*The JD4 is normally furnished with a storage cabinet in the lower portion. However there is available at extra cost a letter file drawer which would replace the storage room.


## DIRECTOIRE BINDER ARRANGEMENTS

With three types of binder sections available, it is possible to vary arrangements of these sections. Three DB-2's or Three DB-3's are equivalent of two DB-1's.


## HOMELITE CARRYABLE GENERATORS

Homelite Carryable Generators offer ideal standby or portable means of supplying power. These AC generators are complete self-excited power plants. Carryable generators are extremely light in weight which allows movement of such $\alpha$ unit to any place where power is needed.

Gasoline driven engines available in three sizes, furnishing the following power: (1) 1500 watts at 115 volts AC, (2) 2500 watts at 115 volts AC, and (3) 5000 watts at either 115 or 230 volts AC.

The built-in gasoline engine is weatherproof - will start just as easy in cold or rainy weather as it does indoors. All large castings are of aluminum alloys for maximum strength and minimum weight. Oil is mixed with the gasoline and lubricates all necessary parts while motor is running.

## Model 23A115

This model has a rating of 1500 watts, 115 volts, 60 -cycle singlephase alternating current. Voltage regulation is normally $14 \%$, however, closer regulation is possible through the use of a field rheostat. Weight is 110 lbs . Size: $24^{\prime \prime} \times 17^{\prime \prime} \times 171 / 2^{\prime \prime}$. Fuel consumption one gallon for $23 / 4$ hours at full load. Stock No. (895977)


Homelite Power Unit 23A115


Homelite Power Unit 32A115/230-1

## Model 24A115

Its rating is 2500 watts, 115 volts, 60 -cycle single phase alternating current. The same voltage regulation is possible in this model as in the previously mentioned model. Weight is 135 lbs . and measures $25^{\prime \prime} \times 18^{\prime \prime} \times 20^{\prime \prime}$. Fuel consumption is one gallon for every $13 / 4$ hours at full load. Stock No. (895978)

## Model 32A115/230-1

Has dual voltage output of 5000 watts, 230 volts, or 5000 watts, 115 volts, 60 -cycle, single-phase alternating current. Voltage regulation from no load to full load is approximately $\pm 6 \%$. Weight is 228 lbs . and measures $29^{\prime \prime} \times 24^{1 / 2} 2^{\prime \prime} \times 251 / 2^{\prime \prime}$. Fuel consumption is $3 / 4$ hour per gallon at full load. Three-gallon tank has auxiliary fuel supply fitting. Stock No. (895979)
 dropping or trimming trees in clearing right-of-ways. The saw has a rated horsepower of 3.5 . Available with $15^{\prime \prime}$ to $36^{\prime \prime}$ straight blades and $14^{\prime \prime}$ and $18^{\prime \prime}$ plunge cut bows.

Catalog No. Model 17
Stock No. (895980)

## NO. 164 BIG BEAM BEACON LAMPS



The combination portable electric hand lamp and flashing red beacon. The No. 164 uses a sealed beam bulb. With the beacon arm folded down over the handle, the beacon serves as a tail light. When beacon is raised to upright position, unobstructed vision is assured. When placed on ground or top of car, it serves as a warning or signal light. Two switchesone for headlight, the other for $\alpha$ tail light. Powered by one No. 200, 6 -volt lantern battery.

| Catalog No. | Stock No. <br> 164 <br> $\mathbf{1 8 9 7 2 7 4 )}$ | Description |
| :---: | :---: | :---: |
| 200 | $(897275)$ | Big Beam Beacon, Less Battery |
|  |  |  |

## BIG BEAM MODEL NO. 211 PORTABLE ELECTRIC HAND LAMP



Throws a powerful 1,500-foot light beam for hundreds of utility and emergency uses. An emergency light for all pur-
poses: electrical failure in emergency light for all pur-
poses: electrical failure in storms, repair at night.

The most unusual feature of this lamp is its light weightonly $31 / 4 \mathrm{lbs}$. without batteries or $51 / 2 \mathrm{lbs}$. with batteries.
Main and auxiliary bulbs. Double-throw switch with fin-ger-tip control. Simple focus adjustment for spot and spread light. Powered by standard dry cell lantern batteries. Pressure contacts. No wires to connect. Perfectly balanced for carrying. Compact. Weatherproof, rustproof. Stock No. (894800)
$\quad$ Description
Big Beam Beacon, Less Battery
6-Volt Standard Lantern Battery

Revised 1-1-57


## EXIDE LIGHTGUARD

Lightguards are excellent sources of emergency light. Instantly lights when normal power is cut off. Prevents fumbling in the dark for extra lamps as well as injuries that might be caused when all lights go out.

Available in two types-Model M and Model T, both feature either single- or dual-sealed beam lamps mounted on a container of gray 20 gauge steel. The Model $M$ has a full-wave selenium rectifier with provision for manual two-rate charging. Control switches and signals are mounted on the front panel. The Model $T$ has a full-wave selenium rectifier that automatically recharges the battery at $\alpha$ high trickle rate and maintains the battery fully charged.

$$
\begin{array}{ll}
\text { Cat. } & \text { Stock } \\
\text { No. } & \text { No. }
\end{array}
$$

48263 (895981) Model M-Single or double lamp
48255 (895982) Model T-Single or double lamp


The Benjamin Reel will store an electric extension cord until it is needed. It will pay out cord as desired and will take it back when work is done. These reels save time and reduce hazards of entanglement with loose, excess cord.

Model 995 reels are available with Eye-Bolt mounting arrangement for simple installation either overhead or on wall. Spring tension for the cord is balanced with the weight of the lamp guard and handle to prevent sudden return of the cord. Over-all dimensions: $75 / 8^{\prime \prime}$ diameter, $17 / 8^{\prime \prime}$ deep. Approximate weight: 5 lbs . Electrical rating: $6 \mathrm{amps}-750$ Watts.

Model 700-18-ML features a Benjamin Reel with floodlight attachment. This reel is mobile, having steel ball bearing casters and a $20^{\prime}$ neoprene jacketed cord. Floodlight can be tilted to focus in any direction desired. Flood lamp itself is available at extra cost.

$$
\begin{array}{ll}
\text { Model No. 995 } & \text { Stock No. (895698) } \\
\text { Model No. 700-18-ML } & \text { Stock No. (895699) }
\end{array}
$$

Revised 11-15-55


## NO. 6 COLUMBIA GRAY LABEL DRY CELLS

Especially designed for telephone service. Noted for its long life on light drain service; exceptionally high in recuperative power. Round jacket; dimensions $25 / 8^{\prime \prime}$ dia. x $65 / 8^{\prime \prime}$ high. $11 / 2$ Volts. Standard package 12 cells; approximate weight 58 pounds.

Stock No. (890302)

## NO. 950 EVEREADY CELL

This battery has been recently improved for longer life. Light in weight, being designed expressly for portable equipment. Dimensions $121 / 64^{\prime \prime}$ dia. $x$ $227 / 64^{\prime \prime}$ high. $11 / 2$ Volts. Standard package 48 cells; approximate weight $91 / 4$ pounds


NO. 487 MINIMAX
B BATTERY


This Eveready B Battery will outlast the large bulky round-cell types. Dimensions $51 / 8^{\prime \prime} \times 21 / 16^{\prime \prime} \times 71 / 4^{\prime \prime} .45$ Volts. Standard package 10 cells; approximate weight 44 pounds.

Stock No. (894803)

## 386C Specialty Battery Company Unit Type <br> Telephone Battery

This battery is manufactured by the Specialty Battery Company, a subsidiary of the Ray-O-Vac Company. It is manufactured under the same quality-controlled production which has made Ray-O-Vac products famous for their high quality. The 386 C is a 3 -volt battery, equivalent of two No. 6 cells, housed in a single compact carton. They are convenient and economical. These batteries are supplied
 in mailing cartons ready to be sent to the subscriber who then makes the change himself. The 386C is a 3 -volt battery measuring $37 / 8 \times 25 / 8 \times 53 / 8$. It is packed in $\alpha$ standard package of 10 weighing 27 pounds.

Stock No. (890308)

## 489C Specialty Battery Company Unit Type Telephone Baftery

The 489C is a unit type plug in battery. It is a $41 / 2$-volt battery, the equivalent of three No. 6 cells. It is housed in a single compact carton and is convenient and economical. These batteries are supplied in mailing cartons ready to be sent to the subscriber who then makes the change himself. The 489 C is a $41 / 2$-volt battery measuring $37 / 8 \times 37 / 8 \times 53 / 8$ and packed in a standard package quantity of 10 ,
 weighing 43 pounds.

Stock No. (890309)


This battery is also manufactured by Specialty Battery Company, $\alpha$ subsidiary of Ray-O-Vac, under Ray-O-Vac's quality-controlled production. It is designed for use at operators' positions on telephone switchboards. It is composed of a number of small highly efficient cells connected in series parallel, to furnish $41 / 2$ volts. It is provided with long service capacity and a uniform voltage characteristic. The 4945 C is $\alpha 4 \frac{1}{2}$-volt battery measuring $117 / 8 \times$ $41 / 8 \times 7$. It is packed in $\alpha$ standard package quantity of two, weighing 32 pounds.

Stock No. (890307)


## DRY CELLS

## No. 6 Ray-O-Vac Telephone Battery

For a long life and low saving cost always use Ray-O-Vac No. 6 Telephone batteries. Quality controlled production insures maximum performance. Long life in performance cuts down replacements and keeps operating costs low. No. 6 Telephone $11 / 2$ volts, round 6 -inch battery, packed in standard packages of 25 , weighing 58 pounds.

Stock No. (890304)

## GOULD MULTI-LITE RECHARGEABLE FLASHLIGHT AND BATTERY

Here is a flashlight that has rechargeable batteries. The Gould Multi-Lite Unit comprises a flashlight with 2 nonremovable "D" size cells and $\alpha$ small charger that operates on a 115 v, 60-cycle A.C.


The Multi-Lite battery is hermetically sealed, permanently mounted in the flashlight, no corrosion or battery leakage. The battery has 250 use cycles. Battery maintains high voltage with high light intensity throughout each cycle.

Three flashlight models available: (1) all chrome, red plastic lens, fixed focus and shock absorber; (2) two-tone chrome, black trim, fixed spotlight focus; (3) safety approved type, fiber barrel insulation and neoprene caps.

| Catalog No. | Stock No. |
| :---: | :---: |
| 2DRF-1 | $(895983)$ |
| 2DRF-2 | $(895984)$ |
| 2DRF-3 | $(895985)$ |



$\quad$| Description |
| :---: |
| All chrome case flashlight |
| Two-tone case flashlight |
| Safety case flashlight |

## EVEREADY AIR CELLS

Air depolarized, constant voltage primary batteries. Especially designed for telephone, railroad and industrial use where a uniform current supply is necessary at all times at a low ampere-hour cost.

Eveready Air Cell batteries are made in single cell units or in batteries consisting of two cells in series. The average voltage per cell is 1.25 under discharges usu$\alpha \mathrm{al}$ in telephone transmission.

Batteries are shipped dry and are actuated by merely filling with the proper quantity of ordinary drinking water.

Air Cell No. T-2300 capacity 300 amp . hr.; Height $85 / 8$ inches.

Air Cell No. T-1600 and T-2600 capacity 600 amp. hr.; Height 113/16 inches.


T-2300

| TYpe | Stock No. | Cells | Volts | Dimensions in In. <br> Length Width | Wt. Lb. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dry |  |  |  |  |  |

PARAGON BATTERY BOXES


Made of heavy pressed steel and finished in bright black wrinkle. Lined throughout with insulating fibre.

Cover fits tightly and is attached to the box with nickel-plated chain. Holes are provided in the top and bottom for bringing in wires. Box is neat and durable and will thoroughly protect the batteries. Each box is individually packed in a carton.

| Cat No. | Stock No. | Capacity Standard <br> No. 6 Dry Cells | Wt. Lb. |
| :---: | :---: | :---: | :---: |
| 2 | $(890305)$ | 2 | $11 / 2$ |
| 3 | $(890306)$ | 3 | $21 / 2$ |

## RETRACTILE TELEPHONE CORDS



Koiled Kords extend effortlessly to the standard length of straight cord, and retract to a neat one foot of tightly coiled wire, out of the way when not in use.

Koiled Kords are permanently molded into their spring-like shape-no springs or other mechanical means are used. This construction assures longer life because the cord is free of kinks. The conductors are rubber insulated tinsel wire. The outer jacket is neoprene-black. Colored Koiled Kords available on request.

| Cat. No. Stock No. | Use |  |
| :---: | :---: | :--- |
| $5001-1$ | $(894826)$ | For use on Kellogg No. 1000 series Desk <br> and No. 1100 series Wall Masterphones. |
| $5001-2$ | $(894827)$ | For Kellogg No. 900, 925, 9900, 9917 series <br> and other Masterphones using a No. 27-C <br> handset. |
| $5001-3$ | $(894828)$ | For use on Stromberg-Carlson, Western <br> Electric and North Electric handset type <br> telephones. |
| $5001-4$ | $(894829)$ | For use on Automatic Electric handset type <br> telephones. |
| $5001-5$ | $(894830)$ | For use on Leich Electric handset type tele- <br> phones. |

## HANDS-FREE TELEPHONE



The "Hands-Free" Telephone is a new type of instrument that permits the user to initiate or receive calls without removing the handset from its cradle. This telephone is ideal for conferences, where a group of people sit around a table, for all can hear and take part in the conversation with the party on the other end of the line. It is possible for the user to leave his desk, go to a filing cabinet or other places within the room and still carry on a conversation.

The telephone instrument is the Stromberg-Carlson 1500 Series Telephone, gray in color, to which a sub-base and separate
microphone has been attached. This telephone can be used exactly as any other standard telephone. In addition, it may be utilized to provide two-way conversation even though the handset remains on the housing.

The sub-base contains controls that permit operation of the telephone as a loud speaking system. The left hand button is the "On" button. The one next to it is the "Off" button. A light indicates when the loud speaking system is in use. The "MCO" button cuts off the microphone. Volume is controlled by the knob on the right hand side.

To initiate a call, simply depress the "On" button, listen for the operator or dial tone, on the speaker, and either state the desired number or dial it - all without lifting the handset. To terminate a call, depress the "Off" button. If it is desired to cut down interfering noises or other conversations within the room, depress the "MCO" button which temporarily kills the microphone.

Volume level of the speaker is controlled by a volume control knob. The speaker and microphone are immediately cut off when the handset is lifted. To return to the speaker, depress the "On" button and replace the handset.
To install this telephone connect the line cord to a terminal box in the same way as a standard telephone. Connect power cord to any 110 -volt A.C. outlet and connect microphone cord to $\alpha$ jack on the instrument.

Cat. No. 1583-A
Stock No. (895826)

## GAI-PHONE

The Gai-Phone is a telephone subset designed expressly for use in high noise level areas. The instrument eliminates the need for noise-proof booths or other means of acoustic protection.
Installation and operation is simple. The instrument is connected to an existing telephone circuit and can be provided for either dial or manual operation; for desk or wall mounting. It is operated in the same manner as a standard telephone. A source of $110 \mathrm{v}, 60$ cycles AC is required for each instrument.

Sidetone can be varied from normal to below audibility. In areas of high noise level, the noise picked up on the transmitter and fed to the receiver can be eliminated or reduced to a comfortable level. This permits the user to hear clearly the voice signal coming into that area. A concealed control adjusts sidetone level at the time of installation.

The Gai-Phone provides control of incoming (receiver) volume level and outgoing (transmitter) level. This feature allows its use as a terminal repeater station on relatively long lines.

The electronic tubes used in this instrument have been chosen for their ruggedness and long life. The voltages at which the tubes operate are approximately $50 \%$ of the values normally used. This feature promotes long, trouble-free use.

The power used by the Gai-Phone is so low that it can be operated satisfactorily with a small D.C. inverter (the type normally used to operate an electric shaver from the cigarette lighter socket of an automobile). This feature, coupled with the instrument's built-in repeater characteristics, provides an ideal solution to temporary and other long line problems where reliable communication is difficult.


To convert the desk type Gai-Phone to wall type, a wall mounting conversion assembly is available. Order Package Assembly Stock No. (212833).

## TELEX BOOM-TYPE HEADSET

Here is a combination of extreme light weight, rugged construction and outstanding sending-receiving quality for those who require a two-way headset. The new Telex Boom-type headset weighs only $31 / 2$ ounces, yet it is ruggedly constructed for long life; this being achieved through the use of plastics, light metals and miniature parts design.


## Specifications

Sensitivity-120 db above .0002 dynes per square CM. per 1 milliwatt of input.
Frequency Response-Entire system covers range up to 5000 cycles.
Impedances-Receiver 500 ohms; Carbon mike 50 ohms.

$$
\begin{array}{cc}
\text { Catalog No. } & \text { Stock No. } \\
9650 & (897276)
\end{array}
$$

## EARPHONES AND HEADSET PADS

Made of white sponge rubber, these pads add comfort to utility when placed on operators' headsets. The headset pad prohibits the wire band from slipping while in position on the operator's head. The receiver disc adds comfort to the earpiece and aids the operator by cutting down outside noises - making customer voices clearer.

Stock No.
(895433)
(895434)
(895435)

Headset and Earphone Pads Earphone Pads only Headset Pads only


Description

## RUBEROID INSULATING TAPE

## Asphalt Saturated



A tough, waterproof insulating tape, both sides adhesive. For use both above and below ground. Has great tensile strength, won't tear, ravel or pucker; resists abrasion and is acid or alkali proof. Will not dry, crack or harden and is especially durable. Adapted for wires, connections, conduit joints, overhead cables, mine machinery and mine locomotive cables,
telephone and electric light lines. May be stored without deterioration.

Exceeds A.S.T.M. specifications by $300 \%$ in adhesiveness, $26 \%$ in tensile strength and $290 \%$ in dielectric strength.

| Width In. | Stock No. | Weight <br> per roll | Approx. <br> Ft. per roll |
| :---: | :---: | :---: | :---: |
| $3 / 4$ | $(894196)$ | $1 / 2 \mathrm{lb}$. | $612 / 3$ |
| 2 | $(894197)$ | 1 lb. | $461 / 4$ |

Standard cases of $3 / 4^{\prime \prime}$ contain 25 lbs .
Standard cases of $2^{\prime \prime}$ contain 50 lbs .

NO. 1501 A.S.T.M. FRICTION TAPE


SI Brand Friction Tape is made of a strong closely woven cotton fabric which is thoroughly saturated with an adhesive insulating compound that retains its sticking qualities through all seasons.
$821 / 2$ feet minimum per roll. Supplied in $3 / 4$-inch and 2 -inch widths.

| Width $\ln$. | Stock No. |
| :---: | :--- |
| $3 / 4$ | 18907511 |
| 2 | 18907521 |

Stock No.
(890752)

## PLASTIC ELECTRICAL TAPE



Will withstand exposure to all types of weather. The dielectric resistance of this tape is 8,000 volts per each $.007^{\prime \prime}$ layer. This tape is pliable and will stretch $200 \%$ of its own length. Resists corrosive fumes. This tape remains workable at all ordinary temperatures.

Size of one Roll is $3 / 4^{\prime \prime} \times 60^{\prime}$.
Catalog No. 60 Stock No. (895693)

OKOPRENE WEATHER RESISTANT TAPE


Okoprene Weather Resistant Tape provides permanent, nonfibrous protection for all splices in neoprene-sheathed cables. Made with neoprene, it possesses unsurpassed resistance to ozone and weather and excellent all-round physical properties.

Okoprene Tape fuses into $\alpha$ tough waterproof sheath which provides additional electrical insulation as well as permanent mechanical protection. Any need for friction tape coverings or weather-proof paint is thus eliminated.

Okoprene Tape Packing: Standard package is $3 / 4^{\prime \prime}$ width, $1 / 2$ lb. roll, packed in cans. Others are wrapped in cellophane or waxed paper.

Stock No. (894841)
NO. 33 SCOTCH ELECTRICAL TAPE With Vinyl Plastic Backing


This tape has a stretchy, rubber-like Vinyl Plastic backing that enables it to do the work of the rubber and friction tape combination. Goes on in one operation, instead of two, and does a better job. Its stretchability and resistance to oil and moisture equip it perfectly for a wide range of uses in electrical construction and repair. Its thinness gives it an important advantage in "overstuffed" junction boxes.

| Cat. No. | Stock No. | Dimensions | Packing |  |
| :--- | :---: | :---: | :---: | ---: |
|  |  |  | Can | Carton |
| 33 | $(894837)$ | $3 / 4^{\prime \prime} \times 66 \mathrm{Ft}$ | 1 | 12 |
| 33 | $(894913)$ | $3 / 4^{\prime \prime} \times 20 \mathrm{Ft}$ | 1 | 12 |

## MANSON FRICTION TAPE



Made only with new rubber which thoroughly impregnates and coats the strong, closely woven cotton fabric.
Unequalled in true adhesiveness and in aging and weatherina qualities.

Provides lasting protection for joint.
Rolls, $3 / 4 \mathrm{in}$. wide, containing 82 feet, black, per $1 / 2 \mathrm{lb}$. (in cans).

> Cat. No. 92-11 Stock No. (890753)

OKONITE RUBBER TAPE


Compounded only from new Up-River fine Para rubber. When wrapped on the joint, it fuses into $\alpha$ homogeneous wall of tough insulation that is impervious to moisture and stays elastic and resilient.

Insures highest electrical strength and permanence.
Rolls, $3 / 4 \mathrm{in}$. wide, containing 30 feet, black, per $1 / 2 \mathrm{lb}$. (in cans).

> Cat. No. 92-21 Stock No. (890755)

## BI-SEAL SELF-BONDING TAPE, TYPE 2

Virtually non-absorbent, this tape presents a strong barrier to water. When applied in layers, the tape fuses into a solid mass. This poly-ethylene based tape possesses excellent electrical, chemical, mechanical and thermal properties.

Recommended for use in splicing telephone cable and drop wire.

Several width sizes: $1 / 2^{\prime \prime}, 3 / 4^{\prime \prime}, 1^{\prime \prime}$. $2^{\prime \prime}$. at 20 mils thick. All in $30^{\prime}$ rolls. $1 / 2^{\prime \prime}$ width packed 2 to $\alpha$ box, all others are 1 to $a$ box.

| Size | Stock No. |
| :--- | ---: |
| $1 / 2^{\prime \prime}$ | $(895187)$ |
| $3 / 4^{\prime \prime}$ | $(895188)$ |
| $1^{\prime \prime}$ | $(895189)$ |
| $2^{\prime \prime}$ | $(895987)$ |



BISHOP VINYL ELECTRICAL TAPE, NO. 2


This tape offers complete electrical and mechanical protection for most general taping problems. Improved method of bonding the adhesive to the vinyl prevents transfer, and gives greater adhesive strength. Thin, tough, resilient.

| $\begin{aligned} & \text { Cat. } \\ & \text { No. } \end{aligned}$ | Stock No. | Dimensions | Packing |
| :---: | :---: | :---: | :---: |
| 2 | (897294) | $1 / 2^{\prime \prime} \times 36 \mathrm{yd}$. |  |
| 2 | (897295) | 3/4" $\times 36$ yd. | Individual cellophane-wrapped |
| 2 | (897296) | $1^{\prime \prime} \times 36$ yd. |  |
| 2 | (897297) | $11 / 2^{\prime \prime} \times 36 \mathrm{yd}$. |  |
| 2 | (897298) | $2^{\prime \prime} \times 36 \mathrm{yd}$. |  |

BISHOP NO. 125 FILLER TAPE


This especially blended synthetic rubber insulating compound in handy tape form is $1 / 8^{\prime \prime}$ thick. Fuses into a solid wall of high-dielectric insulation in a matter of seconds. It is highly moisture resistant.


## HI TAPE-MATE WINDER



Tape-Mate winds fish tape with an easy sliding action, under proper tension, and your hand never touches the tape as it winds on the reel. Tape coming off reel is safe, springing is eliminated by a keeper slot. Tape-Mate gives you exactly the footage called for. TapeMate fits all "HI" 12 in . fish tape reels or equivalent containing $1 / 8$ in. flat fish tape.

Stock No. (897279)

HOLUB FISH TAPE

(Less Reel)
It is the highest grade oil tempered flat spring steel. Handles easily and runs smoothly. Each tape is individually packed and comes complete with wire loop.

| Cat. No. | Stock No. | Length \& Size of Tape | Wt. Lbs. |
| :--- | :--- | ---: | :---: |
| HI-205 | $(897280)$ | $50 \mathrm{ft}-1 / 8^{\prime \prime} \times .045^{\prime \prime}\left(3 / 64^{\prime \prime}\right)$ | $11 / 2$ |
| HI-206 | $(897281)$ | $100 \mathrm{ft} .-1 / 8^{\prime \prime} \times .045^{\prime \prime}\left(3 / 64^{\prime \prime}\right)$ | $21 / 2$ |

Other sizes available on request.

## HOLUB FISH TAPE

 (With Reel and Puller)
$\begin{array}{lllc}\text { Cat. No. } & \text { Stock No. } & \text { Length \& Size of Tape } & \text { Wt. Lbs. } \\ \text { HI-140 } & (897282) & 50 \mathrm{ft} .-1 / 8^{\prime \prime} \mathrm{x} .045^{\prime \prime}\left(3 / 64^{\prime \prime}\right) & 2\end{array}$ HI-200 (897283) $100 \mathrm{ft}-1 / 8^{\prime \prime} \times .060^{\prime \prime}\left(1 / 16^{\prime \prime}\right) \quad 5$
Other sizes available on request.
A real combination tool (1) Fish Tape, (2) Reel and (3) Puller. Speed wiring, saves tape, and gives a safe, positive grip. Tape always enclosed in reel with end locked.

KEARNEY AIRSEAL


Airseal is a weatherproof insulating compound for preventing the formation of oxides and corrosion in electrical connections.
Temperature down to $-50^{\circ} \mathrm{F}$. will not cause Airseal to harden, nor will it flow at temperatures up to $+250^{\circ} \mathrm{F}$. Application is made by kneading the compound over the connection; to remove, it is necessary only to peel off the protective coat. Airseal will not stick to hands or gloves.

Airseal does not deteriorate even when installed underground to protect ground rod connections.

Catalog No. 18415 Stock No. (895228)

## GENERAL INDEX

A complete alphabetical index with cross references for all the products shown in this section or any of the other sections will be found in the center of this catalog.

TCI Library www.telephonecollectors.info

## KEARNEY RUST-CUTTER

 not be reached. skin.

## No. 19229

Kearney Rust-Cutter is a new product for chemically loosening ferrous nuts, bolts, and other corroded hardware.

It is superior to penetrating oils because of its much faster action. Pressurized nozzle takes the atomized mist into places which otherwise could

Rust-Cutter will not harm

Stock No. (895237)

## TYPE RTC-2 VINCENT RARE GAS RELAYS

An electronic device for use on telephone lines instead of mechanical ringing relays. It has no moving parts, may be placed in any position and is unaffected by atmospheric or temperature changes.

Used on magneto or common battery lines, leaving the condensers in where they are used in the bell circuit. Either harmonic or coded ringing bells may be used.

Lines equipped with the relay are free from grounds in normal operation and therefore free from noises which would ordinarily be picked up through grounds.
Prevents premature tripping in machine ringing from manual or dial offices.
Also acts as a protector against lightning discharges and drains off excessive current induction from high tension sources.


Consists of $\alpha$ small glass tube containing a special combination of rare inert gases acting in contact with special metal electrodes, which allow current to pass above a closely pre-determined voltage. The glass envelope is mounted in $\alpha$ heavy bakelite shell for protection. Whole unit is mounted in a special holding clamp with the terminals of the relay presented at convenient points for connections.
Length $21 / 2$ inches and height, $11 / 2$ inches, when mounted.
Furnished complete with mounting.
Stock No. (892163)

## KEARNEY NON-STATIC GROUND CLIP



These clips eliminate a major source of radio interference by maintaining high pressure contact with ground wires.

They are more satisfactory than staples, as contact pressure is not dependent upon how tight the clip is set in the wood. Once staples begin to loosen, the air gap which develops causes a tiny radio spark gap that appears as a loud buzz in receivers throughout the area.

Kearney Non-Static Ground Clips permanently grip the wire and contact is maintained free of air gaps. Drive pointed end into wood, insert ground wire under hook, drive until hook protrudes through body slot, and bend end of clip over until firm.

| Catalog | Stock |  |  |  |  |
| :---: | :---: | :---: | :---: | :--- | :---: |
| No. | No. | Ground Wire <br> Size |  |  | Length <br> In. |
| 12326 | $(895235)$ | 4 Sol. | $21 / 2$ | Material | Galv. Steel |
| 12325 | $(895236)$ | 4 Sol. | $21 / 2$ | Bronze | 27 |
| perM |  |  |  |  |  |

## KEARNEY GUY WIRE CLIPS



Kearney Guy Wire Clips serve up strand ends quickly and securely. They are stamped half formed to fit the guy strand, and are made in six sizes of aluminum, galvanized iron and copper.

Two small indentations are punched in the clips to prevent it from twisting or loosening on the strand.

While these clips are easily installed with $\alpha$ pair of pliers, $\alpha$ quicker and neater job is obtained with the Guy Wire Clip Tool.

| Cat. No. | Stuminum |  |  |  |
| ---: | :---: | :---: | :---: | :---: |
| 400 | $(891768)$ | $1 / 4$ | Size of Strand <br> Inches | Strand <br> Rating | | Weight Lb. |
| :---: |
| Per 100 |

Galvanized iron and copper, other sizes of aluminum available on request.

## KEARNEY DROP WIRE GRIP



An efficient drop wire grip for attaching telephone drop wire to poles and buildings. The "snubbing" action of this grip is greater than the rated strength of the conductors, because strain is distributed throughout the length of the grip. This prolongs the life of drop wire and permits free swinging of the tie. Also, the smooth spiral channel makes it unnecessary to "parallel" twisted pair wire.

| Cat. No. | Stock No. | Material | Length | Approx. Ship. <br> Wt. per 100 |
| :--- | :---: | :---: | ---: | :---: |
| $\mathbf{6 7 1 5}$ | $\mathbf{( 8 9 3 0 4 4 )}$ | Copper | $81 / 2^{\prime \prime}$ | 12 pounds |
| $6715-1$ | $(893045)$ | Steel | $81 / 2^{\prime \prime}$ | 12 pounds |



The Kearney Lay-Cit Cable Grip is a neat, compact grip for aerial and service cable. The double gripping action of the LayCit plates and the extra holding power of their inner surfaces provide a secure cable fastening that will not damage insulation, making this grip particularly efficient on modern syntheticjacketed cables.

The laced design of the Lay-Cit grip causes an evenly distrib-



First operation is to spread plates far enough apart so that they may be properly fitted around the cable being used.


Adjust grip to fit cable by spreading plates apart so one plate rests on top and the other on the bottom of cable.
uted increase in holding pressure with an increase in conductor tension, preventing slipping of the conductor inside the jacket. The grip is conveniently installed, even on continuous runs, and cable slack is easily adjusted without removing the grip.

Lay-Cit Cable Grips
Catalog No.
Stock No.
Round Cable Sizes
Single
(895035)
(895036)

Tandem
(895226)
(895227)


Place bottom of bail in position, then lace through the hooks of the bottom and top plates-keeping plates one above the other.


With lacing in place, pull up bail snugly and notice how plates take grip and settle into position.


An ideal device for attaching twisted pair or parallel drop wire to poles and buildings. It prolongs the life of the installation, permits free swinging at the tie, places all the wear on the hardware and eliminates sharp bends in the insulation.

The Drop Wire Clamp makes a very neat appearing installation. It is easy and quick to install. Two of them can be used to make an angular turn. Slack in drop wires can be taken up very quickly without leaving any weak spots. Clamp is wedgeshaped, with a copper wire loop at one end for hooking over a common drive hook, masonry hook or porcelain knob. When using twisted pair, it is essential to parallel the wires through the clamp.

## Type P Clamp

Clamps will accommodate standard No. 18, No. 17, No. 16, or No. 14 A.W.G. twisted pair or parallel drop wire with neoprene, braid or plastic-covered.

Cable, Twisted Pair or Parallel; Range of Clamp, . $160^{\prime \prime}$ Max., $.140^{\prime \prime}$ Min., Width $.250^{\prime \prime}$; Bail Length $4^{\prime \prime}$; Standard Package 25; Shipping Weight per 100, 11 Lbs.
Catalog No. P
Stock No. (893046)

## Type PS Clamp

Used in similar manner to Type P above. Will accommodate No. 17 Non-Reinforced wire and all sizes through No. 20. The longer and sharper taper permits use with these smaller wires.

| Catalog No. | Stock No. | Std. Pkg. | Ship. Wt. |
| :---: | :---: | :---: | :---: |
| PS | $(894918)$ | 25 | $121 / 4 \mathrm{lbs}$. |

## Type PR Clamp

Similar to types P and PS but is largely used with Nos. 14-16 AWG twisted pair and parallel wires. Also suitable with Nos. 17-18 AWG reinforced parallel wires, neoprene jacketed.

| Catalog No. | Stock No. | Std. Pkg. | Ship. Wt. |
| :---: | :---: | :---: | :---: |
| PR | $(895689)$ | 25 | 14 lbs. |

## GENERAL INDEX

A complete alphabetical index with cross references for all the products shown in this section or any of the other sections will be found in the center of this catalog.


Drop wire with types " $P$ " and " $D$ " clips.

The Reliable " $D$ " clip is suitable for both parallel and dumbbell type drop wires. It provides a fast, neat installation and eliminates a second support. For example, the porcelain knob that supports the "P" drop wire clamp can also be used to snub the drop wire after forming a loop to change the direction of the drop wire run.

Catalog No. D
Stock No. (895292)

## RELIABLE TESTING CLIPS

Reliable Testing Clips are used for temporary connections to insulated wires and are equipped with hard, sharp insulation puncturing points and perfectly registering teeth.


## KEARNEY TELEPHONE CON-NEC-TITES



An inexpensive and reliable means of making bridge or test connections in telephone work. Small and compact in size.
Galvanic action between iron and copper is eliminated by the use of a plated separating washer which places like metals to-gether-thus assuring maximum pressure distribution.

## Copper to Copper Connection

| Cat. No. | Stock No. | Maximum <br> Wire Size |  | No. of <br> Washers |
| ---: | :---: | :---: | :---: | :---: |
| Wt. Lb. |  |  |  |  |
| $\mathbf{8 6 - 7}$ | $\mathbf{( 8 9 3 0 9 2 )}$ | 12 NBS-10 B\&S | 1 | 1 |
| $\mathbf{9 8 6 - 7}$ | $\mathbf{( 8 9 3 0 9 3 )}$ | 12 NBS-10 B\&S | 2 | 2 |
| $\mathbf{8 9 - 2}$ | $\mathbf{( 8 9 3 0 9 4 )}$ | 10 NBS-8 B\&S | 1 | 3 |
| $\mathbf{9 8 9 - 2}$ | $\mathbf{( 8 9 3 0 9 5 )}$ | 10 NBS-8 B\&S | 2 | 3 |

Iron to Iron Connection

| $2451-7$ | $(893096)$ | 12 B.W.G. | 1 | 2 |
| :--- | :--- | :--- | :--- | :--- |
| $2449-7$ | $(893097)$ | 12 B.W.G. | 2 | 2 |

5694-7 (893098) 12 B.W.G.-12 NBS 2

## C-R SERVICE CONNECTORS



For connecting copper, or bronze or copperweld drop or service wires to galvanized iron or copper line wires, or for multiple service and party-line connections, pole jumper wires, groundwire connections, etc.

Made in two types, tinned for gaivanized iron to copper wire connections and plain brass for copper to copper wire connections. When ordering state whether tinned or plain brass connectors are wanted.

Cat. No. 1. Made in nickel finish brass only. Used for splicing drop wire, multiple taps on drop wire, connecting house wire to drop wire, etc. $1 / 4$-inch brass bolt with $3 / 8$-inch hexagon head and nut, slotted to receive No. 14 B\&S gage, No. 17 B\&S gage and smaller wires.

Cat. No. 2. 5/16-inch brass bolt with 7/16-inch hexagon head and nut slotted to receive No. 12 B\&S gage, No. 14 N.B.S. gage and No. 14 B.W. gage wires.

Cat No. 3. $7 / 16$-inch brass bolt with $5 / 8$-inch hexagon head and nut, slotted to receive No. 10 B\&S gage, No. 12 N.B.S. gage and No. 12 B.W. gage wires.

Cat. No. 3A. $3 / 8$-inch brass bolt with $1 / 2$-inch hexagon head and nut, same capacity as No. 3 but lighter construction.

| Cat. No. | Stock No. | TYpe |
| :---: | :---: | :--- |
| 1 | $(893081)$ | Nickel |
| 2 | $(893082)$ | Brass |
| 2 | $(893083)$ | Tinned |
| 3 | $(893084)$ | Brass |
| 3 | $(893085)$ | Tinned |
| 3A | $(893086)$ | Brass |
| 3A | $(893087)$ | Tinned |

KEARNEY DROP WIRE CLIPS


For Intermediate Drop Wire Attachments

This reliable clip can be used either with parallel or twisted pair drop wire, where intermediate fastenings are desired on straight line drop extensions. They are carefully designed to grip drop wire tightly without damag. ing the wire.

Catalog No. 11452 Stock No. 18948361


## BRIDGING CONNECTORS

Reliable solderless bridging connectors are made with $\alpha$ cold forged bolt from $\alpha$ tough alloy of almost pure copper. The nuts are forged of silicon bronze by a method that rejects material with any flaws. These connectors are economical to use, convenient to install, and provide much more strength than actually required.

## Bridging Connectors Without Spacer For Copper and Copperweld Wires

| Stock No. | Cat. No. | AWG <br> Solid | AWG <br> Strand | Std. <br> Pkg. | Shpg. Wt. <br> Lbs. per C |
| :--- | :--- | :---: | :---: | :---: | :---: |
| (897036) | 9F | 10 | 10 | 100 | 2 |
| (895074) | 9FB with washer | 10 | 10 | 100 | $21 / 4$ |
| (897290) | 8F | 8 | 8 | 100 | $23 / 4$ |
| (897291) | 8FB with washer | 8 | 8 | 100 | 4 |

For copper to copper, steel to steel, solid aluminum to solid aluminum. Recommend Spacer Type for aluminum.

|  | Stel BWG |  |  | Alum. or <br> Copper AWG | Std. | Shpg. Wt. |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Stock No. Cat. No. | Solid |  |  |  |  |  |
| Solid | Strand | Pkg. | Lbs. per C |  |  |  |

## Bridging Connectors with Spacer

All-purpose connector for copper to copper, copper to aluminum, aluminum to aluminum, steel to copper and steel to aluminum.

| Stock No. | Cat. No. | Alum. or |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Solid | Solid | Strand | Pkg. | Lbs. per C |
| (893091) | 9FGB | 12 | 9 | - | 100 | $21 / 4$ |
| (897293) | 8FGB | 10 | 7 | 8 | 100 | 4 |

## HI PLASTIC SCREWANCHOR

The HI plastic screw


NO CONFUSION IN USE! anchors consist of two separate sections, one to receive the screw and the other to engage the walls of the drilled hole. As the screw is driven into the center section, the plastic and the outer section is forced outward. Microscopic inspection proves that the plastic actually cold flows into the pores of the material in which the anchor is set.

| Stock No. | $\begin{aligned} & \text { For Woo } \\ & \text { Size } \end{aligned}$ | od Screws Length | $\begin{aligned} & \text { Use An- } \\ & \text { chor } \\ & \text { No. } \end{aligned}$ | Anchor Length | Drill Hole | $\begin{aligned} & \text { Std. } \\ & \text { Ctn. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (897284) | 6,5 or 4 | $\begin{aligned} & 1^{\prime \prime} \text { or } 11 / 4^{\prime \prime} \\ & 11 / 2^{\prime \prime} \end{aligned}$ | 6 | $\begin{aligned} & 3 / 4^{\prime \prime} \\ & 1^{\prime \prime} \end{aligned}$ | $11 / 64^{\prime \prime}$ | 100 |
| (897285) | 8, 7, 6 or 5 | $\begin{aligned} & 1^{\prime \prime} \text { or } 11 / 4^{\prime \prime} \\ & 11 / 2^{\prime \prime} \\ & 2^{\prime \prime} \text { or } 21 / 2^{\prime \prime} \end{aligned}$ | 8 | $\begin{aligned} & 3 / 4^{\prime \prime} \\ & 1^{\prime \prime} \\ & 11 / 2^{\prime \prime} \end{aligned}$ | 3/16 | 100 |
| (897286) | 10, 9, 8 or 7 | $\begin{aligned} & 1^{\prime \prime} \text { or } 11 / 4^{\prime \prime} \\ & 11 / 2^{\prime \prime} \text { or } 13 / 4^{\prime \prime} \\ & 2^{\prime \prime} \text { or } 21 / 2^{\prime \prime} \end{aligned}$ | 10 | $\begin{aligned} & 3 / 4^{\prime \prime} \\ & 1^{\prime \prime} \\ & 11 / 2^{\prime \prime} \end{aligned}$ | 7/32 ${ }^{\prime \prime}$ | 100 |
| (897287) | 12, 10 or 9 | $\begin{aligned} & 11 / 4^{\prime \prime} \\ & 11 / 2^{\prime \prime} \\ & 13 / 4^{\prime \prime} \text { or } 2^{\prime \prime} \end{aligned}$ | 12 | $\begin{aligned} & 3 / 4^{\prime \prime} \\ & 1^{\prime \prime} \\ & 11 / 2^{\prime \prime} \end{aligned}$ | $1 / 4^{\prime \prime}$ | 100 |
| (897288) | 14 or 12 | $\begin{aligned} & 11 / 2^{\prime \prime} \text { or } 13 / /^{\prime \prime} \\ & 2^{\prime \prime} \text { or } 21 / 2^{\prime \prime} \\ & 3^{\prime \prime} \text { or } 31 / 2^{\prime \prime} \end{aligned}$ | 14 | $\begin{aligned} & 1^{\prime \prime} \\ & 11 / 2^{\prime \prime} \\ & 2^{\prime \prime} \end{aligned}$ | 9/32 ${ }^{\prime \prime}$ | 100 |
| (897289) | 16, 14 <br> or $1 / 4^{\prime \prime}$ lag <br> screw | $\begin{aligned} & 11 / 2^{\prime \prime} \\ & 2^{\prime \prime} \text { or } 21 / 2^{\prime \prime} \\ & 3^{\prime \prime} \text { or } 31 / 2^{\prime \prime} \end{aligned}$ | 16 | $\begin{aligned} & 1^{\prime \prime} \\ & 11 / 2^{\prime \prime} \\ & 2^{\prime \prime} \end{aligned}$ | 5/16 ${ }^{\prime \prime}$ | 50 |

## TOGGLE BOLTS



For making attachments to hollow brick, tile or lath walls.

The Diamond Spring Toggle is made with two wings that engage a trunnion nut and $\alpha$ spring which forces the wings outward when the head has passed through the wall.

## GENERAL INDEX

A complete alphabetical index with cross references for all the products shown in this section or any of the other sections will be found in the center of this catalog.

Stock No. Drill Size Inches

| $(890138)$ | $3 / 8$ |
| :--- | :--- |
| $(890139)$ | $3 / 8$ |
| $(890140)$ | $3 / 8$ |
| $(890142)$ | $1 / 2$ |
| $(890143)$ | $1 / 2$ |
| $(890144)$ | $1 / 2$ |
| $(890145)$ | $1 / 2$ |
| $(890146)$ | $5 / 8$ |
| $(890147)$ | $5 / 8$ |
| $(890148)$ | $5 / 8$ |
| $(890149)$ | $5 / 8$ |

## IRON WOOD SCREWS



These screws are available in hot galvanized, blued, bright or cadmium plated. Specify finish.



## DIAMOND DRIVE RINGS

This ring accomplishes the same purpose as the screw threaded pigtail bridle ring, but is designed for driving instead of screwing into structures. When attached to hard substances, brick, stone or concrete, hammer drive anchors are employed.

Made of hard nail wire, hot dip galvanized.

Stock No. $\qquad$ (893078)(893079)(893080)
Diameter Eye. ...................... in. $1 / 2 \quad 5 / 8 \quad 1 / 8$ Size Hammer Drive Anchor to Use . in. $3 / 16 \times 7 / 8 \quad 1 / 4 \times 1 \quad 1 / 4 \times 1$ Weight per $1000 \ldots \ldots \ldots \ldots . .$. lb. $18 \quad 28$. 53

## BRIDLE RINGS

## Galvanized and Enameled



For pole and line interior block distribution.

Furnished either galvanized by the hot process or enameled. All enameled rings, unless otherwise, specified, are furnished in dark blue. Opening of all rings is 5/16 inches.

| Style | $\begin{aligned} & \text { Sto } \\ & \text { Galvan. } \end{aligned}$ | No. Enam. | $\begin{aligned} & \text { Eye } \\ & \text { In. } \end{aligned}$ | Shank In. | Steel | Lbs. per 1000 Galvan. Enam. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | (893052) | (894161) | $15 / 8$ | 11/4 | $1 / 4$ | 150 | 150 |
| C | (893053) | (894162) | $11 / 4$ | $11 / 4$ | 1/4 | 125 | 125 |
| E | (893054) | (894163) | 5/8 | 7/8 | $3 / 16$ | 50 | 50 |
| F | (893055) | (894164) | 3 | $17 / 8$ | $5 / 16$ | 335 | 335 |

## FLEXIDUCTS

Flexiduct equipment disposes the "over-the-floor" wiring problems. This floor duct carries up to 25 pair cloth covered or 16 pair plas. tic covered cable. It hugs the floor and is stumbleproof. Flexiduct can be removed and reused an indefinite number of times, making it a permanent part of the office equipment.
Installations require a maximum of five items and some tubed adhesive, all of which are listed below:

| Cat. No. | Stock No. |
| :---: | :---: |
| 1 | $(895728)$ |
| 2 | $(895729)$ |
| 3 | $(895730)$ |
| 4 | $(895731)$ |
| 5 | $(895732)$ |
| 6 | $(895733)$ |



No. 5


No. 2


No. 4


No. 3

No. Cond. carried and description 8 - Inside wire 25 prs. cloth covered, 16 prs. plastic Riser
L - Join
T- Joint
5 oz . tube of adhesive

The porcelain ring has a diagonal opening which allows the easy insertion of wires and when pulled taut they cannot become released from the ring.

The porcelain is glazed on the interior surface of the ring and on the surfaces of the slot.


Opening 9/32 inch; Steel $1 / 4$ inch.


| Type In. | Stock No. | Size Eye In. | Lenqth <br> Shank In. | Wt. Lb. <br> per 1000 |
| :---: | :---: | :---: | :---: | :---: |
| $5 / 8-S$ | $(891232)$ | $5 / 8$ | 1 | 85 |
| $5 / 8-L$ | $(891233)$ | $5 / 8$ | 2 | 95 |
| $1-S$ | $(891234)$ | 1 | $11 / 8$ | 180 |
| $1-L$ | $(891235)$ | 1 | $21 / 8$ | 190 |

## T5-STAPLING TACKER

The T5 Stapling Tacker speeds up the installation of inside telephone wire. It is handy for it is possible to work in confined places where swinging a hammer is difficult.

Feeds and drives more than 80 staples without reloading. This stapling tacker is grooved to fit over Whitney Blake parallel Teleduct wire. It
 will attach both two and three conductor styles and drive staples so as to hug wire firmly without damaging the insulation.

| Catalog No. | Stock No. | Description |
| :--- | :---: | :---: |
| T5-8 | $(895264)$ | Stapling Tacker |
| STCR-5019 | $(895265)$ | $3 / 8^{\prime \prime}$ Staples |

## T-25 ARROW STAPLE GUN



The T-25 automatic staple gun will staple any wire up to $1 / 4^{\prime \prime}$ in diameter. The driving blade automatically stops short preventing injury to the wire covering. Tapered head provides easy access into tight corners.

| Catalog No. | Stock No. | Description | Packaged |
| :--- | :---: | :--- | :--- |
| T-25 | (897074) | Automatic |  |

## TELEPHONE INSTRUMENT

SAMPLE CASES


Here's the perfect case for sales calls to residential, business and professional subscriber prospects. Black luggage-type hardware and exterior finish. Has ample space for displaying of two removable Stromberg-Carlson 1500 Series Telephones of your choice. Line cords are neatly stored by winding around cover cleats.
Stock No. (896040)

# Prices-Supply Sections 

## For Your Information

WHEN ORDERING-Give billing name and address and destination to which goods are to be shipped. Take care to specify our Code or Stock Number as well as the name of each article ordered. Unless you specify what is wanted by Number, your order may be subject to delay.

PRICES are subject to change without notice. All merchandise will be billed at prices in effect at time of shipment which may be either higher or lower than those listed. Prices shown herein do not include any sales, excise, freight, use or similar taxes. All such taxes will be shown as additional charge on invoices where applicable.

TERMS are net 10 days E.O.M. (End of Month) billing. Cash Discounts as established by the manufacturer of the supply materials will be extended to customers.

ALE AGREEMENTS are made contingent upon strikes, fires, accidents or causes beyond our control.

SHIPMENTS on Telephone Supply Material will be made from Rochester, New York; Chicago, Hlinois; Kansas City, Missouri; San Francisco, California or direct from the manufacturer of such material.

Unless otherwise agreed upon all goods are sold f. o. b. Rochester, New York, Branch Office Warehouses or manufacturer's shipping point and transportation charges will therefore be collected by the carriers upon arrival of goods at destination.


Issue Date: 11-1-55
On Pole Line Hardware prices are f.o.b. our warehouses and/or manufacturers plant with full freight allowed (and prepaid) on shipments weighing 100 pounds or more to nearest regular Railroad freight station in the following states only. Orders will be invoiced at the proper zone price applying to shipping destination.
Shipments of less than 100 pounds will be f.o.b. shipping point.
If it is requested that shipment be made by mail, express or other than in the cheapest way, such additional expense will be borne by the purchaser.

ZONES APPLICABLE TO POLE LINE HARDWARE
CONNECTICUT
DELAWARE
DISTRICT OF COLUMBIA
ILLNNOIS
INDIANA
IOWA
KENTUCKY
MARNE

Zone 1
MARYLAND OHIO
MASSACHUSETTS PENNSYLVANIA MICHIGAN RHODE ISLAND MINNESOTA VERMONT
MISSOURI NEW HAMPSHIRE WEST VIRGINIA NEW JERSEY : WISCONSIN NEW YORK

Cities of: Bristol, Tenn., Kansas City, Kansas, and Omaha, Nebraska

|  | Zone 2 |  |  |
| :--- | :--- | :--- | :--- |
| ALABAMA | GEORGIA | NORTH CAROLINA | SOUTH CAROLINA |
| ARKANSAS | LOUISIANA | NORTH DAKOTA | SOUTH DAKOTA |
| FLORIDA | MISSISSIPPI | OKLAHOMA |  |
| KANSAS, except City of Kansas City, Kansas. |  |  |  |
| NEBRASKA, except City of Omaha, Nebraska. |  |  |  |
| TENNESSEE-All of Tennessee, excepting City of Bristol, Tenn. | TEXAS-City of Texarkana, Texas only. |  |  |

## Zone 3

COLORADO
NEW MEXICO
WYOMING
MONTANA-All of Montana, excepting the Counties of Flathead, Lincoln, Sanders and Lake. TEXAS-All of Texas, excepting City of Texarkana, Texas.

Zones 4 and 5 Western and Pacific Coast not shown. Prices in these zones are slightly higher and are available upon request.

When prices listed are under Eastern and Western Zones, the following points indicate the boundary lines:
EASTERN ZONE: Includes all points in the U. S. east of the boundary lines as outlined below:
Montana-East of the eastern boundary line.
Wyoming-East of the eastern boundaries of the following counties: Big Horn, Washakie, Fremont and Sweet Water.
Colorado-East of the eastern boundaries of the following counties: Jackson, Grand, Gilpin, Clear Creek, Park, Teller, Fremont, Custer, Alamosa and Costilla.
New Mexico-East of the eastern boundaries of the following counties: Taos, Sandoval, Valencia, Socorro and Luna.
WESTERN ZONE: Includes all points in the U. S. west of the above boundary lines.

## TO DETERMINE YOUR COST ON POLE LINE HARDWARE

Prices as shown are based upon ordering in standard package quantities. If less than standard package quantities are ordered add $15 \%$ to the price.

| anding |  |  | PRICE EACH |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Eastern Zone |  | Weatern Zose |  |
| Cat. No | Stock No. |  | 1-99 | 100 or more | 1-99 | 100 or more |
| 62 | 890002 | 2 way. | \$ 1.78 | \$ 1.70 | \$ 2.04 | \$ 1.96 |
| 82 | 890003 | 2 way. | 2.67 | 2.55 | 2.96 | 2.85 |
| 633 | 890004 | 3 way | 2.15 | 2.05 | 2.68 | 2.58 |
| 834 | 890005 | 3 way | 2.67 | 2.55 | 2.96 | 2.85 |
| 836 | 890006 | 3 way. | 3.36 | 3.20 | 3.86 | 3.72 |
| 8310 | 890007 | 3 way. | 3.67 | 3.50 | 4.32 | 4.16 |
| 8312 | 890008 | 3 way. | 3.67 | 3.50 | 4.32 | 4.16 |
| 10316 | 890009 | 3 way. | 6.82 | 6.50 | 8.41 | 8.09 |
| 84-3/4 | 890011 | 4 way. | 3.93 | 3.75 | 4.62 | 4.45 |
| 84-1 | 890012 | 4 way. | 3.93 | 3.75 | 4.62 | 4.45 |
| 104 | 890013 | 4 way. | 7.45 | 7.10 | 8.79 | 8.47 |
| 124 | 890014 | 4 way. | 11.44 | 10.90 | 12.79 | 12.30 |

## Chance Pyramid Cone Anchors

$\qquad$

| Cat. No: | Stock No. | Eantern Zone |  |  | Weatera Zone |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1.99 | 100 or more | 1:99 | 100 or mare |
| 6 | 890015. |  |  | \$ . . 80 | \$ 1.05 | \$ 1.00 |
| 8 | 890016. |  | 1.20 | 1.15 | 1.45 | 1.40 |
| 10 | 890017. |  | 2.10 | 2.00 | 2.35 | 2.15 |
| 12 | 890018. |  | 3.05 | 2.90 | 3.55 | 3.40 |
| 16 | 890019. |  | 6.20 | 5.90 | 7.00 | 6.70 |

Other sizes on request.

| Kearney P-L. Expanding Anchors |  |  |  | PRICE EACH |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Eastara Zone |  | Western Zone |  |
| Cat. No. | Stock No. |  | Standard Pkg. | 1.99 | 100 or more | 1.99 | 100 or more |
| KPL-62-2.5 | 895168 | 2 way | 6 | \$ 1.45 | \$ 1.25 | \$ 1.70 | \$ 1.50 |
| KPLI-62-4 | 895169 | 2 way | 6 | 1.85 | 1.70 | 2.15 | 2.00 |
| KPLL-82-6 | 895170 | 2 way | 6 | 2.35 | 2.25 | 2.75 | 2.60 |
| KPL-82-8 | 895171 | 2 way | 6 | 2.60 | 2.40 | 3.00 | 2.85 |
| KPL-82-10 | 895172 | 2 way | 6 | 2.90 | 2.75 | 3.40 | 3.25 |
| KPL-82-12 | 895173 | 2 way | 6 | 2.90 | 2.75 | 3.40 | 3.25 |
| KPL-84-100-6 | 895174 | 4 way | 6 | 2.35 | 2.25 | 2.75 | 2.60 |
| KPL-84-115-8 | 895175 | 4 way | 6 | 2.60 | 2.40 | 3.00 | 2.85 |
| KPL-84-135-10 | 895176 | 4 way | 6 | 2.90 | 2.75 | 3.40 | 3.25 |
| KPL-104200-20 | 895171 | 4 way | 3 | 5.30 | 5.00 | 6.10 | 5.80 |


| han |  | ACH |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Zastorn Zone |  | Weatorn Zone |  |
| Cat. No. | Stock No. | 1.99 | 100 or more | 1.99 | 100 or more |
| 88100 | 894942. | \$ 2.35 | \$ 2.25 | \$ 2.75 | \$ 2.60 |
| 88115 | 894943. | 2.60 | 2.40 | 3.00 | 2.85 |
| 88135 | 894944. | 2.90 | 2.75 | 3.40 | 3.25 |
| 6860 | 895436. | 1.45 | 1.25 | 1.70 | 1.50 |
| 6870 | 895437. | 1.85 | 1.70 | 2.15 | 2.00 |
|  | - . |  |  |  |  |
| Chance Expanding Pole Key Anchor |  |  |  |  |  |
| P4817 | 895438 | 6,60 | 6.30 | 7.20 | 6.90 |
| Cancelling Sheet Dated: 12.1-56 |  | All pricer subject to change without notice |  |  |  |

## page 4m Continued

Issue Date: 4-15-57
Kearney Malleable Iron Expansion Anchors
-NET PRICK EACH

|  |  |  | Tone |  | Zone |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | 1.99 | 100 \& Over | 1.99 | 100 \& Orer |
| 37533 | 890074. | \$ 1.70 | \$ 1.60 | \$ 1.95 | \$ 1.84 |
| 6076 | 890076. | 3.10 | 2.92 | 3.56 | 3.36 |
| 8090 | 890079. | 3.01 | 2.84 | 3.47 | 3.27 |
| 8110 | 890080. | 3.43 | 3.24 | 3.95 | 3.73 |
| 84090 | 890082. | 3.11 | 2.93 | 3.57 | 3.37 |
| 84110 | 890083. | 3.48 | 3.28 | 4.00 | 3.77 |
| 84125 | 890084. | 4.39 | 4.14 | 5.05 | 4.76 |
| *Price does not include Anchor Rods |  |  |  |  |  |


| Hubbard Steelwing Anchors - Three Hubeye |  | NET PRICE EACH |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Fontern Zone |  | Weatera zone |  |
| Cat. No. | Stock No. | 1.99 | 100 or more | 1.99 | 100 or more |
| 7524 | 890053. | \$ 2.59 | \$ 2.42 | \$ 2.89 | \$ 2.69 |
| 7526 | 890054. | 3.87 | 3.46 | 4.14 | 3.87 |
| 7527 | 890055. | 6.00 | 5.78 | 6.76 | 6.36 |
| 7528 | 890056. | 6.57 | 6.19 | 7.44 | 6.96 |

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Hubbard Hubeye Anchor Rods $\qquad$ PRICES PER 100 PIECES

| Cat. No. | Stock No. | Standard Package | Zone 1 | Zone 2 | Zone 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 8405 | 894005 | 10. | \$ 98.46 | \$100.06 | \$107.26 |
| 8406 | 894006 | 10. | 110.82 | 112.70 | 121.12 |
| 8407 | 894007 | 10. | 123.17 | 125.32 | 134.98 |
| 8415 | 894008 | 10. | 135.03 | 137.51 | 148.59 |
| 8416 | 894009 | 10. | 154.78 | 157.71 | 170.85 |
| 8417 | 894010 | 10. | 174.53 | 177.92 | 193.11 |
| 8418 | 894011 | 5. | 194.28 | 198.13 | 215.38 |

Prices on other sizes available on request.

| H | pperwe | ound | Clamp |  | PRICS | PER 100 | izces |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Zone 1 |  |  | zone 2 |  |  | Zone 3 |  |
| Cat. No. | Stock No. | $\begin{aligned} & { }_{10 \text { Lege }}^{\text {Pleces }} \\ & \hline \end{aligned}$ | 10-99 | 100 or over | $\begin{aligned} & \text { Less } \\ & 10 \text { Pleces } \end{aligned}$ | 10-99 | 100 or over | $\begin{aligned} & \hline \begin{array}{c} \text { Leas } \\ 10 \text { Pfoces } \end{array} \\ & \hline \end{aligned}$ | 10-99 | 100 or more |
|  | - A |  |  |  |  |  |  |  |  |  |
| 9490 | 891956 | \$25.90 | \$22.10 | \$21.20 | \$26.60 | \$22.70 | \$21.80 | \$26.80 | \$22.90 | \$22.10 |
| 9491 | 891957 | 42.20 | 35.90 | 34.50 | 43.40 | 37.10 | 35.60 | 43.80 | 37.60 | 36.00 |
| 9492 | 891958 | 59.10 | 50.30 | 48.20 | 60.80 | 52.00 | 49.90 | 61.30 | 52.50 | 50.40 |
| 9590 | 891962 | 25.90 | 22.10 | 21.20 | 26.60 | 22.70 | 21.80 | 26.80 | 22.90 | 22.10 |
| 9591 | 891963 | 42.20 | 35.90 | 34.50 | 43.40 | 37.10 | 35.60 | 43.80 | 37.60 | 36.00 . |
| 9592 | 891964 | 59.10 | 50.30 | 48.20 | 60.80 | 52.00 | 49.90 | 61.30 | 52.50 | 50.40 |
|  |  |  |  |  |  |  |  |  |  |  |
| 6490 | 891968 | 16.90 | 14.10 | 13.50 | 17.20 | 14.50 | 13.80 | 17.30 | 14.60 | 13.90 |
| 6491 | 891969 | 28.70 | 23.90 | 22.80 | 29.40 | 24.70 | 23.60 | 29.80 | 25.00 | 23.80 |
| 6492 | 891970 | 41.40 | 34.60 | 33.10 | 42.60 | 35.90 | 34.30 | 43.10 | 36.40 | 34.70 |
| 6590 | 891972 | 16.90 | 14.10 | 13.50 | 17.20 | 14.50 | 13.80 | 17.30 | 14.60 | 13.90 |
| 6591 | 891973 | 28.70 | 23.90 | 22.80 | 29.40 | 24.70 | 23.60 | 29.80 | 25.00 | 23.80 |
| 6592 | 891974 | 41.40 | 34.60 | 33.10 | 42.60 | 35.90 | 34.30 | 43.10 | 36.40 | 34.70 |

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Issue Date: 12-1-56
Hubbard Copporweld Ground Rods

|  |  |  | Zone 1 |  |  | Zone 2 |  |  | Zone 3 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stack No. | $\begin{gathered} \text { Less } \\ \hline 0_{\text {Pieces }} \end{gathered}$ | 10.99 | 100 or over | $\begin{gathered} \hline \text { Less } \\ 10 \text { Pieces } \end{gathered}$ | 10-99 | 100 or ovar | $\begin{aligned} & \text { Lesss } \\ & 10 \text { Pfeces } \end{aligned}$ | $\underline{10-99}$ | 100 or over |
| 7775 | 891937 | \$ 96.40 | \$87.80 | \$ 85.10 | \$102.10 | \$ 93.50 | \$ 90.80 | \$104.20 | \$ 95.60 | \$ 92.90 |
| 7776 | 891938 | 111.40 | 101.30 | 97.90 | 118.40 | 108.30 | 104.90 | 120.90 | 110.80 | 107.40 |
| 7795 | 891939 | 180.30 | 162.30 | 156.30 | 190.00 | 172.00 | 166.00 | 193.50 | 175.50 | 169.50 |
| 7796 | 891940 | 207.40 | 186.20 | 179.20 | 219.00 | 197.80 | 190.80 | 223.30 | 202.10 | 195.10 |
| 7797 | 891941 | 234.70 | 210.20 | 202.10 | 248.30 | 223.80 | 215.70 | 253.20 | 228.78 | 220.60 |
| 7798 | 891942 | 261.70 | 234.20 | 224.90 | 277.40 | $249.90^{\circ}$ | 240.60 | 283.10 | 255.60 | 246.30 |
| 9415 | 891908 | 71.90 | 63.30 | 60.60 | 77.50 | 68.90 | 66.20 | 79.50 | 70.90 | 68.20 |
| 9416 | 891909 | 86.90 | 76.80 | 73.40 | 93.80 | 83.70 | 80.30 | 96.10 | 86.00 | 82.60 |
| 9388 | 891911 | 117.60 | 103.80 | 99.30 | 126.40 | 112.60 | 108.10 | 129.70 | 115.90 | 111.40 |
| 9425 | 891912 | 152.30 | 134.20 | 128.38 | 161.70 | 143.60 | 137.70 | 165.10 | 147.00 | 141.10 |
| 9426 | 891913 | 179.40 | 158.20 | 151.20 | 190.80 | 169.60 | 162.60 | 195.00 | 173.80 | 166.80 |
| 9427 | 891914 | 206.70 | 182.10 | 173.90 | 202.20 | 195.60 | 187.40 | 225.00 | 200.40 | 192.20 |
| 9428 | 891915 | 233.70 | 206.10 | 196.80 | 249.20 | 221.60 | 212.30 | 254.80 | 277.20 | 217.90 |
| 9435 | 891918 | 213.00 | 188.00 | 179.60 | 227.30 | 202.30 | 193.90 | 232.30 | 207.30 | -198.90 |
| 9436 | 891919 | 251.90 | 222.40 | 212.40 | 269.10 | 239.60 | 229.60 | 275.20 | 245.70 | 235.70 |
| 9437 | 891920 | 291.30 | 256.90 | 245.60 | 311.30 | 276.90 | 265.60 | 318.40 | 284.00 | 272.70 |
| 9438 | 891921 | 330.30 | 291.30 | 278.40 | 353.20 | 314.20 | 301.30 | 361.20 | 322.20 | 309.30 |
| Other prices on application |  |  |  |  |  |  |  |  |  |  |


| Hubbard Steel Ground Rods. |  |  | PRICES PER 100 PIECES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Standard Package | Zoze 1 | Zone 2 | Zone 3 |
| With Wire |  |  |  |  |  |
| 9505 | 891952 | 10. | \$102.69 | \$104.25 | \$111.23 |
| 9506 | 891953 | 10. | 115.40 | 117.26 | 125.59 |
| 9516 | 891954 | 10. | 160.09 | 162.83 | 175.16 |
| Less Wire |  |  |  |  |  |
| 9555 | 891943 | 10. | 47.74 | 48.60 | 52.51 |
| 9556 | 891944 | 10. | 55.53 | 56.80 | 61.31 |
| 9565 | 891945 | 10. | 72.71 | 74.17 | 80.75 |
| 9566 | 891946 | 10. | 85.30 | 87.07 | 95.00 |
| 9567 | 891947 | 10. | 97.88 | 99.95 | 109.25 |


| Reliable Ground Rod Clamps |  |  | PRICES PER 100 PIECES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Standard Package | Less than 10 | 10-99 | 100 or more |
| E-48 | 891760 | 100. | \$23.75 | \$22.55 | \$21.35 |
| E-58 | 891762 | 100. | 33.90 | 32.25 | 30.55 |
| E-68 | 891764 | 100. | 37.70 | 35.85 | 33.95 |
| S-48 | 891761 | 100. | 17.92 | 17.02 | 16.13 |
| S-58 | 891763 | 50. | 21.18 | 20.12 | 19.06 |
| S-68 | 891765 | 50. | 22.81 | 21.67 | 20.53 |

Station Ground Clamps

|  |  |  | 1-499 | 500 or mare |
| :---: | :---: | :---: | :---: | :---: |
| No. 1 | 891759 | 100. | \$15.75 | \$15.00 |


|  |  |  | Lesa than 10 | 10.99 | 100 or more |
| :---: | :---: | :---: | :---: | :---: | :---: |
| K-48 | 891766 | 100. | \$24.73 | \$23.50 | \$22.26 |
| K-58 | 891767 | 100. | 29.39 | 27.92 | 26.45 |


| Cross-O | Clamps |  |  | PER 100 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Standard Package | Zone 1 | Zone 2 | Zone 3 |
| 8930 | 891696 | 50. | \$80.82 | \$81.54 | \$84.77 |

[^3]STROMBERG-CARLSON

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Issue Date: 4-15-57

Guy Clamps

|  |  | PRICES PER 100 PILCES |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Stock No. | Standard Package | Zone 1 | Zone 2 | Zone 3 |
| 891712 | 20. | \$184.66 | \$186.81 | \$196.42 |
| 891713 | 25. | 78.61 | 79.91 | 85.65 |
| 891714 | 50. | 55.69 | 57.76 | 60.12 |
| 891715 | 20. | 109.95 | 111.70 | 119.50 |
| 891716 | 100. | 21.35 | 21.65 | 23.03 |
| 891717 | 50. | 38.54 | 39.12 | 41.73 |
| 891718 | 50. | 51.79 | 52.59 | 56.16 |
| 891719 | 25. | 65.38 | 66.46 | 71.31 |
| 891720 | 100. | 21.35 | 21.65 | 23.03 |
| 891721 | 50. | 34.87 | 36.04 | 37.44 |
| 891722 | 50. | 49.92 | 51.71 | 53.80 |
| 891723 |  |  |  |  |
| 891724 ) |  |  |  |  |


| Guy Clamps |  |  | PRICES PER 100 PIECIS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat No. | Stock No. | Standard Package | Zone 1 | Zone 2 | Zone 3 |
| J1061 | 891728 | 100. | \$21.35 | \$21.65 | \$23.03 |
| J1030 | 891729 | 50. | 38.54 | 39.12 | 41.73 |
| J930 | 891730 | 25. | 65.38 | 66.46 | 71.31 |
| J931 | 891731 | 25. | 78.61 | 79.91 | 85.65 |
| J933 | 891733 | 20. | 109.95 | 111.70 | 119.50 |


| Crosby Clips |  | PRICES PER 100 PIECES | Hubbard Wire Rope Clips |  | PRICES PER 100 PIECES |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat No. | Stock No. |  | Cat. No. | Stock No. |  |
| J1038 | 891739 | \$36.00 | 8480 | 891749. | \$12.71 |
| $J 1039$ | 891740 | 37.00 | 8481 | 891750. | 14.15 |
| J1040 | 891741 | 41.00 | 8482 | 891751. | 19.58 |
| J1041 | 891742 | 45.00 | 8484 | 891752. | 25.16 |
| $J 1042$ | 891743 | 48.00 | 8485 | 891753. | 33.32 |
| J1043 | 891744 | 56.00 |  |  |  |


| Kearn | de Cla | PRICES PER 100 PIECES |
| :---: | :---: | :---: |
| Cat. No. | Stock No. |  |
| 7551 | 891703. | \$133.70 |
| 7551-1 | 891704. | 137.00 |
| 7551-2 | 891705. | 141.20 |

TO DETERMINE YOUR COST ON POLE LINE HARDWARE
Prices as shown are based upon ordering in standard package quantities. If less than standard package quantities are ordered add $15 \%$ to the price.

## page 8 m

| Diamond Cable Lashing Clamp |  |  |  |  | PRICE PER 100 PIECES |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Cat. No. } \\ & 900 \end{aligned}$ | Stock No. 895032 . |  |  |  | \$20.24 |  |
| Cable Suspension Clamps |  |  |  | PRICES PER 100 PIECES |  |  |
| Cat. No. | Stock No. |  | Standard Package | Zone 1 | Zone 2 | Zone 3 |
| 8901 | 891694 | (1 Bolt) | 100. | \$20.61 | \$20.95 | \$22.51 |
| 8903 | 891695 | (3 Bolt) | 25. | 62.07 | 63.06 | 67.48 |

# page 8 m continued 

| Corner Cable Suspension Clamps |  |  | PRICES PER 100 PISCIS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | ${ }_{\text {Stazdard }}^{\text {Package }}$ | Zone 1 | Zoze 2 | Zore 3 |
| 8902 | 894473 | 20. | \$183.48 | \$185.33 | \$193.65 |
| Servisleeves |  |  |  |  |  |
| 7451 | 891787 | 1000. | 6.32 | 6.33 | 6.79 |
| 7462 | 891788 | 1000. | 6.32 6.32 | 6.33 6.33 | 6.79 |
| 1453 | 891789 | 1000. | 6.32 | 6.33 | 6.79 6.79 |
| Span Clamps |  |  | PRICE PER 100 PIECES |  |  |
| 869 | 895024. |  |  | \$33.60 |  |

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| Guy Wire Protectors |  |  |  |  |  | PRICES PER 100 PIECES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. Na | Stock No. |  | Standard Package |  |  | Zone 1 | Zone 2 | Zоде 3 |
| 7657 | 891980 | 7' | 2. |  |  | \$383.22 | \$388.71 | \$413.36 |
| 7658 | 891981 | $8^{\prime}$ | 2. |  |  | 408.90 | 415.31 | 444.07 |
| 27657 | 891982 | 7' | 2. |  |  | 462.09 | 469.42 | 502.29 |
| 27658 | 891983 | $8{ }^{\prime}$ | 2. |  |  | 490.24 | 498.48 | 535.45 |
| Cable Suspension Screws and Clamps |  |  |  |  |  |  |  |  |
| 8966 | 895408 |  | 100. |  |  | 51.10 | 51.70 | 54.37 |
|  |  |  |  | Standard Package | Less Stondard Package |  |  |  |
| PA-166 | 895407 |  | 200........... | \$20.30 | \$22.80 |  |  |  |
| PA-166A | 895785 |  | 200........... | 20.30 | 22.80 |  |  |  |
| J8236-B | 895439 |  | 30. |  |  | 78.96 | 79.93 | 84.24 |
| J8235-C | 895440 |  | 20. |  |  | 131.27 | 132.79 | 139.55 |
| Universal Messenger Hangers |  |  |  |  |  |  |  |  |
| 8911 | 891795 |  | 20. |  |  | 116.98 | 118.47 | 125.15 |
| 8912 | 891796 |  | 25. |  |  | 89.60 | 90.73 | 95.83 |
| Non-Breakable Messenger Hangers |  |  |  |  |  |  |  |  |
| 8914 | 891793 |  | 50... |  |  | 123.67 | 124.55 | 128.48 |
| 8915 | 891794 |  | 50... |  |  | 124.85 | 125.65 | 129.31 |



## page 10 m continued

Issue Date: 12-1-56

| Storm Guy Hooks |  |  | PRICES PER 100 PIECES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Standard Package | Zope 1 | Zone 2 | Zone 3 |
| 6001 | 891803 | 50. | \$ 44.27 | \$ 45.50 | \$ 46.99 |
| 6002 | 891804 | 50. | 60.10 | 61.11 | 65.31 |
| 6004 | 891805 | 100. | 24.50 | 24.88 | 26.51 |
| Reinforcing Links |  |  |  |  |  |
| 8919 | 891806 | 50. | 80.36 | 81.70 | 83.33 |
| 8929 | 891807 | 50. | 101.81 | 102.43 | 105.17 |
| Guy Hooks |  |  |  |  |  |
| 7583-1/2 | 891799 | 200. | 11.04 | 11.22 | 12.02 |
| 7584 | 891800 | 100. | 24.00 | 24.37 | 26.00 |
| 7585 | 891801 | 100. | 17.08 | 17.36 | 18.62 |
| 7586 | 891802 | 100. | 24.00 | 24.39 | 26.19 |
| Hub Guards |  |  |  |  |  |
| 7101 | 891790 | 5. | 242.99 | 247.75 | 269.12 |
| 7102 | 891791 | 2. | pplication |  |  |
| 7103 | 891792 | 2. | 828.93 | 846.91 | 884.14 |
| Reinforcing and Safety Straps. |  |  |  |  |  |
| 8905 | 891725 | 250. | 18.55 | 18.78 | 19.84 |
| 8906 | 891726 | 100. | 59.93 | 60.85 | 61.89 |
| 8907 | 891727 | 50.. | 101.78 | 103.21 | 104.86 |

## page llm

| Hubbard Strain Plates |  |  | PRICES PER 100 PIECES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | ( Standard | Zone 1 | Zone 2 | Zone 3 |
| 7575 | 891847 | 100.. | \$ 20.53 | \$ 20.93 | \$ 22.70 |
| 7576 | 891848 | 100. | 24.61 | 25.01 | 26.78 |
| Hubbard Flat Lift Plates |  |  |  |  |  |
| 8891 | 891814 | 50. | 37.37 | 39.22 | 41.41 |
| Hubbard Load or Breast Plates |  |  |  |  |  |
| 8877 | 891809 | 50. | 30.34 | 31.80 | 33.50 |
| 8878 | 891810 | 50. | application |  |  |
| Hubbard Hook Type Strain Plate. |  |  |  |  |  |
| 7577 | 891849 | 50. | 63.70 | 64.37 | 67.36 |

(Premax Letters and Figures and Escutcheon Pins-Price on application)

| Square Washers |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 7811 | 892051 | 500. | 3.44 | 3.50 | 3.78 |
| 7812 | 892052 | 500. | 3.44 | 3.50 | 3.78 |
| 7812-1/2 | 892053 | 250. | 4.20 | 4.27 | 4.60 |
| 7813 | 892054 | 250. | 5.99 | 6.10 | 6.63 |
| 7813-1/2 | 892055 | 250. | 5.99 | 6.10 | 6.63 |
| 7814 | 892056 | 250. | 5.99 | 6.10 | 6.63 |
| 7816 | 892057 | 100. | 11.56 | 11.80 | 12.82 |
| 7817 | 892058 | 100. | 13.81 | 14.10 | 15.40 |

Prices on other sizes available on request.

| Curved Washers. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 7822 | 892048 | 250. | 7.96 | 8.09 | 8.74 |
| 7823 | 892049 | 100. | 14.00 | 14.30 | 15.66 |
| 7824 | 892050 | 100. | 22.03 | 22.38 | 24.01 |
| 7825 | 891872 | 100. | 16.40 | 16.77 | 17.65 |


| Round Washers |  |  | PRICES PER 100 PIECES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Standard Package | Zone 1 | Zone 2 | Zone 3 |
| 7801 | 892043 | 5000. | \$ 1.00 | \$ 1.01 | \$ 1.03 |
| 7802 | 892044 | 2500. | 1.41 | 1.43 | 1.49 |
| 7803 | 892045 | 1500. | 1.99 | 2.01 | 2.09 |
| 7805 | 892046 | 1000. | 3.78 | 3.81 | 3.99 |
| 7806 | 892047 | 500. | 4.58 | 4.63 | 4.87 |

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| Pole Dating Nails |  |  | PRICES PER 100 PIECES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Standard Package | Zone 1 | Zone 2 | Zone 3 |
|  | 891818 | 1000. | \$ 3.30 | \$ 3.36 | \$ 3.41 |


| 9603 | 891566 | 500. | 5.46 | 5.51 | 5.75 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 9603-1/2 | 891567 | 500. | 5.81 | 5.88 | 6.16 |
| 9604 | 891568 | 500. | 6.17 | 6.24 | 6.54 |
| 9604-1/2 | 891569 | 500. | 6.45 | 6.53 | 6.87 |
| 9605 | 891570 | 250. | 6.94 | 7.02 | 7.40 |
| 9605-1/2 | 891571 | 250. | 7.30 | 7.40 | 7.82 |
| 9606 | 891572 | 250. | 7.67 | 7.77 | 8.23 |
| 9704-1/2 | 891573 | 200. | 11.01 | 11.16 | 11.85 |
| 9705 | 891575 | 200. | 11.79 | 11.94 | 12.69 |
| 9706 | 891576 | 200. | 12.60 | 12.79 | 13.60 |
| 9707 | 891571 | 100. | 16.89 | 17.12 | 18.09 |
| 9708 | 891578 | 100. | 17.84 | 18.07 | 19.15 |
| 9710 | 891579 | 100. | 19.74 | 20.03 | 21.28 |
| 9712 | 891580 | 100. | 21.73 | 22.05 | 23.49 |
| 9714 | 891581 | 100. | 23.73 | 24.10 | 25.71 |
| 9806 | 891585 | 100. | 20.66 | 20.98 | 22.35 |
| 9807 | 891586 | 100. | 22.25 | 22.60 | 24.16 |
| 9808 | 891587 | 100. | 23.79 | 24.17 | 25.87 |
| 9810 | 891588 | 50. | 26.82 | 27.26 | 29.23 |
| 9812 | 891589 | 50. | 29.94 | 30.44 | 32.74 |
| 9814 | 891590 | 50. | 33.04 | 33.62 | 36.26 |
| 9816 | 891591 | 50. | 36.20 | 36.87 | 39.86 |
| 9818 | 891592 | 35. | 39.32 | 40.06 | 43.39 |

Prices on other sizes available upon request.

| 9232 | 891222 |  | 6.28 | 6.31 | 6.46 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 9233 | 891223 |  | 7.97 | 8.07 | 8.28 |
| 9603 | 891566 | 500. | 5.46 | 5.51 | 5.75 |
| 9605-1/2 | 891571 | 250. | 7.30 | 7.40 | 7.82 |

Issue Date: 4-15-57

| Lag Screws |  |  | PRICES PER 100 PIECES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Standard Package | Zone 1 | Zone 2 | Zone 3 |
| 9722 | 891990 | 2000. | \$ 4.09 | \$ 4.10 | \$4.15 |
| 9722-1/2 | 891991 | 2000. | 4.41 | 4.42 | 4.49 |
| 9732 | 891992 | 1000. | 4.55 | 4.57 | 4.67 |
| 9732-1/2 | 891993 | 1000. | 4.87 | 4.89 | 5.01 |
| 9733 | 891994 | 1000. | 5.34 | 5.37 | 5.51 |
| 9733-1/2 | 891995 | 500. | 5.79 | 5.84 | 5.99 |
| 9742-1/4 | 891996 | 1000. | 4.96 | 4.99 | 5.15 |
| 9742-1/2 | 891997 | 1000. | 5.09 | 5.12 | 5.31 |
| 9743 | 891998 | 1000. | 5.46 | 5.51 | 5.70 |
| 9743-1/2 | 891999 | 500. | 5.87 | 5.91 | 6.18 |
| 9744 | 892000 | 500. | 6.23 | 6.29 | 6.55 |
| 9744-1/2 | 892001 | 500. | 6.60 | 6.66 | 6.95 |
| 9745 | 892002 | 500. | 6.98 | 7.06 | 7.37 |
| 9752-1/2 | 892003 | 500. | 6.96 | 7.02 | 7.34 |
| 9753 | 892004 | 250. | 7.27 | 7.35 | 7.75 |
| 9753-1/2 | 892005 | 250. | 7.86 | 7.96 | 8.39 |
| 9754 | 892006 | 250. | 8.44 | 8.54 | 9.00 |
| 9754-1/2 | 892007 | 250. | 9.00 | 9.11 | 9.58 |

Prices on other sizes available upon request.

TO DETERMINE YOUR COST ON POLE LINE HARDWARE
Prices as shown are based upon ordering in standard package quantities. If less than standard package quantities are ordered add $15 \%$ to the price.

| Carriage Bolis |  |  | PRICES PEA 100 PIECES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Standard Package | $\underline{\text { Zone } 1}$ | Zone 2 | Zone 3 |
| 9633 | 891552 | 500. | \$ 4.91 | \$ 4.98 | \$ 5.22 |
| 9633-1/2 | 891553 | 500. | 5.34 | 5.41 | 5.72 |
| 9634 | 891554 | 500. | 5.68 | 5.76 | 6.07 |
| 9634-1/2 | 891555 | 250. | 6.07 | 6.14 | 6.47 |
| 9635 | 891556 | 250. | 6.49 | 6.57 | 6.98 |
| 9635-1/2 | 891557 | 250. | 6.85 | 6.96 | 7.37 |
| 9636 | 891558 | 250. | 7.23 | 7.33 | 7.77 |

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| Double Arming Bolts |  |  | PRICES PER 100 PIECES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Standard <br> Package | Zone 1 | Zona 2 | Zone 3 |
| 9844 | 891610 | 50. | \$ 30.76 | \$ 31.20 | \$ 33.13 |
| 9846 | 891611 | 50. | 33.23 | 33.70 | 35.84 |
| 9848 | 891612 | 50. | 35.55 | 36.04 | 38.25 |
| 9850 | 891613 | 50. | 38.09 | 38.65 | 41.16 |
| 9852 | 891614 | 50. | 40.70 | 41.32 | 44.16 |
| 9854 | 891615 | 50. | 43.16 | 43.83 | 46.87 |
| 9864 | 891617 | 50. | 44.67 | 45.30 | 48.21 |
| 9866 | 891618 | 25. | 47.98 | 48.68 | 51.88 |
| 9868 | 891619 | 25. | 51.31 | 52.09 | 55.58 |
| 9870 | 891620 | 25. | 54.65 | 55.49 | 59.31 |

Prices on Pole Line Hardware not listed are available upon request.

Issue Date: 4-15-57

| Hubbard Straight and Angle Hubeye Bolts |  |  |  | PRICES PER 100 PIECES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cat Na. | Stock No. |  | Standard Package | Zone 1 | Zone 2 | Zone 3 |
| 9058 Str. | 891630 |  | 50. | \$ 51.48 | \$ 52.07 | \$ 54.69 |
| 9060 Str. | 891631 |  | 50. | 55.01 | 55.68 | 58.67 |
| 9062 Str. | 891632 |  | 50. | 58.54 | 59.27 | 62.59 |
| 9064 Str. | 891633 |  | 25. | 62.08 | 62.88 | 66.52 |
| 9150 Angle | 891637 |  | 50. | 53.50 | 54.13 | 56.94 |
| 9151 Angle | 891638 |  | 50. | 57.02 | 57.71 | 60.84 |
| 9152 Angle | 891639 |  | 50. | 60.53 | 61.31 | 64.72 |
| 9153 Angle | 891640 |  | 25. | 64.06 | 64.88 | 68.62 |
| Extra Nuts Only |  |  |  |  |  |  |
|  | 894148 | $1 / 2^{\prime \prime}$ | 100. | 4.07 | 4.10 | 4.27 |
|  | 894468 | $5 / 3^{\prime \prime}$ | 100. | 7.07 | 7.15 | 7.44 |
|  | 894484 | $34^{\prime \prime}$ | 100. | 10.75 | 10.86 | 11.35 |
| Drop Forged Angle Bolt Hubeyes |  |  |  |  |  |  |
| 1100 | 891844 |  | 50. | 54.13 | 54.67 | 57.02 |
| 1101 | 891845 |  | 50. | 54.13 | 54.67 | 57.02 |
| Drop Forged Hubeye Nuts |  |  |  |  |  |  |
| 7509 | 891826 | $1 / 2^{\prime \prime}$ | 50. | 48.16 | 48.56 | 50.33 |
| 7510 | 891827 | 5\%" | 50. | 48.16 | - 48.56 | 50.33 |
| 7511 | 891828 | 3/4" | 50. | 53.82 | 54.19 | 55.88 |
| 7512 | 891829 | $1 "$ | 50. | 88.50 | 90.66 | 93.19 |
| Drop Forged Straight Bolt Hubeyes |  |  |  |  |  |  |
| 7519 | 891837 | $3 / 8{ }^{\prime \prime}$ | 50. | 70.24 | 70.79 | 73.21 |
| 7520 | 891838 | $34^{\prime \prime}$ | 50. | 70.24 | 70.79 | 73.21 |

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| Cat. No. | Stock No. | Standard Package | Zone 1 | Zone 2 | Zone 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 9200 | 891226 | 100. | \$ 16.80 | \$ 17.07 | \$ 18.22 |
| 9202 | 891227 | 100. | 23.01 | 23.44 | 25.37 |
| Corner Brackets |  |  |  |  |  |
| 9204 | 891228 | 100. | 28.84 | 29.13 | 30.50 |
| 9205 | 891229 | 100. | 30.61 | 30.96 | 32.57 |
| Hubbard Drive Hook and Screw Hook |  |  |  |  |  |
| 1316 | 894978 | 200. | 15.91 | 16.04 | 16.59 |
| 1317 | 894979 | 500. | 7.92 | 7.96 | 8.18 |


| Kec | ouse | PRICE | PER 100 |
| :---: | :---: | :---: | :---: |
| Cat No. | Stock No. | Lers than 500 | 500 or more |
| 8031 | 893048 | \$14.10 | \$ 13.45 |
| 6766-1 | 893049 | 10.45 | 9.95 |
| 6766-3 | 893050 | 18.15 | 17.30 |

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Issue Date: 4-15-57

| Hubbard U-Cable Guards |  | PRICES PER 100 PIECES |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Standard Package | Zone 1 | Zone 2 | Zone 3 |
| 7531891875 | 5. | \$141.24 | \$149.72 | \$160.80 |
| 7532891876 | 5. | 204.30 | 207.87 | 223.89 |
| 7533 891877 | 5. | 294.63 | 300.30 | 325.73 |
| 7534891878 | 5. | 288.12 | 293.07 | 315.24 |
| 7535891879 | 2. | 409.99 | 418.40 | 456.15 |
| U-Cable Guard Straps |  |  |  |  |
| 7538 891880 | 500. | 10.02 | 10.12 | 10.53 |
| 7539 891881 | 200. | 12.94 | 13.10 | 13.81 |
| 7540891882 | 100. | 33.60 | 33.97 | 35.64 |
| Guy Thimbles |  |  |  |  |
| 1593 892065 | 500......................................... | 9.99 | 10.04 | 10.25 |
| 7594892066 | 250. | 13.53 | 13.62 | 14.09 |
| 7595 892067 | 100.. | 20.51 | 20.71 | 21.58 |

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| Insulated Clevises (Less Insulators) |  |  | PRICES PER 100 PIECES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Standard Package | Zone 1 | Zone 2 | Zone 3 |
| 1343 | 891247 (Uses No. 1606 Insulator) | 50. | \$ 33.70 | \$ 34.15 | \$ 36.11 |
| 561 | 891250 (Uses No. 355 Insulator) | 50. | 55.63 | 56.38 | 59.75 |
| 641 | 891248 (Uses No. 357 Insulator) | 100. | 67.41 | 68.14 | 71.43 |
| 8820 | 891249 (Uses No. 357 Insulator) | 100. | 54.17 | 54.84 | 57.83 |
| Insulators for Use With Above Clevises |  |  |  |  |  |
| 355 | 895135 | 50. | 17.10 | 18.00 | 19.60 |
| 351 | 895136 | 50. | 9.00 | 9.30 | 9.80 |
| 1606 | 894644 | 100. | 10.30 | 10.70 | 11.20 |
| Insulated Fork Bolts (Less Insulators) |  |  |  |  |  |
| 8810 | 891241 (Uses No. 357 Insulator) | 50. | 78.66 | 80.92 | 83.55 |
| 8811 | 891242 (Uses No. 357 Insulator) | 50. | 82.51 | 84.96 | 87.73 |
| 8812 | 891243 (Uses No. 357 Insulator) | 50. | 88.50 | 89.30 | 91.00 |
| 8813 | 891244 (Uses No. 357 Insulator) | 50. | 89.96 | 92.88 | 96.22 |
| 8814 | 891245 (Uses No. 357 Insulator) | 50. | 97.06 | 98.41 | 100.73 |
| 8815 | 891246 (Uses No. 357 Insulator) | 25. | 104.10 | 105.18 | 105.24 |
| Joslyn Upset Spool Bolts (Less Insulator) |  |  |  |  |  |
| J-2342-1/2 | 895444 (Uses No. J101 Insulator) | 50. | 53.53 | 54.18 | 57.05 |
| J-2343-1/2 | 895445 (Uses No. J101 Insulator) | 50. | 55.14 | 55.83 | 58.91 |
| J-2344-1/2 | 895446 (Uses No. J101 Insulator) | $50 .:$ | 56.57 | 57.29 | 60.59 |
| Insulator For Above. |  |  |  |  |  |
| J-101 | 895447 | 50... | 15.50 | 16.39 | 17.78 |
| Chance Terminal Bracket (Less Insulator) |  |  |  |  |  |
| H-14 | 894470 | 100... | 23.83 | 25.01 | 25.79 |
| H-24 | 894471 (Insulator for above) | 100... | 12.70 | 13.20 | 13.80 |

Hubbard Dead End Bracket (Less Insulator)
PRICES PER 100 PIECES

| Cat No. | Stock No. | Standard Package | Zone 1 | Zone 2 | Zone 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2944 | 895013 | 100. | \$23.82 | \$25.00 | \$25.78 |
| 1663 | 894921 (Insulator for above) | 50. | 15.85 | 16.55 | 16.94 |


|  |  |  | page 16 m |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Reliable Strandvises |  |  | PRICE PER 100 PIECES |  |  |
| Cat. No. | Stock No. | Strand | $\begin{gathered} \text { Less Than } \\ \text { Carton } \\ (1.24) \\ \hline \end{gathered}$ | $\begin{gathered} \text { Carton } \\ \text { Quanthy } \\ (25) \end{gathered}$ | $\begin{gathered} \text { Standard } \\ \text { Package } \\ (100) \\ \hline \end{gathered}$ |
| 5099 | 895786 | 3/6". | \$110.00 | \$105.00 | \$ 99.00 |
| 5100 | 895040 | $1 / 4 "$ | 114.00 | 108.00 | 103.00 |
| 5101 | 894957 | $5 / 6$ " | 134.00 | 127.50 | 120.50 |
| 5102 | 894958 | \%" | 165.00 | 157.00 | 148.50 |
| 5103 | 895755 | 76" | 195.50 | 186.00 | 176.00 |
| 5149 | 895781 | 3/6" | 113.00 | 108.00 | 102.00 |
| 5150 | 895041 | $1 / 4^{\prime \prime}$ | 118.00 | 112.00 | 106.00 |
| 5151 | 894959 | 5/k" | 147.00 | 140.00 | 132.50 |
| 5152 | 894960 | $3 / 7$ " | 179.00 | 170.00 | 161.00 |
| 5153 | 895756 | 7/6" | 220.00 | 209.00 | 198.00 |
| 9055 | 894963 | Pulling Hook for all Strandvises | 1.40 |  |  |
| 5171 | 895757 | 3/6" Universal Bail Strandvise. | 188.25 | 178.85 | 169.45 |
| 5172 | 895758 | $3{ }^{\prime \prime}$ " | 220.00 | 209.00 | 198.00 |
| 5175 | 895759 | 5/6" with Flexible Bail. | 205.90 | 195.60 | 185.30 |
| 5176 | 895760 | $3{ }^{\prime \prime}$. | 249.40 | 236.95 | 224.45 |
| Rellable Strandinks |  |  |  |  |  |
| 4999 | 895788 | $3 / 6{ }^{\prime \prime}$. | 103.00 | 98.00 | 93.00 |
| 5000 | 895039 | $1 / 4^{\prime \prime}$ | 105.00 | 99.00 | 94.50 |
| 5001 | 894961 | 5/6" | 121.00 | 115.00 | 109,00 |
| 5002 | 894962 | \%" | 141.50 | 135.00 | 128.50 |
| 5003 | 895761 | 74" | 179.00 | 170.00 | 161.00 |
| 5022 | 895762 | 3/2".5/k" Reducer. | 155.00 | 146.00 | 139.00 |
| 5023. | 895763 | 7/4"-7/4" Reducer | 193.00 | 184.00 | 175.00 |


| Preformed Guy-Grips |  |  | PRICE EACH | Preformed Splices |  |  | PRICE EACH |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Sise | Stock No. |  | Cat. No. | Sime | Stock No. |  |  |  |
| 20GDE | 3/16" | 895933. | \$ . 40 | 27GLS | $3 / 16^{\prime \prime}$ | 895942. |  |  | \$.72 |
| 23GDE | $7 / 2^{\prime \prime}$ | 895934. | . 45 | 29GLS | 7/2" | 895943. |  |  | . 75 |
| 25GDE | $1 / 4{ }^{\prime \prime}$ | 895935 | . 55 | 35GLS | $1 / 4 "$ | 895944. |  |  | . 99 |
| 28GDE | 9/3" | 895936. | . 60 | 38GLS |  | 895945. |  |  | . 99 |
| 30GDE | $5 / 6{ }^{\prime \prime}$ | 895937. | . 75 | 42GLS | 5/6" | 895946. |  |  | 1.26 |
| 35GDE | $3 \%^{\prime \prime}$ | 895938 | . 85 | 50GLS | \%" | 895947 |  |  | 1.66 |
| 38GDE | 7160 | 895939 | 1.45 | 56GLS | 7/6" | 895948. |  |  | 2.32 |
| 40GDE | $12^{\prime \prime}$ | 895940. | 1.80 | 63GLS | $1 / 2^{\prime \prime}$ | 895949. |  |  | 3.23 |
| 45GDE | $9 / 16$ | 895941. | 2.30 | 70GLS | 9610 | 895950. |  |  | 4.02 |
| Preformed | Spli | ces |  | Preformed | Dea | d Ends |  |  |  |
| Cat. No. |  | Stock No. |  | Cat. No. |  | Stock No. |  |  |  |
| 10GLS-083 |  | 895920. | . 24 | 11GDE-083 |  | 895917. |  |  | . 16 |
| 22GLS-083 |  | 895921. | . 31 | 12GDE-109 |  | 895918. |  |  | . 20 |
| 12GLS-109 |  | 895922. | . 27 | 13GDE-135 |  | 895919. |  |  | . 25 |
| 24GLS-109 |  | 895923. | . 35 |  |  |  |  |  |  |
| 14GLS-134 |  | 895924. | . 41 |  |  |  |  |  |  |
| 26GLS-134 |  | 895925. | . 50 |  |  |  |  |  |  |

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| Crossover Brackets |  |  | PRICIS PER 100 piscris |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Standard Package | Zone 1 | Zone 2 | Zone 3 |
| 2384 | 891533 | 1. | \$237.30 | \$244.72 | \$253.31 |
| 2385 | 891534 | 5. | 687.23 | 708.71 | 733.60 |

Pole Steps

| 7123 | 891263 |  | 100.. | 21.87 | 22.20 | 23.70 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7124 | 891264 |  | 100. | 24.37 | 24.76 | 26.51 |
| 7125 | 891265 |  | 100.. | 26.00 | 26.44 | 28.36 |
| 7126 | 891266 |  | 50. | 36.14 | 37.43 | 38.97 |
| 7129 | 891268 |  | 100.. | 32.45 | 32.96 | 35.21 |
| Braces-Side Extension Fixtures. |  |  |  |  |  |  |
| 8050 | 891529 | Diagonal | 1. | 517.07 | 526.00 | 566.06 |
| 8051 | 891530 | Back | 1. | 348.87 | 355.65 | 386.04 |
| 8052 | 891531 | Back | $1 .$. | 409.09 | 417.10 | 453.05 |
| 8054 | 891532 | Vertical | $1 .$. | 207.30 | 210.59 | 225.39 |

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| Flat Cr | m Brac |  |  | PER 100 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stack No. | Standard Package | Zone 1 | Zone 2 | 20ne 3 |
| 8020 | 891487 | 20. | \$ 30.40 | \$ 30.99 | \$ 33.67 |
| 8022 | 891488 | 20. | 33.20 | 33.86 | 36.82 |
| 8024 | 891489 | 20. | 36.00 | 36.72 | 39.95 |
| 8028 | 891490 | 20. | 38.78 | 39.56 | 43.06 |
| 8028 | 891491 | 20. | 41.63 | 42.48 | 46.28 |
| 8030 | 891492 | 20. | 44.47 | 45.38 | 49.50 |
| 8032 | 891493 | 20. | 47.30 | 48.29 | 52.70 |
| 8120 | 891494 | 20. | 34.80 | 35.58 | 39:07 |
| 8122 | 891495 | 20. | 37.89 | 38.74 | 42.54 |
| 8124 | 891496 | 20. | 40.98 | 41.89 | 46.00 |
| 8126 | 891497 | 20. | 44.06 | 45.05 | 49.45 |
| 8128 | 891498 | 20. | 47.15 | 48.21 | 52.93 |
| 8130 | 891499 | 20. | 50.23 | 51.35 | 56.38 |
| 8132 | 891500 | 20. | 53.32 | 54.51 | 59.86 |
| Alley | Braces |  |  |  |  |
| 7979 | 891501 | 1. | 350.88 | 356.84 | 383.54 |
| 7981 | 891502 | 1. | 316.99 | 322.02 | 344.63 |
| 7982 | 891503 | 1. | 352.38 | 358.33 | 385.04 |
| 7983 | 891504 | 1. | 398.55 | 415.70 | 435.56 |
| 7984 | 891505 | 1. | 435.66 | 443.68 | 479.63 |
| 7985 | 891506 | 1. | 859.71 | 875.73 | 947.63 |

Verfical Braces
$\left.\begin{array}{l}\text { Cross Arm Back Braces } \\ \text { Angle Cross Arm Braces }\end{array}\right\}$ Prices on application
E.E.I. Standard Braces

| Point Type Transposition Brackets |  |  |  | PRICES PER 100 PIECES |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Standard Package | Zone 1 | Zone 2 | Zone 3 |
| 9272-LT | 894392 | 5. | \$314.64 | \$328.93 | \$338.44 |
| 9273-LT | 894393 | 5. | 314.64 | 328.93 | 338.44 |
| 9272 | 894390 | 5. | 286.05 | 300.34 | 309.87 |
| 9273 | 894391 | 5. | 286.05 | 300.34 | 309.87 |
| Aluminum Point Transposition Brackets |  |  |  |  |  |
| SE-1611 | 895441 | 20. |  |  | \$3.10 each |
| SE-1590 | 895442 | 20. |  |  | 3.10 each |
| Crossarm Point Type |  |  |  |  |  |
| SE-1648 | 895764 | 10. |  |  | 3.10 each |
| SE-1780 | 895765 | 10. |  |  | 3.10 each |
| Aluminum Transposition Brackets |  |  |  |  |  |
| PM-101 | 895178 | 20. |  |  | 1.96 each |

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| T |  |  | PRICES PER 100 PIECES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | - Standard | Zone 1 | Zone 2 | Zone 3 |
| J-18 | 891545 | 1. | \$ 68.01 | \$ 68.57 | \$ 71.12 |
| J-19 | 891546 | 1. | 94.46 | 95.30 | 99.07 , |
| J-20 | 891547 | 1. | 232.22 | 233.48 | 239.15 |
| J-21 | 891548 | 1. | 410.31 | 412.63 | 423:02 |
| One-Piece Transposition Brackets |  |  |  |  |  |
| 9260 | 894710 | 20. | 139.95 | 141.40 | 147.76 |
| 9261 | 894711 | 20. | 142.01 | 143.47 | 150.05 |
| 9262 | 894712 | 5. | 445.87 | 450.27 | 469.99 |
| Pole Bracket |  |  |  |  |  |
| 152 | 891541 | 25 | 106.99 | 108.14 | 113.22 |
| Standard Transposition Brackets |  |  |  |  |  |
| 9249 | 891549 | 25. | 75.06 | 76.16 | 81.09 |
| 9251 | 891550 | 25. | 75.41 | 76.57 | 81.70 |
| Pressed Steel Pole Brackets |  |  |  |  |  |
| 137 | 891540 |  | 95.96 | 97.77 | 99.85 |
| Tandem Transposition Brackets |  |  |  |  |  |
| 9271 | 894713 | 10. | 59.14 | 60.45 | 66.13 |
| 9278 | 894714 | 10. | 95.79 | 97.17 | 103.33 |
| Carriage Bolt Especially for Above_ |  |  |  |  |  |
| 9676 | 895033 | 100.. | 19.76 | 20.06 | 21.40 |

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Issue Date: 4-15.57

| Hubbard Pinch Bracket |  |  | R 100 PIECES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Standard Package | Zone 1 | Zone 2 | Zone 3 |
| 9288 | 897189 |  | \$ 92.24 | \$ 93.35 | \$ 98.35 |



| 8000 | 891298 | 100. | 29.44 | 29.76 | 31.20 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 8005 | 891299 | $50 .$. | 46.03 | 46.50 | 48.68 |
| 8010 | 891302 | 100. | 28.68 | 28.90 | 29.82 |
| 8011 | 891305 | 100.. | 41.23 | 41.83 | 42.52 |
| 8012 | 897190 |  | 44.55 | 44.84 | 46.17 |
| 8015 | 891303 | 100.. | 44.55 | 44.84 | 46.17 |
| 8016 | 891306 |  | 44.55 | 44.84 | 46.17 |

"Prices on Pole Line Hardware not listed available on request"


Wood Top Pins with Steel Bolts
Prices on all sizes available on application.

## PAGE 22m

| Pole Balconies - Hot Galvanized |  |  | PRICE PER HUNDRED |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat, No. | Stock No. | Standard Package | Zone 1 | Zone 2 | Zone 3 |
| 9035 | 891850 |  | 5576.01 | 5654.01 | 5744.38 |
| Pole Seats |  |  |  |  |  |
| 755 | 891851 | 5. | 609.97 | 624.82 | 642.01 |
| 757 | 891852 | 5.... | plication |  |  |


| Chanc | Y Platfo | PRICE EACH |
| :---: | :---: | :---: |
| M4950 | 897187 | \$37.75 |

page 4n
Poles
Prices on application
PAGE 5 n

| Cross Arms-Electric Light Arms (31/4 $\times 41 / 4$ inches) |  |  | PRICE PER 100 ARMS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Stack No. | $\underline{\text { Leagth Ft. }}$ | Pin Holes | F.O.B. Chicago New Orleang | F.O.B. Kansas Clty |  |
| 891140. | 3 | 2 | \$142.28 | \$140.18 | \$145.16 |
| 891141. | 4 | 4 | 189.70 | 186.90 | 193.55 |
| 891142. | 5 | 4 | 237.13 | 233.63 | 241.94 |
| 891143. | 6 | 4 | 284.56 | 280.35 | 290.33 |
| 891144. | 6 | 6 | 284.56 | 280.35 | 290.33 |
| 891145. | 8 | 6 | 393.40 | 387.81 | 401.10 |
| 891146. | 8 | 8 | 393.40 | 387.81 | 401.10 |
| 891147. | $81 / 2$ | 10 | 442.58 | 436.28 | 451.24 |
| 891148. | 10 | 8 | 491.75 | 484.76 | 501.38 |
| 891149. | 10 | 10 | 491.75 | 484.76 | 501.38 |

Pony Telephone Arms ( $23 / 4 \times 33 / 4$ inches)

| 891153 | 42 | 4 | 155.20 | 153.07 | 158.14 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 891154 | 62 | 6 | 232.80 | 229.60 | 237.20 |
| 891155 | 82 | 8 | 271.60 | 267.87 | 276.74 |
| 891156 | 102 | 10 | 349.20 | 344.40 | 355.81 |
| 891157 | 120 | 12 | 388.00 | 382.67 | 395.34 |

## Yellow Pine Arms - Prices on Application

## Wood Pins and Brackets



## page on

Issue Date: 12-1-56

| Pole Steps and Corner Pins |  |  | F.O.B. <br> Chicago |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Std. Package |  |  |  | $\begin{gathered} \text { F.O.B. } \\ \text { Kansas City } \end{gathered}$ |  | $\begin{gathered} \text { F.O.B. } \\ \text { Rochester } \end{gathered}$ |
|  |  |  | $\begin{aligned} & \text { Std. Pkg. } \\ & \text { to } 5000 \end{aligned}$ |  |  | Std. Pkg.to 5000 |  | $\begin{aligned} & \begin{array}{l} \text { Std. Pkg } \\ \text { to SOOD } \end{array} \\ & \hline \end{aligned}$ |
| J2662 | 891269 | 20 | \$6.34 |  |  | \$6.90 |  | \$5.99 |
| Locust Pin | Bushings |  | PRICES PER 100 PIECES |  |  |  |  |  |
|  |  |  | F.O.B. Ka | aid City | Chicago | F.O. | Rocheat |  |
| Cat. No. | Stock No. |  | $\begin{gathered} \text { Legs than } \\ 1000 \\ \hline \end{gathered}$ | $\begin{array}{r} 1000 \text { to } \\ \hline 5000 \\ \hline \end{array}$ | $\begin{gathered} 5000 \text { and } \\ \mathrm{O}_{\mathrm{ver}} \\ \hline \end{gathered}$ | $\begin{gathered} \text { Less than } \\ 1000 \\ \hline \end{gathered}$ | $\begin{aligned} & 1000 \text { to } \\ & 5000 \\ & \hline \end{aligned}$ | $\begin{gathered} 5000 \text { and } \\ \text { Over } \end{gathered}$ |
| $\begin{aligned} & 11 / 6 " 1 \\ & 9 / 160 " \end{aligned}$ | $\begin{aligned} & 895184 . . \\ & 895159 . . \end{aligned}$ |  | \$41.00 | \$38.00 | \$32.75 | \$40.25 | \$37.25 | \$32.25 |

Carbolineum
891279......................................... . . Prices on application

C-A Wood Preserver
891280.

Prices on application

| Bracket Straps |  |  | PRICES PER 100 PIECES |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Standard Package |  | Zone 1 | Zone 2 | Zone 3 |
| 8065 | 891285 | 250. |  | \$10.23 | \$10.37 | \$10.56 |
| 8066 | 891286 | 250. |  | 11.09 | 11.34 | 11.66 |
| 8067 | 891287 | 250. |  | 10.84 | 10.96 | 11.50 |
| 8068 | 891288 | 500. |  | 8.83 | 8.91 | 9.22 |
| 8089 | 891289 | 250. |  | 10.23 | 10.37 | 10.56 |
| 8090 | 891290 | 250. |  | 4.90 | 4.92 | 5.06 |
| 8098 | 891291 | 250. |  | 10.09 | 11.19 | 11.60 |
| 8099 | 891292 | 250. |  | 4.90 | 4.92 | 5.60 |
| J2562 | 894663 | 250. |  | 8.04 | 8.14 | 8.56 |
| J2563 | 894664 | 200. |  | 10.09 | 10.23 | 11.60 |

PAGE 3p

| Regular Lead |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 26 AWG Type 26-S-85 .085 MC |  |  | 24 AWG Type 24-S-90 .09 MC |  |  | 22 AWG Type 22-S. 90 .09 MC |  |  | 19 AWG Type 19-S.90 .09 MC |  |  |
| $\begin{gathered} \text { Number } \\ \text { Pairs } \end{gathered}$ | $\begin{gathered} \text { Sheothth } \\ \text { Inches } \end{gathered}$ | $\begin{gathered} L_{i s t}^{L_{i s t}} \\ P_{p+e} \\ 1000 \end{gathered}$ | $\begin{gathered} \text { Shpg. } \\ \text { Stot } \\ \text { Pot } \\ \text { Poor } \end{gathered}$ | $\begin{aligned} & \text { Sheath } \\ & \text { Incheres } \end{aligned}$ |  | $\begin{gathered} \text { Shpg. } \\ \text { St. } \\ \text { Pot } \\ \text { IOOO } \end{gathered}$ | Sheath in Inches |  | $\begin{gathered} \text { Shpg. } \\ \text { St. } \\ \text { Petr } \\ 1000 \end{gathered}$ | Sheath ${ }_{\text {Inches }}^{\text {in }}$ | $\begin{gathered} \text { List } \\ \text { Price } \\ \text { Poer } \\ 10000^{\prime} \end{gathered}$ |  |
| 6 |  |  |  |  |  |  |  |  |  | . 063 | \$217.10 | 500 |
| 11 | . 061 | \$143.50 | 340 | . 061 | \$164.70 | 370 | 063 | \$213.50 | 480 | . 065 | 306.00 | 675 |
| 16 | . 061 | 164.70 | 370 | . 062 | 200.60 | 430 | . 064 | 258.20 | 580 | . 067 | 392.90 | 835 |
| 26 | . 063 | 215.30 | 480 | . 064 | 258.20 | 530 | . 066 | 346.50 | 735 | . 070 | 543.50 | 1100 |
| 51 | . 065 | 316.50 | 690 | . 067 | 397.60 | 800 | . 070 | 553.50 | 1095 | . 075 | 891.20 | 1635 |
| 76 | . 067 | 411.20 | 890 | . 069 | 523.50 | 1020 | . 073 | 737.60 | 1380 | . 080 | 1254.10 | 2325 |
| 101 | . 069 | 507.10 | 1080 | . 071 | 646.50 | 1200 | . 076 | 921.20 | 1660 | . 084 | 1590.60 | 2805 |
| 152 | . 072 | 694.10 | 1450 | . 075 | 896.50 | 1620 | . 080 | 1275.90 | 2320 | . 090 | 2237.10 | 3870 |
| 202 | . 074 | 855.30 | 1690 | . 078 | 1118.20 | 1950 | . 084 | 1612.40 | 2740 | . 095 | 2900.00 | 5040 |
| 303 | . 078 | 1178.20 | 2250 | . 082 | 1565.90 | 2650 | . 091 | 2286.50 | 3900 | . 104 | 4158.80 | 6975 |
| 404 | . 082 | 1479.40 | 2570 | . 087 | 1988.20 | 3285 | . 095 | 2932.90 | 4750 | . 112 | 5385.30 | 9075 |
| 455 | - | - |  |  |  |  |  |  |  | .175 | 6065.00 | 10015 |
| 606 | . 088 | 2165.30 | 3680 | . 093 | 2932.90 | 4625 | . 104 | 4347.60 | 6845 |  | - |  |
| 1. Quantity Discounts2,500 feet and over 1,000 feet to 2,499 feet |  |  |  | List Less 15\% |  |  | 500 feet to 250 feet to |  | 999 feet | List Less List |  |  |
|  |  |  |  | List Less 10\% |  |  | The total quantity determines the price to |  |  |  |  |  |

Cable Reels will be charged extra but are returnable for full credit within one year after date of purchase. Write for shipping instructions before returning empty reels. 2. Delivery-Prices are f.o.b. Factory. For delivered prices see below.

| state | $\begin{aligned} & \text { Factor Por C.W.T. } \\ & L . C L \end{aligned}$ |  | State | $\begin{aligned} & \text { Factor Per C.W.T. } \\ & \text { L.C.L. } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama. | \$2.85 | \$1.90 | Nevada. | \$3.05 | \$2.90 |
| Arizona. | 3.55 | 2.45 | New Hampshire. | 1.50 | . 90 |
| Arkansas. | 3.70 | 2.25 | New Jersey | . 85 | . 45 |
| California. | 2.85 | 2.00 | New Mexico | 5.25 | 3.10 |
| Colorado. | 4.45 | 2.85 | New York: |  |  |
| Connecticut. | 1.00 | . 70 | New York City and |  |  |
| Delaware. | 1.10 | . 70 | Westchester County. | . 60 | . 30 |
| District of Columbia. | 1.30 | . 75 | Balance of State. | 1.30 | . 75 |
| Florida. | 3.00 | 2.00 | North Carolina. | 1.95 | 1.30 |
| Georgia | 2.60 | 1.65 | North Dakota. | 3.95 | 2.50 |
| Idaho. . | 3.80 | 2.90 | Ohio.. | 2.20 | 1.10 |
| Illinois. | 2.70 | 1.45 | Oklahoma | 3.90 | 2.45 |
| Indiana. | 2.50 | 1.25 | Oregon. | 3.00 | 2.30 |
| Iowa. | 3.05 | 1.95 | Pennsylvania. | 1.40 | . 70 |
| Kansas. | 3.75 | 2.35 | Rhode Island. | 1.30 | . 85 |
| Kentucky. | 2.60 | 1.45 | South Carolina | 2.25 | 1.50 |
| Louisiana. | 3.50 | 2.30 | South Dakota. | 3.80 | 2.40 |
| Maine. | 1.80 | 1.00 | Tennessee. | 2.65 | 1.80 |
| Maryland. | 1.30 | . 75 | Texas. | 4.45 | 2.65 |
| Massachusetts. | 1.30 | . 75 | Utah. | 3.65 | 2.85 |
| Michigan. | 2.35 | 1.30 | Vermont. | 1.45 | . 90 |
| Minnesota . | 3.30 | 2.10 | Virginia | 1.60 | . 90 |
| Mississippi. | 3.05 | 2.05 | Washington. | 3.00 | 2.30 |
| Missouri. | 3.15 | 2.00 | West Virginia. | 1.85 | 1.00 |
| Montana. | 5.45 | 3.30 | Wisconsin | 2.75 | 1.65 |
| Nebraska. | 3.80 | 2.45 | Wyoming. | 4.85 | 3.05 |

Where delivered prices are required, multiply shipping weight per 1000 feet as indicated above by the factor per 100 lbs. shown opposite the State in which destination is located and add the resultant amount to the F.O.B. Factory price. CL factors are to be used only when total shipping weight of all items on an inquiry is not less than $30,000 \mathrm{lbs}$.

## page 4p

Issue Date: 4-15-57
Type 775-P Telephone Cable For Aerial or Duct Service $\qquad$

| $\begin{gathered} \text { Total } \\ \text { Noir } \\ \text { Pairs } \end{gathered}$ | $\begin{gathered} \text { Guart'd } \\ \text { Noirs } \\ \text { Pab } \end{gathered}$ | $\underset{\text { Finish }}{\text { Approx. }}$ O.D. | $\begin{gathered} \text { Net Wt. } \\ \begin{array}{c} \text { Per } \end{array} . \end{gathered}$ | Nominal Reel Length <br> Length | Approx. Shpg. Wt. | List Price Per M Meet Freight Mllowed to Destination in United States |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Size 24 AWG Copper Conductors |  |  |  |  |  |  |
| 11 | 11 | .40" | 87 | $500{ }^{\prime}$ | 95 | \$ 108.00 |
| 16 | 15 | .46" | 112 | $500{ }^{\prime}$ | 128 | 141.00 |
| 26 | 25 | .54" | 159 | $500{ }^{\prime}$ | 178 | 203.00 |
| 51 | 50 | .72" | 277 | $300{ }^{\prime}$ | 315 | 367.00 |
| 76 | 75 | .84" | 384 | 2500' | 448 | 528.00 |
| 101 | 100 | .96" | 500 | $2000^{\prime}$ | 580 | 691.00 |
| 152 | 150 | 1.24" | 810 | $100{ }^{\prime}$ | 920 | 1,120.00 |
| 202 | 200 | $1.41^{\prime \prime}$. | 1025 | $100{ }^{\prime}$ | 1140 | 1,455.00 |
| 303 | 300 | 1.64" | 1427 | $1000^{\prime}$ | 1587 | 2,450.00 |
| 404 | 400 | 1.84" | 1825 | $1000^{\prime}$ | 2030 | 3,218.00 |
| Size 22 AWG Copper Conductors. |  |  |  |  |  |  |
| 11 | 11 | .45" | 113 | $5000^{\prime}$ | 129 | 129.00 |
| 16 | 15 | .51" | 145 | $5000^{\prime}$ | 167 | 184.00 |
| 26 | 25 | .63" | 223 | $500{ }^{\prime}$ | 246 | 252.00 |
| 51 | 50 | .81" | 382 | $300{ }^{\prime}$ | 420 | 465.00 |
| 76 | 75 | .97" | 548 | $200{ }^{\prime}$ | 603 | 660.00 |
| 101 | 100 | 1.09" | 699 | $300{ }^{\prime}$ | 752 | 866.00 |
| 152 | 150 | $1.40^{\prime \prime}$ | 1114 | $100{ }^{\prime}$ | 1274 | 1,385.00 |
| 202 | 200 | 1.57" | 1416 | $100{ }^{\prime}$ | 1603 | 1,822.00 |
| 303 | 300 | 1.85" | 2019 | $100{ }^{\prime}$ | 2324 | 2,850.00 |
| 404 | 400 | $2.10^{\prime \prime}$ | 2611 | $100{ }^{\prime}$ | 2916 | 3,765.00 |
| Size 19 AWG Copper Conductors_ |  |  |  |  |  |  |
| 11 | 11 | .55" | 178 | 5000 | 198 | 195.00 |
| 16 | 15 | .65" | 251 | $500{ }^{\prime}$ | 273 | 272.00 |
| 26 | 25 | .79" | 373 | 5000' | . 409 | 398.00 |
| 51 | 50 | 1.06" | 685 | $2500^{\prime}$ | 749 | 745.00 |
| 76 | 75 | 1.27" | 988 | $300{ }^{\prime}$ | 1055 | 1,130.00 |
| 101 | 100 | 1.45" | 1298 | $300{ }^{\prime}$ | 1365 | 1,471.00 |
| 152 | 150 | 1.80" | 1958 | $1000^{\prime}$ | 2168 | 2,217.00 |
| 202 | 200 | 2.01" | 2519 | $1000^{\prime}$ | 2842 | 2,865.00 |
| 303 | 300 | 2.40 " | 3665 | $1000^{\prime}$ | 4070 | 3,985.00 |
| 404 | 400 | 2.73" | 4820 | $100{ }^{\prime}$ | 5525 | 5,386.00 |

Type 611 -Size 19 AWG Medium Hard Copper Conductors-Multiple Pair Self-Supporting Drop Cable $\begin{array}{lllllll}6 & 6 & .46^{\prime \prime} & 112 & 5000^{\prime} & 121 & 135.00\end{array}$

QUANTITY DISCOUNT-Minimum Quantity Any One Item 250 Feet


DELIVERY: F.O.B. Factory, freight allowed to destination in the continental United States via freight or shipper's option, on shipments of 300 lbs . or more. No freight allowance on shipments of less than 300 lbs.
REELS Included in Prices are Non-Returnable.
TERMS: 1\% 10 Days; Net 30 Days from Date of our Invoice.
Billing will be at price in effect at date of shipment.
All Prices, Terms and Conditions Subject to Change Without Notice.

Issue Date: 4-15-57

## Type 775-AP Armored Telephone Cable For Direct Earth Burial

| $\begin{aligned} & \text { Total } \\ & \begin{array}{c} \text { Naifr } \end{array} \end{aligned}$ | $\begin{gathered} \text { Guart'd } \\ \substack{\text { Nairs }} \end{gathered}$ | $\begin{gathered} \text { Approx. } \\ \text { Finish. } \\ \text { O.D. } \end{gathered}$ |  | $\begin{gathered} \text { Nominal } \\ \text { Reel } \\ \text { Length } \end{gathered}$ | Approx. Per M Ft. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Size 24 AWG Copper Conductors |  |  |  |  |  |  |
| 11 | 11 | .56" | 182 | $400{ }^{\prime}$ | 204 | \$ 196.00 |
| 16 | 15 | . 61 " | 216 | $3000^{\prime}$ | 242 | 237.00 |
| 26 | 25 | .72" | 290 | $300{ }^{\prime}$ | 327 | 328.00 |
| 51 | 50 | .89" | 443 | $300{ }^{\prime}$ | 481 | 519.00 |
| 76 | 75 | $1.02{ }^{\prime \prime}$ | 578 | $2500^{\prime}$ | 648 | 707.00 |
| 101 | 100 | $1.18^{\prime \prime}$ | 761 | $200{ }^{\prime}$ | 841 | 911.00 |
| 152 | 150 | 1.49 " | 1185 | $100{ }^{\prime}$ | 1372 | 1,460.00 |
| 202 | 200 | 1.66 " | 1446 | $1000^{\prime}$ | 1633 | 1,831.00 |
| 303 | 300 | 1.89 " | 1918 . | $1000^{\prime}$ | 2223 | 2,571.00 |
| 404 | 400 | 2.09 " | 2370 | $100{ }^{\prime}$ | 2675 | 3,282.00 |

## Size 22 AWG Copper Conductors

| 11 | 11 | $.62^{\prime \prime}$ | 226 | $4000^{\prime}$ | 248 | 226.00 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 16 | 15 | $.68^{\prime \prime}$ | 269 | $3000^{\prime}$ | 295 | 273.00 |
| 26 | 25 | $.80^{\prime \prime}$ | 379 | $5000^{\prime}$ | 414 | 389.00 |
| 51 | 50 | $.98^{\prime \prime}$ | 564 | $5000^{\prime}$ | 605 | 607.00 |
| 76 | 75 | $1.17^{\prime \prime}$ | 786 | $4000^{\prime}$ | 837 | 839.00 |
| 101 | 100 | $1.31^{\prime \prime}$ | 996 | $3000^{\prime}$ | 1063 | $1,064.00$ |
| 152 | 150 | $1.65^{\prime \prime}$ | 1532 | $1000^{\prime}$ | 1747 | $1,698.00$ |
| 202 | 200 | $1.82^{\prime \prime}$ | 1879 | $1000^{\prime}$ | 2099 | $2,140.00$ |
| 303 | 300 | $2.11^{\prime \prime}$ | 2567 | $1000^{\prime}$ | 2931 | $3,027.00$ |
| 404 | 400 | $2.35^{\prime \prime}$ | 3228 | $1000^{\prime}$ | 3838 | $3,944.00$ |

Size 19 AWG Copper Conductors

| 11 | 11 | $.72^{\prime \prime}$ | 310 | $3000^{\prime}$ | 347 | 290.00 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 16 | 15 | $.83^{\prime \prime}$ | 407 | $4000^{\prime}$ | 436 | 393.00 |
| 26 | 25 | $.98^{\prime \prime}$ | 564 | $4000^{\prime}$ | 608 | 520.00 |
| 51 | 50 | $1.5^{\prime \prime}$ | 942 | $4000^{\prime}$ | 1011 | 856.00 |
| 76 | 75 | $1.48^{\prime \prime}$ | 1324 | $3000^{\prime}$ | 1437 | $1,208.00$ |
| 101 | 100 | $1.68^{\prime \prime}$ | 1706 | $2000^{\prime}$ | 1807 | $1,547.00$ |
| 152 | 150 | $2.05^{\prime \prime}$ | 2484 | $1000^{\prime}$ | 2686 | $2,347.00$ |
| 202 | 200 | $2.26^{\prime \prime}$ | 3117 | $1000^{\prime}$ | 3522 | $3,021.00$ |
| 303 | 300 | $2.65^{\prime \prime}$ | 4361 | $1000^{\prime}$ | 5186 | $4,295.00$ |
| 404 | 400 | $2.98^{\prime \prime}$ | 5616 | $1000^{\prime}$ | 6526 | $5,582.00$ |

QUANTITY DISCOUNT-Minimum Quantity Any One Item 500 Feet
500 feet to 999 feet. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
1,000 feet to 1,999 feet. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . List less 5\%
2,000 feet to 2,499 feet . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . List less $10 \%$
2,500 feet and over . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . List less $15 \%$
Items on this sheet may be combined to obtain quantity discount.
DELIVERY: F.O.B. Factory, freight allowed to destination in the continental United States via freight or shipper's option, on shipments of 300 lbs . or more. No freight allowance on shipments of less than 300 lbs .
REELS Included in Prices are Non-Returnable.
TERMS: $1 \% 10$ Days; Net 30 Days from Date of our Invoice.
Billing will be at price in effect at date of shipment.
All Prices, Terms and Conditions Subject to Change Without Notice.

Issue Date: 4-15-57
Whitney Blake Telecable-Exchange Area Telephone Cable-Aerial \& Duct Service-

| Poly | Insu | olyeth | cketed | ded |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat <br> No. | $\begin{gathered} \text { No. } \\ \text { Total } \\ \text { Palrs } \end{gathered}$ | $\begin{aligned} & \text { Feet } \\ & \text { Rer } \\ & \text { Reel } \end{aligned}$ | $\begin{aligned} & \text { Approx } \\ & \text { Onch. } \end{aligned}$ | ${ }_{S h p g .}{ }^{\text {Apt }}$ Lbs./M' | $\begin{gathered} \text { Left } \\ \text { Price } \\ \text { per M, } \end{gathered}$ |


|  | -So |  | d | Spec |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 11 | 5,000 | . 440 | 96.. | \$ 107.00 |
| 1202 | 16 | 5,000 | . 515 | 132.. | 140.00 |
| 1203 | 26 | 5,000 | . 630 | 194. | 201.00 |
| 1204 | 51 | 2,500 | . 860 | 350. | 364.00 |
| 1205 | 76 | 2,500 | 1.010 | 523. | 516.00 |
| 1208 | 101 | 2,500 | 1.160 | 721. | 699.00 |
| 1207 | 152 | 2,500 | 1.390 | 1045.. | 1,029.00 |
| 1208 | 202 | 1,000 | 1.580 | 1243.. | 1,464.00 |
| 1209 | 303 | 1,000 | 1.650 | 1548 | 2,636.00 |
| 1210 | 404 | 1,000 | 1.910 | 2070.. | 3,418.00 |


| No. 22 | Sof | pper | ed | Spec |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1231 | 11 | 5,000 | . 480 | 128. | 131.00 |
| 1232 | 16 | 5,000 | . 550 | 164. | 182.00 |
| 1233 | 26 | 5,000 | . 700 | 253. | 252.00 |
| 1234 | 51 | 2,500 | . 930 | 459. | 476.00 |
| 1235 | 76 | 2,500 | 1.100 | 673. | 664.00 |
| 1236 | 101 | 2,500 | 1.260 | 915. | 885.00 |
| 1237 | 152 | 2,500 | 1.520 | 1382. | 1,393.00 |
| 1238 | 202 | 1,000 | 1.750 | 1647. | 1,849.00 |
| 1239 | 303 | 1,000 | 2.020 | 2714 | 2,892.00 |
| 1240 | 404 | 1,000 | 2.270 | 3550. | 3,789.00 |


| 1261 | 11 | 5,000 | . 550 | 186. | 199.00 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1262 | 16 | 5,000 | . 660 | 266. | 277.00 |
| 1263 | 26 | 5,000 | . 800 | 407. | 407.00 |
| 1264 | 51 | 2,500 | 1.080 | 751 | 753.00 |
| 1265 | 76 | 2,500 | 1.300 | 1109. | 1,169.00 |
| 1266 | 101 | 2,500 | 1.500 | 1463. | 1,519.00 |
| 1267 | 152 | 1,000 | 1.850 | 2210. | 2,289.00 |
| 1268 | 202 | 1,000 | 2.100 | 2633. | 2,984.00 |



TERMS: $1 / 2$ of $1 \%-10$ days from date of invoice, net 30 days.
DELIVERY: F.O.B. Factory, freight prepaid and allowed to destination in the Continental United States via freight or shipper's option on shipments of 300 pounds or more. No freight allowance on shipments of less than 300 pounds.
REELS: Non-Returnable. No charge will be made for reels and no credit allowed if returned.

Issue Date: 4-15-57
Whitney Blake Telecable-Inside Wiring Cable-Semi-Rigid VinyI InsulafedBrown or Ivory Vinyl Jacketed

| Cat. No. | $\begin{gathered} \text { No. of } \\ \text { Palrz } \end{gathered}$ | Foot. | Approx. O.D. Inchoer | ${ }^{\text {Appros. }}$ Shpg. | List Price per M |
| :---: | :---: | :---: | :---: | :---: | :---: |
| No. 24 AWG-Soft Bare Copper Conductors |  |  |  |  |  |
| 1001 | 6 | 2,500 | . 31 | 59. | \$ 60.00 |
| 1002 | 11 | 2,500 | . 37 | 93. | 101.00 |
| 1003 | 12 | 2,500 | . 38 | 98. | 116.00 |
| 1004 | 16 | 2,500 | . 42 | 122. | 135.00 |
| 1009 | 21 | 2,500 | . 48 | 152. | 163.00 |
| 1005 | 26 | 2,500 | . 52 | 183. | 202.00 |
| 1008 | 32 | 2,500 | . 49 | 216. | 284.00 |
| 1006 | 51 | 2,500 | . 71 | 338. | 386.00 |
| 1007 | 76 | 2,500 | . 84 | 482. | 599.00 |
| No. 22 AWG-Soft Bare Copper Conductors |  |  |  |  |  |
| 1026 | 6 | 2,500 | . 32 | 70. | 72.00 |
| 1027 | 11 | 2,500 | . 40 | 116. | 123.00 |
| 1028 | 12 | 2,500 | . 41 | 123. | 142.00 |
| 1029 | 16 | 2,500 | . 46 | 156. | 167.00 |
| 1030 | 26 | 2,500 | . 57 | 237. | 256.00 |
| 1032 | 32 | 2,500 | . 65 | 308. | 303.00 |
| 1031 | 51 | 2,500 | . 78 | 464. | 486.00 |

QUANTITY DISCOUNTS-2,500 feet and over........................................... List less $15 \%$
1,000 feet to 2,499 feet. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
500 fert to 999 feet. ....................................... . . . .
250 feet to 499 feet. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
Items on this sheet may be combined to obtain quantity discount.
TERMS: $1 / 2$ of $1 \%-10$ days from date of invoice, net 30 days.
DELIVERY: F.O.B. Factory, freight prepaid and allowed to destination in the Continental United States via freight or shipper's option on shipments of 300 pounds or more. No freight allowance on shipments of less than 300 pounds.
DELIVERY: F.O.B. New Haven, Conn. Freight allowed.
REELS: Non-Returnable. No charge will be made for reels and no credit allowed if returned.
NOTE: Specify Brown or Ivory Jacket.
Ceeco Loading Coils and Cases
Prices on Application.

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Issue Date: 4-15-57

| Prices on Application. |  |  |
| :---: | :---: | :---: |
| Preforme | ng Rods | PRICE EACH |
| Cat. No. | Stock No. |  |
| LRGS-D | 895889. | \$ . 56 |
| LRGS-E | 895890. | . 56 |
| LRGS-F | 895891. | . 56 |
| LRGS-G | 895892. | . 56 |
| LRGS-H | 895893. | . 67 |
| LRGS-I | 895894. | . 67 |
| LRGS-J | 895895. | . 67 |
| LRGS-K | 895896. | . 67 |
| LRGS-L | 895897. | . 90 |
| LRGS-M | 895898. | . 90 |
| LRGS-N | 895899. | 1.21 |
| LRGS-O | 895900. | 1.21 |
| LRGS-P | 895901. | 1.21 |
| LRGS-Q | 895902. | 1.60 |
| LRGS-R | 895903. | 1.60 |


| Preformed Line Guards_ |  | PRICE EACH |
| :---: | :---: | :---: |
| Cat. No. | Stock No. |  |
| 18AMGT-380 | 895904. | \$ . 63 |
| 20AMGT-450 | 895905. | . 84 |
| 22AMGT-560 | 895906. | . 95 |
| 24AMGT-680 | 895907. | 1.10 |
| 28AMGT-824 | 895908. | 1.89 |
| Tangent Support Clamp_ |  |  |
| TSC-450 | 6 Pair. | . 45 |
| TSC-560 | 11 Pair. | . 50 |
| TSC-680 | 16 Pair: | . 50 |
| TSC-824 | 26 Pair. | . 50 |
| Plastic Line Guards |  | PER FOOT EACH |
| Size | Stock No. |  |
| 9/r" | 895910. | \$ . 14 |
| 3/2" | 895911. | . 16 |
| 1/2" | 895912. | . 23 |
| 5/8" | 895913. | . 26 |
| $34^{\prime \prime}$ | 895914. | . 36 |
| 1 " | 895915. | . 44 |
| $11 / 4^{\prime \prime}$ | 895916. | . 62 |

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| Preformed | Ends | PRICE EACH | Preformed Dead-Ends |  | PRICE EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. |  | Cat. No. | Stock No. |  |
| 11GDE-083 | 895917. | \$ . 16 | ANKDE-450 | 895884. | \$1.00 |
| 12GDE-109 | 895918. | . 20 | ANKDE-530 | 895885. | 1.20 |
| 13GDE-134 | 895919. | . 25 | ANKDE-660 | 895886 | 1.75 |
| Preformed Armor Rods |  |  | ANKDE-750 | 895881. | 2.90 |
|  |  |  | WBDE-470 | 895888. | . 75 |
| 8AAR-155 | 895926. | . 20 |  |  |  |
| 12AAR-155 | 895927. | . 24 | Plastic Cable Guards |  | EACH PER 100 |
| 24AAR-155 | 895928. | . 29 | 1/2" | 895412. | \$ 8.50 |
| 12AAR-139 | 895929. | . 24 | $3 / 4^{\prime \prime}$ | 895413. | discontinued |
| 24AAR-139 | 895930. | . 29 | $1 "$ | 896055. | 13.50 |
| 12AAR-110 | 895931. | . 17 | $11 / 2^{\prime \prime}$ | 895414. | 19.80 |
| 24AAR-110 | 895932. | . 21 | $2^{\prime \prime}$ | 896056. | 29.40 |
|  |  |  | $21 /{ }^{\prime \prime}$ | 895415. | discontinued |

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| Preformed Splices |  | PRICE EACH |
| :---: | :---: | :---: |
| Cat. No. | Stock No. |  |
| 10GLS-083 | 895920. | \$ . 24 |
| 22GLS-083 | 895921. | . 31 |
| 12GLS-109 | 895922. | . 27 |
| 24GLS-109 | 895923. | . 35 |
| 14GLS-134 | 895924. | . 41 |
| 26GLS-134 | 895925. | . 50 |


| Preformed Dead-Ends |  | PRICE EACH |
| :---: | :---: | :---: |
| 13NSDE | 897192. | \$ . 33 |
| 14NSDE | 897193. | . 34 |
| Preformed Rural C Tangent Supports |  |  |
| 20NSTS-C | 897007. | . 33 |
| 22NSTS-C | 897008. | . 34 |
| Preformed Rural C Dead-Ends |  |  |
| 15NSDE-14C | 896089. | . 52 |
| 20NSDE-12C | 896090 | . 60 |



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## "SCOTCHCAST" Splicing Kits No. 89

A series of kits designed especially to handle most telephone splice applications. This includes plastic, rubber or lead sheath, mult. conductor shielded or unshielded communication cables.


The following table may also serve as a guide for plastic-insulated, plastic-sheathed cables. The kit size is still limited by the O.D. of the cable as given above.

3. For example: To obtain a kit to splice a 26 pair cable-inline- 24 gage wire, O.D. $11 / 6^{\prime \prime}$ or less order as follows: 1 "SCOTCHCAST" Splicing Kit No. 89-Al.
PACKING: "SCOTCHCAST" Splicing Kits No. 89 are packaged one to a box-10 to a shipping container.

## page 8 p continued

Issue Date: 4-15-57


| Warning Sign $\qquad$ 890996 |  | PRICE $\operatorname{SACH}$ | $\because$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \$17.20 |  |  |  |
| Underground Cable Racks and Hooks |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Cat. No. | Stock No. | Standard Package | Zone 1 | Zone 2 | Zone 3 |
| 2124 | 890969 | 10. | \$50.91 | \$51.54 | \$54.38 |
| 2125 | 890970 | 10. | 80.48 | 81.40 | 85.50 |
| 2126 | 890971 | 10. | 98.21 | 99.51 | 105.38 |
| 2131 | 890972 | 100.. | 24.77 | 25.00 | 26.08 |
| 2132 | 890973 | 50. | 43.09 | 43.68 | 46.31 |
| 2133 | 890974 | 50. | 59.85 | 60.73 | 64.68 |
| Cable Rack Insulator |  |  |  |  |  |
| 2120 | 890975 | 50. | 30.16 | 31.43 | 32.89 |
| Pulling-in-Iron |  |  |  |  |  |
| 9119 | 890968 | 5......... | 217.42 | 219.71 | 229.92 |

Issue Date: 4-15-57

| Cope Cable Duct Shields Stock Na. |  | PRICE |  |
| :---: | :---: | :---: | :---: |
|  |  | Less than 100 | More than 100 |
| 890976 | $3^{\prime \prime}$ |  |  |
| 890977 | 31/2" | \$40.00 per C | \$27.00 per C |


| Cable Car |  | PRICE |  |
| :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Eastorn Zoze | Westorn Zone |
| 27 | 891002. | \$32.90 ea. | \$36.50 ea. |

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| Bierce Cable Roller Cat. No. Stock No. |  |  |
| :---: | :---: | :---: |
|  |  |  |
| Slack Puller |  |  |
| Cat. No. | Stock No. |  |
| LGI | 891007. | \$31.20 ea. |



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| $\begin{gathered} \text { Catalog } \\ \text { No. } \end{gathered}$ | Crapo Galvanized Steel Cable Lashing Wire "C" Coated |  |  | $.061^{\prime \prime}$ Diameter Wire-Type 430 <br> 735-Foot Coil, Nom. Weight: 7.17 lb . |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Wire } \\ & \text { Sime } \end{aligned}$ | Cofl Length | $\begin{gathered} \text { Arbor } \\ \text { Hole } \end{gathered}$ | CATALOG NO. STRA CATALOG NO. TAPE | 61CR735-S <br> 61CR735-T |
| C-091-S | .091" | 325' | Straight |  |  |
| C-091-T | .091" | 325' | Tapered | Quantit | $\mathrm{Per}_{\text {Cwt. }}$ |
| C-061-S | .061" | $650{ }^{\prime}$ | Straight | Less than 100 pounds | \$115.18 |
| C-061-T | .061" | $650{ }^{\prime}$ | Tapered | 100 to 299 pounds. | 103.96 |
|  |  |  |  | 300 to 499 pounds. | 100.79 |
|  |  | $\begin{array}{cc}\text { PRICES PER HUNDRED POUNDS } \\ .091^{\prime \prime} & .061^{\prime \prime}\end{array}$ |  | 500 to 999 pounds. | 98.17 |
|  |  |  |  | 1,000 to 1,999 pounds | 95.69 |
| Less than 1,500 Pounds. |  | \$26.60 | \$35.58 | 2,000 to 4,999 pounds. | 93.48 |
| 1,500 to 3,999 Pounds. |  | 26.15 | 35.1334.88 | 5,000 to 9,999 pounds. . | 92.24 |
| 4,000 to 9,999 Pounds. |  | 25.90 |  | 10,000 pounds and over. | 90.25 |
| 10,000 to 24,999 Pounds. |  |  | 34.73 |  |  |

PACKING INFORMATION. Packed 6 coils to the carton. Approximate gross weight of carton ready for shipment: size $.091^{\prime \prime}, 44$ pounds; size $.061^{\prime \prime}, 40$ pounds. Tare weight, approximately 1 pound. For orders which necessitate a broken package, add $\$ 1.00$ for special handling.
Crapo Corrosion-Resistant
Stainless Steel
Cable Lashing Wire
PRICES PER HUNDRED POUNDS

Issue Date: 4-15-57

| Neal Spinning Wire |  |  | PRICE EACH | Model D Spinner | PRICE EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat No. | ${ }^{1.60}$ | 66-294 | $\begin{gathered} 300 \text { or more } \\ \text { Cotls } \end{gathered}$ | 894681. | \$465.23 each |
| 1-A. | \$ 2.22 | \$ 2.16 | \$ 2.10 |  |  |
| 12-A. | 1.74 | 1.69 | 1.64 |  |  |
| 5-A. | 2.02 | 1.97 | 1.91 |  |  |
| 10-A. | 12.19 | 11.86 | 11.52 |  |  |
| 11-A. | 8.77 | 8.53 | 8.29 |  |  |
| 4-A. | 5.44 | 5.29 | 5.14 |  |  |
| 6-A. | 6.44 | 6.27 | 6.09 |  |  |
| 7-A. | 2.44 | 2.37 | 2.31 |  |  |

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| Aerial Cable Splicers' Tents |  |  |  |
| :---: | :---: | :---: | :---: |
| 890999 | S |  | \$50.95 ea. |
| 891000 | $L$. |  | 54.30 ea. |
| 890997 | Ground Tent. |  | 70.80 e. |
| Cable Rings |  |  |  |
| National Cable Rings |  | PRICE PER THOUSAND |  |
|  |  | Standard Package | Less than Standard Package |
| 890576 | $11 / 2$ | \$35.30 | \$38.80 |
| 890577 | 2-Light. | 40.30 | 44.40 |
| 890578 | 2-Heary | 47.70 | 52.50 |
| 890579 | $21 / 2$. | 59.40 | 65.30 |
| 890580 | 3 | 67.30 | 74.00 |


| Extra Long Cable Rings____ Prici per thousand |  |  |
| :---: | :---: | :---: |
| Stock No. | Stue tnches |  |
| 890584 | $11 / 2$ | \$ 85.60 |
| 890585 | 2 | 136.50 |
| 890586 | $21 / 2$ | 160.10 |
| 890587 | 3 | 183.60 |
| Cable Ring Saddles |  |  |
| 890589 | 11/2. | 60.00 |
| 890590 | 2 | 76.00 |
| 890591 | $21 / 2$ | 94.00 |
| 890592 | 3 | 112.00 |
| Lead Cable Spacers |  | PRICE PER HUNDRED |
| Stock No. | Stae inches |  |
| 894910 | $1 / 4$. | \$ 6.75 |
| 894911 | 1/2 | 8.75 |
| 894912 | 3/4. | 11.25 |
| 895108 | 1 . | 14.25 |
| Plastic Cable Spacers |  |  |
| 895346 | $1 / 4$. | .. 2.15 |
| 895347 | 1/2. | 2.65 |
| 895348 | 3/4.. | 3.60 |


| Reliable Stock No. | Cable Hangers |  | PRICE PER THOUSAND |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1.4999 | 5000 or over |
| 890611 | 1 | Zinc. | \$ 27.91 | \$ 26.53 |
| 890612 | 2 | Zinc | 44.22 | 42.01 |
| 890613 | 3 | Zinc. | 51.18 | 48.64 |
| 890614 | 4 | Zinc | 98.93 | 93.96 |
| 895789 | 1-C | Copper | 57.10 | 54.60 |
| 895790 | 2-C | Copper | 74.50 | 70.80 |
| 895791 | $3-\mathrm{C}$ | Copper | 129.20 | 123.00 |
| 895792 | 4.C | Copper . | 217.30 | 206.20 |


(Other sizes on request.)

| Stock No. | Cat. No. | With U Wire | Cat. No. | Less U Wire |
| :---: | :---: | :---: | :---: | :---: |
| 890615 | 891. | \$ 8.10 | 891-L. | \$ 7.88 |
| 890616 | 892. | 9.78 | 892-L. | 9.64 |
| 890617 | 893. | 11.53 | 893-L. | 11.39 |
| 890618 | 894. | 14.02 | 894-L. | 13.87 |
| 890619 | 895. | 15.91 | 895-L. | 15.70 |
| Diamond Strand Connector |  |  |  |  |
| Cat. No. | Stock |  |  |  |
| 867 | 893405 |  |  | \$ . 84 each |


| Marline Twine |  |  |
| :---: | :---: | :---: |
| Cat. | Stock No. |  |
| 415 | 890599. | \$ 8.80 lb . |
| 416 | 890600 | .80 lb . |


| Cable Pulling Grips |  | PRICE EACH |  |  | PRICE EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. |  | Cat. No. | Stock No. |  |
| 802 | 890919. | \$ 6.20 | 977 | 894739. | \$11.30 |
| 803 | 890920. | 6.55 | 978 | 894740. | 12.10 |
| 804 | 890921. | 6.85 | 842 | 890933. | 5.20 |
| 805 | 890922 . | 7.20 | 843 | 890934. | 5.50 |
| 806 | 890923. | 7.50 | 954 | 894731. | 8.50 |
| 807 | 890924. | 7.85 | 955 | 894732. | 9.15 |
| 808 | 890925. | 8.20 | 956 | 894733. | 9.80 |
| 812 | 890926. | 7.50 | 957 | 894734. | 10.50 |
| 813 | 890927. | 7.85 | 958 | 894735. | 11.10 |
| 814 | 890928. | 8.20 | 822 | 890909. | 4.50 |
| 815 | 890929. | 8.50 | 823 | 890910. | 4.80 |
| 816 | 890930. | 8.85 | 824 | 890911. | 5.20 |
| 817 | 890931. | 9.15 | 825 | 890912. | 5.55 |
| 818 | 890932. | 9.50 | 826 | 890913. | 5.85 |
| 862 | 890947. | 5.85 | 933 | 894727. | 6.85 |
| 863 | 890948. | 6.25 | 934 | 894728. | 7.15 |
| 974 | 894736. | 9.00 | 935 | 894729. | 7.55 |
| 975 | 894737. | 9.75 | 936 | 894730. | 7.85 |
| 976 | 894738. | 10.50 |  |  |  |

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Issue Date: 12-1-56

| Waxed C | on S |  | PRICE PER BOX |
| :---: | :---: | :---: | :---: |
| Cat No. | Stock No. |  |  |
| 346 H-5 | 890686 | $3 / 2{ }^{\prime \prime}$ | \$ 1.75 |
| $345 \mathrm{H}-5$ | 890687 | 1/2" | 1.35 |
| $1030 \mathrm{H}-5$ | 890688 | $3 / 22^{\prime \prime}$ | 1.15 |
| $61 \mathrm{H}-5$ | 890689 | $1 / 4{ }^{\prime \prime}$ | 1.00 |
| 79 H-5 | 890690 | $3{ }^{\prime \prime}$ | 1.35 |
| Lead Slee |  |  |  |
| All Sizer. |  |  | per 100 Pounds |
| Cable Co | npound |  |  |
| 1061 | 890712. | ... | 10 lb. container) |
| Dillon Te | perome |  |  |
|  | 890808. |  | . $\$ 7.25$ each |



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| Cope C Stock No 894982 | und Keft | Each \$8.00 |  |
| :---: | :---: | :---: | :---: |
| Paraffin Pans |  |  |  |
| 894983 | No. 67 | Each | 7.20 |
| 894984 | No. 68 | Each | 6.30 |
| Paraffin Pots |  |  |  |
| 894985 | No. 56 | Each | 5.00 |
| Paraffin Dippers. |  |  |  |
| 894986 | No. 57. | Each | 1.40 |



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| Protek-Sorb Desiccant Stock No. |  | PRICE EACH |
| :---: | :---: | :---: |
| 890870 | 160 Gram Size. | \$ . 35 |
| 890871 | 650 Gram Size. | 1.15 |
| 894917 | Rubber Insulating Bandage | 1.50 |
| 893192 | Cable Wrapping Cloth. | . 75 |
| Pouring Ladles |  |  |
| 890763 | 21/2" | discontinued |
| 890764 | 3" | 2.65 |
| 890765 | 31/2" | 2.85 |
| 890766 | 4" | 2.95 |


| Long Handled |  |  | PRICE EACH |
| :---: | :---: | :---: | :---: |
|  |  | Stock No. |  |
|  | /3" | 890756. | \$ 80 |
| 373 | (4" | 890757. | 1.15 |

Wiping Cloths
Flaf Wiping Cloths

|  | Herringbone Stk. No. | Price Each | Molesktn Stk. No. | Price Each |
| :---: | :---: | :---: | :---: | :---: |
| $2 \times 2$ | 890778 | \$ . 30 | 890783 | \$ . 40 |
| $21 / 2 \times 21 / 2$. | 890779 | . 40 | 890784 | . 50 |
| $3 \times 3$ | 890780 | . 50 | 890785 | . 60 |
| $31 / 2 \times 31 / 2$. | 890781 | . 50 | 890786 | . 60 |
| $4 \times 4$ | 890782 | . 60 | 890781 | . 70 |



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page 3q


Reliable Type RP Protected Cable Terminals

| RP-27 | 890550. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| RP-56 | 894900. | 22.40 | 21.28 | 20.16 |


| 506-1800 | 890515. | 14.95 | 14.20 | 13.49 |
| :---: | :---: | :---: | :---: | :---: |
| 506-1820 | 890517. | 18.85 | 17.90 | 17.00 |
| 506-1840 | 890519. | 26.00 | 24.70 | 23.46 |
| 506-1870 | 890521. | 27.90 | 26.50 | 25.15 |
| 506-1805 | 890516. | 19.70 | 18.70 | 17.75 |
| 506-1825 | 890518. | 26.55 | 25.22 | 23.95 |
| 506-1845 | 890520. | 34.15 | 32.45 | 30.80 |
| 506-1875 | 890522. | 39.50 | 37.50 | 35.60 |

page 4q

| Type ST (Pole or Wall) Cable Terminals. |  |  | PRICE EACH |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. |  | 1.19 | 20.99 | 100 or more |
| ST-26 | 895782 |  | \$27.30 | \$25.95 | \$24.60 |
| ST-26P | 895776 |  | 58.50 | 55.60 | 52.80 |
| ST-26PS | 895779 |  | 58.50 | 55.60 | 52.80 |
| Type ST Strand Cable Terminals |  |  |  |  |  |
| ST-11P | 895774 | (Protected). | 28.15 | 26.70 | 25.30 |
| ST-16P | 895775 | (Protected). | 36.55 | 34.70 | 32.95 |
| ST-11PS | 895771 | (Protected). | 28.15 | 26.70 | 25.30 |
| ST-16PS | 895778 | (Protected). | 36.55 | 34.70 | 32.95 |
| ST-11 | 895780 | (Unprotected) | 14.45 | 13.70 | 13.00 |
| ST-16 | 895781 | (Unprotected) | 17.35 | 16.50 | 15.70 |

(For above Terminals specify whether Lead or Plastic Stubs are desired.)

Issue Date: 4-15-57

| Protector Units for ST Type TerminalsCat. No. |  | PRICE EACH |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1.19 | 20-99 |  | 100 or more |  |
| *504 | Station Protector Unit. | \$.60 | \$ | . 57 |  | . 54 |
| *506 | Cable Protector Unit | . 60 |  | . 57 |  | . 54 |
| *Sold only in | Units of ten (10). |  |  |  |  |  |

Replacement Parts.

|  |  | $\begin{gathered} \text { Minfmum Order } \\ \text { Quantlity } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Price } \\ \text { per } 100 \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| P-6082 | Carbon Block | 200..... | \$2.15 |
| P-6083 | Alloy Pellet | 200. | 1.50 |
| P-5841 | Insulator-Carbon Block for No. 504 | 100. | 12.70 |
| P-5827 | Insulator-Carbon Block for No. 506 | 100. | 12.70 |




Issue Date: 4-15-57


## PaGe $8 q$

| Reliable Type "RU" Unprotected Cable Terminals |  | PRICE EACH |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 1.19 | 20-99 | 100 or more |
| 6 Pair | 890559. | \$ 7.70 | \$ 7.32 | \$ 6.93 |
| 6 Pair-Stub | 890560. | 10.50 | 9.98 | 9.45 |
| 11 Pair | 890561. | 9.15 | 8.69 | 8.24 |
| 11 Pair-Stub | 890562. | 13.85 | 13.16 | 12.47 |
| 16 Pair | 890563. | 10.90 | 10.36 | 9.81 |
| 16 Pair-Stub | 890564. | 16.50 | 15.68 | 14.85 |
| 26 Pair | 890565. | 15.60 | 14.82 | 14.04 |
| 26 Pair-Stub | 890566. | 22.80 | 21.66 | 20.52 |
| Reliable Type "GR" Unprotected Cable Terminals |  |  |  |  |
| 11 Pair | 890542. | 10.50 | 9.98 | 9.45 |
| 11 Pair-Stub | 890543. | 16.00 | 15.20 | 14.40 |
| 16 Pair | 890544. | 12.60 | 11.97 | 11.34 |
| 16 Pair-Stub | 890545. | 19.00 | 18.05 | 17.10 |
| 26 Pair | 890546. | 18.00 | 17.10 | 16.20 |
| 26 Pair-Stub | 890547. | 26.30 | 24.99 | 23.67 |
| Power Cross Protector |  |  |  |  |
| 501-40 | 895028. | 3.75 | 3.56 | 3.38 |
| 501-50 | 895251. | 17.45 | 16.57 | 15.74 |
| Rellable High Voltage Prot |  |  |  |  |
|  |  | 1.24 | 25-99 | $\underline{100}$ or more |
| 30-HV | 895053. |  |  |  |
| 20-HV | 895206. | \$ 3.30 | \$ 3.13 | \$ 2.97 |


| PRICE EACH |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No: |  |  |  |
| 506-1900 | 894749. | \$ 50.60 |  |  |
| 506-1902 | 894751 | 58.20 |  |  |
| 506-1904 | 894753. | 72.75 |  |  |
| 506-1906 | 894755. | 145.50 |  |  |
| 506-1866 | 894757. | 1.65 |  |  |
| 506-1901 | 894750 | 66.60 |  |  |
| 506-1903 | 894752. | 78.80 |  |  |
| 506-1905 | 894754. | 99.90 |  |  |
| 506-1907 | 894756. | 181.85 |  |  |
| Reliable "RUG" Underground Cable Terminals |  |  | PRICE EACH |  |
|  | Stock No. | 1.19 | 20-99 | 100 or more |
| 11 Pair | 890572 | \$34.45 | \$32.70 | \$31.00 |
| 11 Pair 1 | 890573. | 37.10 | 35.25 | 33.40 |
| 16 Pair | 895805. | 42.60 | 40.45 | 38.35 |
| 16 Pair 1 | 895806. | 46.55 | 44.20 | 41.90 |
| Stuffing Boxes for RUG Terminal |  | . 86 | . 76 | . 71 |
| Cook Type "U" Utility Protector |  |  |  | PRICE EACH |
| Cat No. | Stock No. |  |  |  |
| 517-1722 | 895796 |  |  | \$15.40 |
| 517-1 | 895797. |  |  | 5.50 |
| 506-1850 | 890186. |  |  | 1.65 |

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| Reliable Fuseless Protectors |  | PRICE EACH |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | 1.24 | 25-99 | 100 or more |
| 504 | 895772. | \$ . 60 | \$ . 57 | \$ . 54 |
| 700 | 895770. | 1.75 | 1.67 | 1.58 |
| 800 | 895771. | 2.55 | 2.43 | 2.30 |
| 801 | 896057. | 1.95 | 1.87 | 1.78 |
| 801-A | 896060. | 1.95 | 1.87 | 1.78 |
| Cook Fuseless Protectors |  |  |  |  |
| 501-150 | 895798. | 2.50 | 2.38 | 2.28 |
| 501-165 | 895799. | 1.70 | 1.64 | 1.55 |
| 41-350 | 895800. | . 60 | . 57 | . 54 |


| Reliable Outdoor Protectors |  |  | PRICE EACH |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | 1.24 | 25-99 |  | or more |
| 2000 | 897105. | \$ 2.45 | \$ 2.32 |  | 2.20 |
| 2000 C | 897108. | 2.45 | 2.32 |  | 2.20 |
| 2000H | 897106. | 2.20 | 2.09 |  | 1.98 |
| 2000 F | 897107. | 2.00 | 1.90 |  | 1.80 |

Issue Date: 4-15-57

| Cook Protectors |  |  | PRICE EACH |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. Na | Stock No. | Type | 1.24 | 25.99 | 100 or more |
| 473-10 | 895287 | O.9U | \$ 2.20 | \$ 2.09 | \$ 1.98 |
| 471-1581 | 890171 | 0.12 | 1.90 | 1.80 | 1.71 |
| 472-1582 | 890178 | 0.7 | 2.00 | 1.90 | 1.80 |
| 473-1583 | 890179 | 0.9 | 2.00 | 1.90 | 1.80 |
| 474-1584 | 890180 | 0.16 | 1.90 | 1.80 | 1.71 |
| 481-1585 | 890181 | O-44 | 1.90 | 1.80 | 1.71 |
| 475-1586 | 890182 | O. 52 | 2.45 | 2.32 | 2.20 |
| 516-1 | 890184 | RO-9U | 1.95 | 1.85 | 1.75 |
| Cook 4-Party Line Junction Box |  |  |  |  |  |
| 501-7400 | 895018. |  | 2.40 | 2.28 | 2.16 |

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| Lightning Arresters $\qquad$ Cat. No. <br> Stock No |  | PRICE EACH |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 1.24 | 25-99 | 100 or more |
| 222 | 890212. | \$ 6.00 | \$ 5.70 | \$ 5.41 |
| 402-RR | 890214. | 1.55 | 1.47 | 1.39 |
| 5503 | 895802. | 3.45 | 3.30 | 3.10 |
|  |  |  | PRICE PER 100 |  |
| Cat. ${ }^{\text {No. }}$ | Stock No. |  | 1.499 | 500 or more |
| P. 495 | 890262. |  | \$10.09 | \$ 9.60 |
| 41-1907 | 890194. |  | 10.90 | 10.50 |
|  |  | PRICE $\operatorname{LACH}$ |  |  |
| Cat. No. | Stock No. | 1.24 | 25-99 | 100 or more |
| 371-2200 | 890192. | \$ 6.00 | \$ 5.70 | \$ 5.41 |
| 501-7800 | 890188. | 1.55 | 1.47 | 1.39 |

## page l3q



## page 14q




## page $15 q$

| Reliable Cat. No. | Building Terminal Stock No. | PRICE EACH |  | Cat. No. | Stock No. | PRICE EACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1.9 | 10 or more |  |  | 1.9 | 10 or more |
| E-11 | 891027. | \$ 7.40 | \$7.00 | EC-52 | 891038. | \$26.90 | \$25.60 |
| E-16 | 891028. | 9.60 | 9.10 | EC-104 | 891039. | 53.80 | 51.10 |
| E-22 | 891029. | $\bigcirc 12.20$ | 11.60 | EC-208 | 891040. | 120.50 | 114.50 |
| E-26 | 891030. | 14.10 | 13.40 | L-11 | 891035. | 13.20 | 12.50 |
| E-32 | 891031. | 16.30 | 15.50 | L-16 | 891036. | 15.70 | 14.90 |
| E-52 | 891032 | 24.90 | 23.70 | L-26 | 891037. | 21.80 | 20.70 |
| E-104 | 891033. | 49.00 | 46.60 | L-52 | 894768. | 38.60 | 36.70 |
| E-208 | 891034. | 96.00 | 91.20 |  |  |  |  |

Reliable Terminal Strips

| E-11 Pr | 891044 | 2,50 | 2.40 | L-16 Pr | 891055. | 7.50 | 7.10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E-13 Pr | 891045. | 2,93 | 2.78 | L-26 Pr | 891056. | 12.10 | 11.50 |
| E-16 Pr | 891046. | 3.64 | 3.48 | T-1X20 | 891057. | 2.78 | 2.61 |
| E-22 Pr | 891047. | 4.95 | 4.70 | T-1X26 | 891057. | 2.93 | 2.78 |
| E-26 Pr | 891048. | 5.93 | 5.66 | T-2X20 | 891058. | 3.64 | 3.48 |
| E-32 Pr | 891049. | 7.29 | 6.91 | T-2X26 | 891058. | 3.86 | 3.64 |
| E-52 Pr | 891050. | 11.81 | 11.21 | T-3X20 | 891059. | 4.52 | 4.30 |
| L-5 ${ }^{1 / 2} \mathbf{P r}$ | 891051. | 2.60 | 2.50 | T-3X28 | 891059. | 4.90 | 4.67 |
| $\mathrm{L}-8 \mathrm{Pr}$ | 891052. | 3.80 | 3.60 | T-4X20 | 891060. | 5.28 | 5.00 |
| L-11 Pr | 891053. | 5.00 | 4.80 | T-4X26 | 891060. | 5.88 | 5.66 |
| L-13 Pr | 891054. | 6.00 | 5.70 |  |  |  |  |


|  |  |  |
| :---: | :---: | :---: |
| HT-610 A | 890574 | \$45.20 each |
| Equipped with one | Coil and 3 pairs Protection |  |
| HT-610 B | 890575 | 74.30 each |
| Equipped with two | Coils and 5 pairs Prctection |  |


| Cook Type 57 Inferior Terminal Box |  | PRICE EACH |
| :---: | :---: | :---: |
| Cat. No. | Stock No. |  |
| 490-7000 | 895807. | \$ 9.50 |
| 490-7001 | 895808. | 12.25 |
| 490-7002 | 895809. | 15.55 |
| 490-7003 | 895810. | 18.15 |
| 490-7004 | 895811. | 31.80 |
| 490-7005 | 895812. | 62.50 |
| Cook Type 53 Junction Box |  |  |
| 490-5313 | 894966. | 9.20 |
| 490-5326 | 894967. | 13.05 |
| Cook Type 54 Interior Junction Boxes |  |  |
| 490-5406 | 894968. | 4.00 |
| 490-5410 | 894969 | 6.40 |
| 490-5413 | 894970 | 7.85 |
| 490-5426 | 894971. | 11.20 |

page $17 q$


## page 18q

| Cook Protectors |  | PRICE PER BANK | Cook Heat Coils |  | PRICE PER 100 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. |  | Stock No | Type |  |
| 360-1210 | 894035. | \$20.80 | 894000 | 4-A. | \$38.10 |
| 360-1220 | 894036. | 39.25 | 894001 | 10. | 31.50 |
| 380-1320 | 894037. | 39.25 | 894002 | 50 or 60. | 36.75 |
| 392-1510 | 894758. | 42.60 | 894003 | 100 or 105 | 32.00 |
| 392-1520 | 894759. | 75.00 | 894004 | 3800. | 32.00 |
| 296-3610 | 894042. | 22.55 |  |  |  |
| 296-3620 | 894043. | 39.25 |  |  |  |


| Reliable Heat Coil Fuses |  | PRICE PER 100 |  |
| :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | 1.99 | 100 or more |
| 107 | 894127. | \$49.50 | \$44.55 |
| 115H | 894769. | 49.50 | 44.55 |
| Reliable Mica Fuses |  | PRICE PER 100 |  |
| Cat. No. | Stock No. | $\begin{aligned} & 1-999 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { sed Type more } \\ & 1000 \text { or mor } \end{aligned}$ |
| 19 | 890251. | \$13.10 | \$11.80 |
| 8 | 890252. | 13.10 | 11.80 |
| 22 | 890253. | 15.30 | 13.80 |
| 137 | 890254. | 15.50 | 14.00 |
| 21 | 890255. | 15.50 | 14.00 |
| 11 | 890256. | 15.50 | 14.00 |
| 25 | 890257. | 16.10 | 14.50 |


| Reliab | celain |  |  | 5 | ACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. |  | 1.99 |  | 0 or more |
| 18 | 894649. | \$ |  |  | \$ . 41 |
| 20 | 894650. |  | . 42 |  | . 39 |


| Blow-Rite Fuse Wire |  |  |
| :---: | :---: | :---: |
| 890237 | (all amperages). | \$1.70 per Spool |
| Reliable and Cable | Fuses for Protectors e Terminals $\qquad$ | PRICE PER 100 |
| 27L | 890218. | \$16.50 |
| 35L | 895823. | 15.25 |
| 714 | 890220. | 23.50 |
| 95L | 890221. | 16.50 |
| 315 | 890223. | 15.25 |
| 53L | 890229. | 30.25 |
| 55L | 890230. | 30.25 |
| 56 | 890232. | 31.80 |
| 52 | 890228. | 25.85 |

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| Cook Tubular Fuses |  | PRICE PER 100 |  | Fuse Wire |  | PRICE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cat No. | Stock No. | 1-499 | 500 or mare |  |  |  |
| 59-0700 | 890238. | \$12.70 | \$12.05 | 900-6000 | 895824 | \$1.35 per 250' spool |
| 91-1200 | 890250. | 15.25 | 14.50 | Knife Swit | hes | PRICE EACH |
| 146-0900 | 890239. | 16.50 | 15.65 | Cat. No. | Stock No. |  |
| 149-1600 | 890244. | 13.35 | 12.70 | 707 | 890258. | \$ 1.10 |
| 299-4400 | 894128. | 15.25 | 14.50 | 708 | 890259. | 1.25 |
| 306-4500 | 890249. | 16.50 | 15.65 | 709 | 800260. | 1.45 |
| 301-4600 | 890248. | 15.25 | 14.50 | 710 | 890261. | 1.75 |
| 424-5200 | 890243. | 30.25 | 28.75 |  |  |  |
| 494-6200 | 890245. | 31.80 | 30.20 |  |  |  |
| 499-6400 | 890247. | 15.10 | 14.35 |  |  |  |
| 146-217 | 895825. | 21.80 | 20.70 |  |  |  |
| Fuse Needle. |  |  |  |  |  |  |
| 59-16 | 894044. | each | \$ . 45 each |  |  |  |

page $3,4,5,6,7 r$
Issue Date: 4-15-57
Whitney Blake Telephone Wire-Teleprene Wire-Neoprene Jacket

| Cat. <br> No. | $T_{Y \text { Pe }}$ | Stock No. | $\begin{gathered} \text { Approx. Wt. } \\ \text { Lbs per. } \\ \text { IM Ft. } \\ \hline \end{gathered}$ | $\begin{gathered} \begin{array}{c} U_{\text {nit }} \\ \text { Pkg. } \end{array} \\ \hline \text { Feet } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Factory } \\ & \begin{array}{l} \text { Shipping } \\ \text { Pkg. Pt. } \end{array} \end{aligned}$ | $\begin{gathered} U_{n i t} \text { Pkg. } \\ \text { to } 25 M \mathrm{FFt.} \\ \hline \text { List } \\ \hline \end{gathered}$ | $\begin{aligned} & 25 M \mathrm{Ft} . \\ & 50 M \mathrm{Ft} \\ & -5 \% \end{aligned}$ | $\begin{aligned} & 50 M \text { Ft. } \\ & 250 \mathrm{Ft} \\ & -121 / 2 \% \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { 250M Ft.- } \\ & \text { and } \mathrm{OV} \\ & \hline-17 y_{2} \% \end{aligned}$ | $\begin{aligned} & \text { Carload } \\ & \text { and }{ }^{2 n v e r} \\ & -20 \% \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Drop Wires |  |  |  |  |  |  |  |  |  |  |
| 567 | 18TCWP | 895354 | 35 | 1000 | 1000(a) | \$26.00 | \$24.70 | \$22.75 | \$21.45 | \$20.80 |
| 559 | 18TCWP-R | 895355 | 39 | 1000 | 1000(a) | 31.35 | 29.78 | 27.43 | 25.86 | 25.08 |
| 552 | 17TBP | 895350 | 40 | 1000 | 1000(a) | 33.10 | 31.45 | 28.96 | 27.31 | 26.48 |
| 553 | 17TBP-R | 895352 | 44 | 1000 | 1000(a) | 38.30 | 36.39 | 33.51 | 31.60 | 30.64 |
| 577 | 18TICWP | 895357 | 30 | 1500 | 1500(a) | 23.90 | 22.71 | 20.91 | 19.72 | 19.12 |
| 566 | 17TIBP | 895356 | 34 | 1500 | 1500(a) | 31.00 | 29.45 | 27.13 | 25.58 | 24.80 |
| 565 | 18TCW-2 | 895361 | 35 | 1000 | 1000(a) | 28.60 | 27.17 | 25.03 | 23.60 | 22.88 |
| 550 | 17TB2 | 895358 | 40 | 1000 | 1000(a) | 35.00 | 33.25 | 30.63 | 28.88 | 28.00 |
| 561 | 17TCW2 | 895359 | 39 | 1000 | 1000(a) | 30.00 | 28.50 | 26.25 | 24.75 | 24.00 |
| 551 | 17TB2-R | 895360 | 45 | 1000 | 1000(a) | 45.40 | 43.13 | 39.73 | 37.46 | 36.32 |
| Distributing Wires_ |  |  |  |  |  |  |  |  |  |  |
| 554 | $14 \mathrm{THC2}$ | 895362 | 78 | 750 | 750(a) | 63.30 | 60.14 | 55.39 | 52.22 | 50.64 |
| 556 | 16THC2 | 895363 | 52 | 1000 | 1000(a) | 45.25 | 42.99 | 39.59 | 37.33 | 36.20 |
| Tree Wire |  |  |  |  |  |  |  |  |  |  |
| 591 | 12TCW1 | 895364 | 49 | 1000 | 1000(a) | 39.70 | 37.72 | 34.74 | 32.75 | 31.76 |
| Bridle Wires |  |  |  |  |  |  |  |  |  |  |
| 732 | 20TBC2 | 895367 | 27 | 500 | 500(c) | 25.55 | 24.27 | 22.36 | 21.08 | 20.44 |
| 733 | 20 TBC 3 | 895368 | 39 | 500 | 500(c) | 38.35 | 36.43 | 33.91 | 31.64 | 30.68 |
| 730 | 18TBC2 | 895365 | 35 | 500 | 500(c) | 29.50 | 28.03 | 25.81 | 24.34 | 23.60 |
| 731 | 18TBC3 | 895366 | 52 | 500 | 500(c) | 44.25 | 42.04 | 38.72 | 36.50 | 35.40 |
| 740 | 14TBC2 | 897011 | 78 | 750 | 750(a) | 63.30 | 60.14 | 55.39 | 52.22 | 50.64 |
| Plastite-Ground Wires |  |  |  |  |  |  |  |  |  |  |
| 1460 | 14-1 Iv. | 895372 | 20 | 500 | 3000(d) | 19.15 | 18.19 | 16.76 | 15.80 | 15.32 |
| 1461 | 14-1 Br. | 895373 | 20 | 500 | 3000(d) | 19.15 | 18.19 | 16.76 | 15.80 | 15.32 |
| 1462 | $14-1 \mathrm{Bl}$. | 895374 | 20 | 500 | 3000(d) | 19.15 | 18.19 | 16.76 | 15.80 | 15.32 |
| Teleseal Underground Wire-Neoprene Jacket |  |  |  |  |  |  |  |  |  |  |
| 1351 | 16TSC2 | 895369 | 59 | 750 | 750(a) | 53.95 | 51.25 | 47.21 | 44.51 | 43.16 |
|  |  |  | 72 | 3000 | 3000(b) | 57.95 | 55.05 | 50.71 | 47.81 | 46.36 |
| 1350 | 14TSC2 | 895370 | 82 | 750 | 750(a) | 71.60 | 68.02 | 62.65 | 59.07 | 57.28 |
|  |  |  | 99 | 2250 | 2250(b) | 76.70 | 72.87 | 67.11 | 63.28 | 61.36 |
| 1358 | 12TSC2 | 895371 | 112 | 750 | 750(a) | 104.95 | 99.70 | 91.83 | 86.58 | 83.96 |
|  |  |  | 138 | 1500 | 1500(b) | 113.80 | 108.11 | 99.58 | 93.89 | 91.04 |
| Armored Teleseal |  |  |  |  |  |  |  |  |  |  |
| 1370 | 16TSCP-A | 897104 | 134 | 5000 | 5000(b) | 140.00 | 133.00 | 122.50 | 115.50 | 112.00 |

FACTORY SHIPPING PACKAGE:
(a) Individual paper wrapped coils.
(b) Non-returnable reels.
(c) Individual knockout cartons.
(d) Six 500 foot coils in individual knockout reship cartons packed in master carton.
(e) Four 500 foot coils in individual knockout reship cartons packed in master carton.
(f) Three 500 foot coils in individual knockout reship cartons packed in master carton.
(g) Two 500 foot coils in individual knockout reship cartons packed in master carton.
(h) Four 1000 foot metal spools in individual reship cartons packed in master carton.
(i) Eight 500 foot metal spools in one carton.

## Plastite Inside Wires - Twisted

| Cot. No. | Type | Stock No. | $\begin{gathered} \text { Approx. Wt. } \\ \text { Lbs. per } \\ \text { IM Ft. } \\ \hline \end{gathered}$ | $\begin{gathered} \begin{array}{c} U_{\text {nit }} \\ P k g \\ \text { Feet } \end{array} \\ \hline \end{gathered}$ | $\begin{gathered} \text { Factory } \\ \text { Shipping } \\ \text { Pkg. Ft. } \end{gathered}$ | $\begin{gathered} U_{n i t P} \text { Kg. } \\ \text { to } 25 M F t . \\ \hline \text { List } \end{gathered}$ | $\begin{gathered} 25 M \mathrm{Ft} \\ 50 \mathrm{M} . \\ -5 \% \\ \hline \end{gathered}$ | $\begin{gathered} 50 M \text { Ft.- } \\ 250 \mathrm{Ft} \\ -12 \mathrm{~V} / 2 \% \end{gathered}$ | 250MFt. and Over $-171 / 2 \%$ | $\begin{gathered} \text { Carload } \\ \text { and } \\ -20 \% \\ \hline-20 \% \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1412 | 22-2.Br. | 895375 | 10 | 500 | 3000(d) | \$10.80 | \$10.26 | \$ 9.45 | \$ 8.91 | \$ 8.64 |
| 1413 | 22-2 Iv. | 895376 | 10 | 500 | 3000(d) | 10.80 | 10.26 | 9.45 | 8.91 | 8.64 |
| 1416 | $19-2 \mathrm{Br}$. | 895371 | 17 | 500 | 2000(e) | 15.30 | 14.54 | 13.39 | 12.62 | 12.24 |
| 1417 | 19-2 Iv. | 895378 | 17 | 500 | 2000(e) | 15.30 | 14.54 | 13.39 | 12.62 | 12.24 |


| 1431 | 22 PN 2 J Br . | 895379 | 18 | 500 | 2000(e) | 19.75 | 18.76 | 17.28 | 16.29 | 15.80 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1432 | 22PN2S Iv. | 895380 | 18 | 500 | 2000(e) | 19.75 | 18.76 | 17.28 | 16.29 | 15.80 |
| 1433 | 22PN3J Br. | 895381 | 20 | 500 | 2000(e) | 21.60 | 20.52 | 18.90 | 17.82 | 17.28 |
| 1434 | 22PN3J Iv. | 895382 | 20 | 500 | 2000(e) | 21.60 | 20.52 | 18.90 | 17.82 | 17.28 |
| 1435 | 22PN4J Br. | 895383 | 24 | 500 | 1500(f) | 26.10 | 24.80 | 22.84 | 21.53 | 20.88 |
| 1436 | 22 PN 4 J Iv. | 895384 | 24 | 500 | 1500(f) | 26.10 | 24.80 | 22.84 | 21.53 | 20.88 |

Plastite Inside Wires-Parallel_

| 1475 | 22PL2 Br. | 895385 | 11 | 500 | $3000(\mathrm{~d})$ | 10.25 | 9.74 | 8.97 | 8.46 | 8.20 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| 1476 | 22PL2 Iv. | 895386 | 11 | 500 | $3000(\mathrm{~d})$ | 10.25 | 9.74 | 8.97 | 8.46 | 8.20 |
| 1477 | 22PL3 Br. | 895387 | 14 | 500 | $3000(\mathrm{~d})$ | 15.45 | 14.68 | 13.52 | 12.75 | 12.36 |
| 1478 | 22PL3 Iv. | 895388 | 14 | 500 | $3000(\mathrm{~d})$ | 15.45 | 14.68 | 13.52 | 12.75 | 12.36 |

All Neoprene Station Wire-Inside Outside Use

| 950 | 22NE2-J | 895399 | 28 | 500 | $1500(f)$ | 29.00 | 27.55 | 25.38 | 23.93 | 23.20 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 951 | 22NE3-J | 895400 | 32 | 500 | $1000(\mathrm{~g})$ | 32.65 | 31.02 | 28.57 | 26.94 | 26.12 |
| 952 | 22NE4-J | 895401 | 40 | 500 | $1000(\mathrm{~g})$ | 40.95 | 38.90 | 35.83 | 33.78 | 32.76 |

SINGLE CONDUCTOR-Half of Twisted pair delivered price.
TRIPLE CONDUCTOR-One and one-half times twisted pair delivered price.
FOUR CONDUCTOR-Two times twisted pair delivered price.
PRICING: Items of telephone wire may be combined for quantity discounts. Minimum order one standard package.
FACTORY SHIPPING PACKAGE:
(a) Individual paper wrapped coils.
(b) Non-returnable reels.
(c) Individual knockout cartons.
(d) Six 500 foot coils in individual knockout reship cartons packed in master carton.
(e) Four 500 foot coils in individual knockout reship cartons packed in master carton.
(f) Three 500 foot coils in jndividual knockout reship cartons packed in master carton.
(g) Two 500 foot coils in individual knockout reship cartons packed in master carton.
(h) Four 1000 foot metal spools in individual reship cartons packed in master carton.
(i) Eight 500 foot metal spools in one carton.

## Whitney Blake Disfribution Wires

| Cat No. | Pafrs | ${ }_{S f(\pi G}^{A W G}$ | ${ }_{p}{ }^{-}$Feret |  | Grose | $\begin{gathered} \text { LhatPrice } \\ p=0 M^{\prime} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1295 | 3 | 19 | 2000 or 4000 | 81 | 99 | \$ 84.70 |
| 1292 | 6 | 19 | 2000 or 4000 | 116 | 138 | 151.80 |
| 1294 | 11 | 19 | 2000 | 201 | 251 | 262.90 |
| 1293 | 16 | 19 | 2000 | 276 | 336 | 365.20 |

NOTE: Not more than $10 \%$ of reels to contain 2 pieces. Minimum length of any piece 500 feet.
QUANTITY DISCOUNTS-Less than standard reel.......................................... List plus $10 \%$ 2,000 to 5,999 feet. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 6,000 to 9,999 feet . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 10,000 feet or more. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . List less $15 \%$
DELIVERY: F.O.B. New Haven, Conn. Freight allowed to destination.
REELS: Non-Returnable. No charge will be made for reels and no credit allowed if returned.

## pages $3,4,5,6,7 \mathrm{r}$ continued

Issue Date: 4-15-57

## Semi-Rigid Plastite Distributing Frame, Jumper and Ducł Wire

| Cat. <br> No. <br> 1 | Type | Stock No. | Approx. Wt. Lbs. Der LM 1M Ft. | $\begin{gathered} \begin{array}{c} U_{n i t} \\ \text { Pkg. } \\ \text { Feet } \end{array} \\ \hline \end{gathered}$ | $\begin{gathered} \text { Factory } \\ \text { Shipping } \\ \text { Pkg. Ft. } \end{gathered}$ | $\begin{gathered} U_{\text {nit PRg. }} \\ \text { to } 25 M \mathrm{MF} . \\ \quad \text { List } \\ \hline \end{gathered}$ | $25 \mathrm{M} \mathrm{Ft}$. 50 MFt $-5 \%$ | 50 MFt -$-121 / 2 \%$ | $\begin{gathered} 250 M \text { Ft- } \\ \text { and } \mathrm{F} .1 \\ -171 / 2 \% \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Carload } \\ & \text { and Over } \\ & -20 \% \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1401 | 22S2 B\&W | 895395 | 7 | 1000 | 4000(h) | \$10.10 | \$ 9.60 | \$ 8.84 | \$ 8.33 | \$ 8.08 |
| 1402 | 22S2 R\&W | 895396 | 7 | 1000 | 4000(h) | 10.10 | 9.60 | 8.84 | 8.33 | 8.08 |
| 1403 | $22 \mathrm{~S} 3 \mathrm{R}, \mathrm{B}, \mathrm{W}$ | 895397 | 11 | 1000 | 4000(h) | 15.15 | 14.39 | 13.26 | 12.50 | 12.12 |
| 1404 | 22S4 R, B, W, G | 895398 | 14 | 1000 | 4000(h) | 20.20 | 19.19 | 17.68 | 16.67 | 16.16 |
| Distributing Frame Wire-Nylon Jacketed |  |  |  |  |  |  |  |  |  |  |
| 2110 | 22DFN2 B8W | 895402 | 7 | 1000 | 4000(h) | 14.40 | 13.68 | 12.60 | 11.88 | 11.52 |
| 2111 | 22DFN2 R\&W | 895403 | 7 | 1000 | 4000(h) | 14.40 | 13.68 | 12.60 | 11.88 | 11.52 |
| 2112 | 22DFN3 B, W, R | 895404 | 11 | 1000 | 4000(h) | 21.60 | 20.52 | 18.90 | 17.82 | 17.28 |
| Distributing Frame Wire-Enamel-Cotton Covered |  |  |  |  |  |  |  |  |  |  |
| 2100 | 22DF2 B\&W | 895392 | 6 | 1000 | 4000(h) | 18.50 | 17.58 | 16.19 | 15.26 | 14.80 |
| 2102 | 22DF2 R\&W | 895393 | 6 | 1000 | 4000(h) | 18.50 | 17.58 | 16.19 | 15.26 | 14.80 |
| 2101 | 22DF3 B, W, R | 895394 | 9 | 1000 | 4000(h) | 27.75 | 26.36 | 24.28 | 22.89 | 22.20 |

## FACTORY SHIPPING PACKAGE:

(a) Individual paper wrapped coils.
(b) Non-returnable reels.
(c) Individual knockout cartons.
(d) Six 500 foot coils in individual knockout reship cartons packed in master carton.
(e) Four 500 foot coils in individual knockout reship cartons packed in master carton.
(f) Three 500 foot coils in individual knockout reship cartons packed in master carton.
(g) Two 500 foot coils in individual knockout reship cartons packed in master carton.
(h) Four 1000 foot metal spools in individual reship cartons packed in master carton.
(i) Eight 500 foot metal spools in one carton.

## Terms and Conditions of Sale

QUANTTTY DISCOUNTS: To all users of these types of wires:
$1,000 \mathrm{ft}$. to $4,999 \mathrm{ft}$. . . . . . . . . . . . . . . . . . . . . . . . . . . . List less less $10 \%$
$5,000 \mathrm{ft}$. to $24,999 \mathrm{ft}$. . . . . . . . . . . . . . . . . . . . List less $20 \%$
$25,000 \mathrm{ft}$ to $49,999 \mathrm{ft}. \mathrm{}. \mathrm{}. \mathrm{}. \mathrm{}. \mathrm{}. \mathrm{}$.

50,000 tt. to 99,999 ft. . . . . . . . . . . . . . . . . . . . . . List less 25\%
$100,000 \mathrm{ft}$. to $249,999 \mathrm{ft}$. . . . . . . . . . . . . . . . . . . . . .
250,000 ft. and over . . . . . . . . . . . . . . . . . . . . . . . List less $30 \%$

Rural Distribution Telephone Wire - ANKOSEAL
Size 19 AWG Copper Conductors -. 109 Extra High Strength Galvanized Sieel Support Wire

| Type No. | $\begin{gathered} \text { Guart'd. } . \\ \text { Pafrs } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Approx. } \\ \text { Appyph. } \\ \text { O.D. } \end{gathered}$ |
| :---: | :---: | :---: |
| 319PEV | 3 | .380" |
| 619PEV | 6 | .500" |
| 1119PEV | 11 | .760" |
| 1619PEV | 16 | .850" |


| $\begin{aligned} & \text { Net Wt. } \\ & \text { Por } \end{aligned}$ | $\begin{gathered} \text { Nominal } \\ \text { Reolt } \\ \text { Longth } \\ \hline \end{gathered}$ | A |
| :---: | :---: | :---: |
| 80 | $4000^{\prime}$ |  |
| 115 | $4000^{\prime}$ |  |
| 193 | 2000' |  |
| 267 | 2000' |  |
| List |  |  |
| List less 5\% |  |  |
| List less 10\% |  |  |
| List less 15\% |  |  |


| Approx. Shpg. Wt. PerMFt. | Liat Price <br> Per MFeet |
| :---: | :---: |
| 100 | \$ 76.00 |
| 130 | 137.00 |
| 234 | 238.00 |
| 342 | 332.00 |

QUANTITY DISCOUNT-Minimum quantity 2,000 feet.

| 2,000 feet to 3,999 feet. | List |
| :---: | :---: |
| 4,000 feet to 5,999 feet. | List less 5\% |
| 6,000 feet to 7,999 feet. | List less 10\% |
| 8,000 feet and over. | List less 15\% |

Items on this sheet may be combined to obtain quantity discount.
REELS included in Prices are Non-Returnable. Not more than $10 \%$ of reels to contain 2 pieces. Minimum length of any piece is 500 feet.

| Crapo Galvanized Best Best (BB) Telephone Wire |  | PRICE PER HUNDRED POUNDS F. O. B. MILL* |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Stock No. | Gauge $\quad$Ees, than <br> Pound | $\begin{aligned} & 1,500 \text { to } \\ & 3,9999 \\ & \hline \text { Pounds } \\ & \hline \end{aligned}$ | $\begin{aligned} & 4,000 \text { to } \\ & \text { Pought } \\ & \hline \end{aligned}$ | $\begin{aligned} & 10,000 \text { to } \\ & 24,9999 \\ & \text { Pound } \\ & \hline \end{aligned}$ | 25,000 Pounds to Pounds to Carload | Carload $\begin{aligned} & \text { and } \\ & \text { Over } \end{aligned}$ |
| 893134 | 10 B.W.G.................. | price on application |  |  |  |  |
| 893135 | 11 B.W.G................. . price on |  |  |  |  |  |
| 893136 | 12 B.W.G................... $\$ 16.91$ | \$16.46 | \$16.21 | \$16.06 | \$15.86 | \$15.56 |
| 893137 | 14 B.W.G................. 18.24 | 17.79 | 17.54 | 17.39 | 17.19 | 16.89 |
| *Shipments from Warehouse Stocks Slightly Higher. |  |  |  |  |  |  |
| Crapo HTL-85 Galvanized Telephone Wire |  |  |  |  |  |  |
| 893126 | 10 B.W.G.................. . $\$ 17.49$ | \$17.04 | \$16.79 | \$16.64 | \$16.44 | \$16.14 |
| 893127 | 12 B.W.G................. 17.71 | 17.26 | 17.01 | 16.86 | 16.66 | 16.36 |
| 893128 | 14 B.W.G.................. 19.11 | 18.66 | 18.41 | 18.26 | 18.06 | 17.76 |
| *Shipments from warehouse stocks slightly higher. |  |  |  |  |  |  |
| Crapo HTL-135 Galvanized Telephone Wire |  |  |  |  |  |  |
| 893129 | 12 B.W.G.................. . $\$ 18.73$ | \$18.28 | \$18.03 | \$17.88 | \$17.68 | \$17.38 |
| Crapo HTL-190 Galvanized Telephone Wire |  |  |  |  |  |  |
| 895747 | 12 B.W.G.................. . $\$ 22.74$ | \$22.29 | \$22.04 | \$21.89 | \$21.69 | \$21.39 |

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| Copperweld Telephone Line Wire | PRICE PER 100 LBS. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & .128^{\prime \prime} \\ & H \\ & \hline \end{aligned}$ | $\begin{array}{r} 100^{\prime \prime} \\ H S S 40 \% \end{array}$ | $\begin{gathered} 104^{\prime \prime} \\ H . S 30 \% \\ \hline \end{gathered}$ | $\begin{aligned} & .102^{\circ} \\ & \underline{E H S S} 30 \% \\ & \hline \end{aligned}$ | $\begin{array}{r} .080^{\circ} \\ \text { HS 40\% } \\ \hline \end{array}$ | $\begin{array}{r} .080^{\circ} \\ \operatorname{EHS} 30 \% \\ \hline \end{array}$ |
| Carload and Over | \$38.95 | . $\$ 39.10$ | \$35.10 | \$36.80 | \$39.20 | \$35.20 |
| 20,000 to 29,999 lbs. incl. | 39.45 | 39.60 | 35.60 | 37.30 | 39.70 | 35.70 |
| 10,000 to 19,999 lbs. incl. | 39.95 | 40.10 | 36.10 | 37.80 | 40.20 | 36.20 |
| 5,000 to 9,999 lbs.incl. | 40.20 | 40.35 | 36.35 | 38.05 | 40.45 | 36.45 |
| 2,000 to 4,999 lbs. incl. . | 40.70 | 40.85 | 36.85 | 38.55 | 40.95 | 36.95 |
| 200 to 1,999 lbs. incl. | 41.45 | 41.60 | 37.60 | 39.30 | 41.70 | 37.70 |
| Bare Copper Line Wire |  |  |  |  | BASE PRIC | 4.00 CWF. |

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| Crapo Galvanized Steel Strand |  |  |  | CLASS A COATING ASTM DESIGNATION A 122-52T |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Extra Galvanized |  | Common | Grade | 7-Wire Strand |  | PRICE PER 1000 fT. |  |  |  |
| Stock No. | Stue |  |  | Pounds per 1000 Ft | Strength in Pounds | $\begin{gathered} \text { Col } 1 \\ \text { GOP to } \\ \text { 9999 Ft } \end{gathered}$ | $\begin{gathered} \operatorname{col} 2 \\ 1000 \mathrm{~F}^{2} \\ \text { to } 74,999 \mathrm{Ft} \end{gathered}$ | $\begin{gathered} \text { Col. } 3 \\ \text { 75,000 } \\ \text { to Carload } \end{gathered}$ | $C \quad C$ <br> Col. 4 (od Snipmen Ot One time to One Destinctlo |
| 893366 | $5 \%$-in. |  |  | 813 | 11600 | \$185.58 | \$173.98 | \$. | \$139.19 |
| 893367 | $1 / 2$-in. |  |  | 517 | 7400 | 112.93 | 105.87 | 99.64 | 84.70 |
| 893368 | 7/6-in. |  |  | 399 | 5700 | 90.22 | 84.58 | 79.61 | 67.67 |
| 893369 | $3 /$-in. |  |  | 273 | 4250 | 66.65 | 62.48 | 58.81 | 49.99 |
| 893370 | 5/6-in. |  |  | 205 | 3200 | 52.37 | 49.10 | 46.21 | 39.28 |
| 893371 | $1 / 4$-in. |  |  | 121 | 1900 | 36.12 | 33.86 | 31.87 | 27.09 |
| 893372 | 3/6-in. |  |  | 72.9 | 1150 | 24.96 | 23.40 | 22.02 | 18.72 |

Issue Date: 4-15-57

# Following Crapo Galvanized Strand is Classified " A " Coating ASTM Designation A122-54T 

Extra Galvanized Siemens-Martin Grade 7-Wire Strand__________ PRICE PER 1000 FEET

| Stock No. | Siae | $\begin{aligned} & \text { Poundy per } \\ & \text { 1000 ft. } \end{aligned}$ | Strength in Pounds |  | $\begin{array}{r} 10,000 \mathrm{Ft} . \\ \text { to } 74,999 \mathrm{Ft} . \\ \hline \end{array}$ | $\begin{aligned} & 75,000 \text { Ft. } \\ & \text { to Carload } \end{aligned}$ | Carload Shipmen at One Time to One Destination |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 893375 | 5/8-in. | 813 | 19100 | \$198.28 | \$185.88 |  | \$148.51 |
| 893376 | $1 / 2$-in. | 517 | 12100 | 121.00 | 113.43 | 106.76 | 90.75 |
| 893377 | 7/6-in. | 399 | 9350 | 96.72 | 90.67 | 85.34 | 72.54 |
| 893378 | $3 / 8$-in. | 273 | 6950 | 70.86 | 66.43 | 62.52 | 53.15 |
| 893379 | 5/6-in. | 205 | 5350 | 55.66 | 52.18 | 49.11 | 41.75 |
| 893381 | 1/4-in. | 121 | 3150 | 37.98 | 35.61 | 33.51 | 28.49 |
| 893382 | 3/6-in. | 72.9 | 1900 | 26.12 | 24.48 | 23.04 | 19.59 |
| Utilities Grade-Western Union-A. T. \& T. |  |  |  |  |  |  |  |
| 893404 | 3/6-in. (2200 lb.) | 80.3 | 2400 | 28.90 | 27.10 | 25.50 | 21.68 |
| 893403 | $9 \% \mathrm{sin}$. ( 4000 lb .) | 164 | 4600 | 45.60 | 42.75 | 40.23 | 34.20 |
| 893402 | 5/6-in. ( 6000 lb.$)$. | 225 | 6000 | 60.66 | 56.87 | 53.52 | 45.50 |
| 893401 | $3 / 8-\mathrm{in}$. ( 10000 lb .) | 273 | 11500 | 75.14 | 70.45 | 66.30 | 56.36 |
| 893400 | $7 / 6$-in. ( 16000 lb .) | 399 | 18000 | 109.18 | 102.36 | 96.34 | 81.89 |
| 893399 | $1 / 2$-in. ( 25000 lb .) | 517 | 25000 | 136.89 | 128.33 | 120.78 | 102.67 |
| Type 430 Stainless Steel - A Chromium Steel |  |  |  |  |  |  |  |
| 897313 | 7/3-in. | 97 | 3600 | 100.00 | 91.00 | 86.00 |  |
| 897314 | 1/4-in. | 128 | 4900 | 118.00 | 107.00 | 102.00 |  |
| 897315 | $9 / 37$-in. | 163 | 6150 | 159.00 | 144.00 | 137.00 |  |
| 897316 | 5/6-in. | 202 | 7600 | 190.00 | 172.00 | 163.00 |  |
| 897317 | 3/8-in. | 270 | 10000 | 251.00 | 228.00 | 217.00 |  |
| 897318 | 7/6-in. | 394 | 15000 | 360.00 | 327.00 | 311.00 |  |
| 897319 | 1/2-in. | 510 | 19500 | 444.00 | 403.00 | 383.00 | - |


| Type 302 897299 | 7/2-in. | 100 | 6300 | 121.00 | 112.50 | 107.00 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 897300 | 1/4-in. | 132 | 8500 | 142.00 | 132.50 | 126.00 |  |
| 897301 | $9 / 8$-in. | 167 | 10700 | 174.00 | 162.00 | 154.00 |  |
| 897302 | 5/6-in. | 208 | 13200 | 203.00 | 188.00 | 179.50 |  |
| 897303 | $3 / 8$-in. | 278 | 18000 | 269.00 | 250.00 | 238.50 |  |
| 897304 | 7/6-in. | 405 | 26000 | 367.00 | 342.00 | 325.50 |  |
| 897305 | 1/2-in. | 525 | 33700 | 462.00 | 430.00 | 410.00 |  |


| 897306 | $7 / 8$-in. | 100 | 5700 | 173.00 | 161.00 | 153.00 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 897307 | 1/4-in. | 132 | 7650 | 223.50 | 208.00 | 198.50 |  |
| 897308 | $9 / 8$-in. | 167 | 9650 | 262.50 | 244.00 | 232.00 | $\underline{4}$ |
| 897309 | 5/6-in. | 208 | 11900 | 323.00 | 300.50 | 287.50 |  |
| 897310 | 3/-in. | 278 | 16200 | 433.00 | 403.00 | 383.50 |  |
| 897311 | 7/6-in. | 405 | 23400 | 576.00 | 545.00 | 519.50 |  |
| 897312 | $1 / 2$-in. | 525 | 30200 | 748.00 | 695.00 | 661.50 |  |

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Copperweld Grip-Flex Insulator Ties - Recommended for Copperweld Line Wire

| Catalog. Number |  | Approx. Shpg. Wt. Per 100 Unta | $\begin{aligned} & \text { Relnforcing } \\ & \hline \text { Wire } \end{aligned}$ | $\begin{gathered} \text { Binding } \\ \text { Wire } \end{gathered}$ | Price Per 100 <br> Complete Unft |
| :---: | :---: | :---: | :---: | :---: | :---: |
| GFC-78 | .128" | 14 lbs. | 7 Awg $\times 15^{\prime \prime}$ | 10 Awg $\times 24^{\prime \prime}$ | \$11.71 |
| GFC-910 | .104" or $102^{\prime \prime}$ | 8 lbs . | 9 Awg $\times 12^{\prime \prime}$ | 11 Awg $\times 24^{\prime \prime}$ | 8.69 |
| GFC-1012 | 080" | 7 lbs . | 10 Awg $\times 10^{\prime \prime}$ | 11 Awg $\times 24^{\prime \prime}$ | 8.13 |

Copper Tie Wires APPROXIMATE PRICE $\$ 60.00$ CWT.

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| Cat. No. | Stae | $\begin{gathered} \text { Dif. } \\ \text { Inches } \end{gathered}$ | Length <br> Inches | *Base List Prfce <br> Per 1000 Pfece |
| :---: | :---: | :---: | :---: | :---: |
| 134SP136 | 10 B.W.G. | . 136 | 21. | \$60.00 |
| 109SP109 | 12 B.W.G. | . 109 | 17. | 44.00 |
| 83SP94 | 14 B.W.G. | . 094 | 16. | 32.00 |

*Quantity Extras: Based on the total quantity of Splints (pieces) ordered at one time to one destination. Splints of more than one size may be combined to obtain minimum price.

5,000 Splints or over-Above prices net.
2,500 to 4,999 Splints-Above prices plus $15 \%$.
1,000 to 2,499 Splints-Above prices plus $25 \%$.
Less than 1,000 Splints-Above prices plus $50 \%$.
Crapo Galvanized Tie Wire
IN COILS
$\qquad$

| Stock No | Size |
| :--- | :--- |
| 893109 | 10 B.W.G. $\ldots . . . \ldots \ldots \ldots$. |
| 893110 | 12 B.W.G. . . . . . . . . . . . . . . |
| 893111 | 14 B.W.G. . . . . . . . . . . . . . |$\}$


| PRICE PER 100 |  |  |  |  |  |  | LBS. F.O.B. MILL* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Less than | 1,500 to | 4,000 to | 10,000 to | 25,000 | Carload |  |  |
| 1,500 | 3,999 | 9,999 | 24,999 | Pounds | and |  |  |
| Pounds | Pounds | Pounds | Pounds | to Carload | Over |  |  |

893111 14 B.W.G.
price on application
*10 TO 24 INCHES (HORSESHOE TIES)

| 10 B.W.G. | \$19.33 | \$18.88 | \$18.63 | \$18.48 | \$18.28 | \$17.98 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12 B.W.G. | 20.32 | 19.87 | 19.62 | 19.47 | 19.27 | 18.97 |
| 14 B.W.G. | 23.02 | 22.57 | 22.32 | 22.17 | 21.97 | 21.67 |
| CHES (ARMOR TIES) |  |  |  |  |  |  |
| 10 B.W.G. | 18.78 | 18.33 | 18.08 | 17.93 | 17.73 | 17.43 |
| 12 B.W.G | 19.57 | 19.12 | 18.87 | 18.72 | 18.52 | 18.22 |
| 14 B.W.G. | 21.77 | 21.32 | 21.07 | 20.92 | 20.72 | 20.42 |

*Straightened and Cut to Length (See Schedule " $A$ " for Straightened and Cut Quantity Extras)
NOTE: Prices for Straightened and Cut Tie Wire include straightening, cutting and packing extras. For quantity extras of Straightened and Cut Tie Wire, add to above net prices, quantity extras shown in following Schedule " $A$ ".

## SCHEDULE "A"

| Extras for Quantity of Str | PER HUNDEED POUND |  |  |
| :---: | :---: | :---: | :---: |
| 1000 pounds and over of | .BASE | 200 to 299 pounds of a size. | \$ 3.00 |
| 500 to 999 pounds of a size. | \$1.00 | 100 to 199 pounds of a size. | 5.00 |
| 300 to 499 pounds of a size | 2.00 | Less than 100 pounds of a size | 10.00 |


| Crapo Tangent Support |  |  | PRICE EACH |
| :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Length |  |
| 064CRW109 | 897194 | 151/2" | \$ . 33 |
| 080CRW109 | 897195 | 151/2" | . 33 |
| 083CRW109 | 897196 | 151/2" | . 33 |

page 3s

| Armstrong Glass Insulators |  | PRICE PER 1000 |
| :---: | :---: | :---: |
| Cat. No. | Stock No. | LCL |
| 1 | 891187. | \$131.65 |
| 2 | 891188. | 104.35 |
| 3 | 891189. | 88.25 |
| 9 | 891190. | 81.85 |
| 10 | 891191. | 228.00 |
| 13 | 891192. | 85.10 |
| 14 | 891193. | 107.65 |
| TW | 894674. | 192.65 |
| CSC | 891195. | 141.25 |

Carload prices on application
Insulator prices applicable for factory shipments only. Slightly
increased prices for warehouse shipments.

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## page 5 S

Insulators Non-Breakable Rubber Insulator


## ZONE DESIGNATIONS

## Knobs

Zone No. 1
The States of Minnesota, Iowa, Missouri, Kentucky, Virginia and all states north and east thereot Also Omaha and Lincoln, Nebr.; Kansas City, Átchison and Leavenworth, Kansas; Bristol, Tennessee; Fargo, N. D. and Sioux Falls, S. D.

Zone No. 2
The States of North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana. Arkansas and Tennessee (except Bristol). Also Texarkana, Texas.

Zone No. 3
The States of North Dakota (except Fargo), South Dakota (except Sioux Falls), Nebraska (except Omaha and Lincoln), Kansas (except Kansas City, Atchison and Leavenworth); Oklahoma and Texas except that part west of the eastern border of New Mexico extended south to the Mexican border. Denver and Pueblo, Colorado and all points in Colorado east thereot. Cheyenne, Casper, and Douglas, Wyoming.

## Zone No. 4

The States of Montana, Idaho, Utah, Nevada, New Mexico, Ârizona, California, Oregon and Washington, Wyoming except Cheyenne, Casper and Douglas; Western Colorado not included in Zone 3, Texas west of the eastern border of New Mexico extended south to the Mexican border.

## Zone No. 5

Prices are F. O. B. Pacific Coast warehouses in the cities of Los Angeles and San Francisco, California; Seattle, Washington and Portland, Oregon.

## Issue Date: 4-15-57



Zone Prices not applicable for Plastic Tubes.
Insulators $\qquad$

| Porcelain Telephone Knobs |  |  | PRICE PER THOUSAND |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Zone 1 | Zone 2 | Zone 3 | zone 4 | Zone 5 |
| 4-SG | 891196 | \$53.80 | \$56.10 | \$59.70 | \$65.40 | \$59.70 |
| S | 891197 | 49.50 | 50.80 | 53.20 | 57.00 | 56.40 |
| 4-2GR | 891199 | 51.60 | 53.40 | 56.70 | 62.10 | 57.00 |
| 6061 | 891200 | 68.50 | 70.30 | 76.10 | 78.10 | 74.70 |
| T | 891201. | 73.50 | 75.60 | 79.10 | 84.60 | 80.60 |
| C | 891202 | 40.90 | 41.50 | 43.10 | 44.90 | 44.10 |
| 6062 | 891198 | 104.00 | 107.10 | 113.00 | 122.10 | 114.30 |
| 22 | 891203 | 156.60 | 159.90 | 165.40 | 174.10 | 169.90 |

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| Split Nail Knobs | PRICE PER THOUSAND |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Stock No. | Zone 1 | Zone 2 | Zone 3 | Zone 4 | Zone 5 |
| 891206 | \$44.40 | \$45.90 | \$48.00 | \$52.00 | \$46.20 |

Same Zone Prices as for Knobs.

## ZONE DESIGNATIONS

## Porcelain Insulators

## Eastern Zone

The States of Maine, New Hampshire, Vermont, Massachusefts, Rhode Island, Connecticut, New York, Pennsylvania, New Jersey, Delaware, Maryland, District of Columbia, Virginia, West Virginia, Kentucky, Ohio, Indiana, Illinois, Michigan, Wisconsin, including all points on the west bank of the Mississippi River, north of the point where the northern boundary of Tennessee intersects the River, and also including all points in Minnesota on or east of a line following the 95th meridian of longitude from the Canadian Boundary south to a point where this meridian crosses the headwaters of the Mississippi River, thence continuing along the River.

## Central Zone

The States of North Carolina, South Carolina, Tennessee, Georgia, Mississippi, Florida, Alabama, Louisiana, Texas, Arkansas, Oklahoma, Kansas, Nebraska, North Dakota, South Dakota, Colorado, and all points in Missouri, Iowa and Minnesota excepting points on the west bank of the Mississippi River as noted in the eastern zone definition, also excepting the portion of Minnesota which is included in the eastern zone definition.

## Western Zone

The States of Montana, New Mexico, Wyoming, Arizona, Utạh, Idaho, Nevada, California, Oregon, Washington.

## Issue Date: 4-15-57

| Porcelain Strain Insulators (Dry Process) |  | PRICE PER HUNDRED |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Eastern Zone | Central Zone | Weatera Zone |
| 500 | 891237. | \$10.70 | \$10.80 | \$11.00 |
| 502 | 891238. | 29.00 | 29.80 | 31.20 |
| 504 | 891239. | 36.30 | 37.60 | 38.90 |
| 506 | 891240. | 54.40 | 57.30 | 60.60 |
| (Wet Process) |  |  |  |  |
| 500 | 894137. | 14.64 | 13.20 | 14.65 |
| 502 | 894138. | 30.30 | 27.30 | 30.30 |
| 504 | 894139. | 37.37 | 33.67 | 37.37 |
| 506 | 894140. | 55.55 | 50.05 | 55.55 |



| Wireholders |  | PRICE PER HUNDRED |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Zone 1 |  | Zone 2 |  | Zone 3 |  |
| Cat. No. | Stock No. | $\begin{gathered} 1.99 \\ \text { Pleces } \end{gathered}$ | $\begin{aligned} & 100 \text { and } \\ & \text { over } \end{aligned}$ | $\begin{aligned} & 1.99 \\ & \hline \text { Preces } \end{aligned}$ | 100 and over | $\begin{gathered} 1.99 \\ \text { Pleces } \end{gathered}$ | $\begin{gathered} 100 \text { and } \\ \text { over } \end{gathered}$ |
| 1621 | 891254. | \$36.10 | \$31.80 | \$37.40 | \$32.90 | \$37.60 | \$33.10 |
| 1622 | 891255 | 31.00 | 27.00 | 31.40 | 27.30 | 32.80 | 28.50 |
| J1955 | 891256 | 35.64 | 31.13 | 36.96 | 32.34 | 37.07 | 32.45 |
| J1960 | 891257 | 43.70 | 38.17 | 45.10 | 39.27 | 45.66 | 39.70 |
| J1961 | 891258 | 55.88 | 48.95 | 57.60 | 50.60 | 58.08 | 50.80 |
| J1965 | 891260 | discontinue |  |  |  |  |  |
| J1976 | 891261. | 95.00 | 82.70 | 97.00 | 84.48 | 97.57 | 85.10 |

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| For Drop, Bridle and Interior Wires $\qquad$ |  | PRICE PER HUNDRED |  | For BB Iron Wire. |  | PRICE PER HUNDRED |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Cat. No. | Stock No. | 1.5000 | 5000 or more |
| Cat. No. | Stock No. |  |  | 1.5000 | 5000 or more | 5-083C | 893221. | \$ 6.26 | \$ 5.63 |
| 3-036A | 893201 | \$ 2.25 | \$ 2.03 | 5-109C | 893222. | 6.68 | 6.01 |
| 3-045B | 893202. | 2.25 | 2.03 | 5-109D-BB | 893223. | 7.50 | 6.75 |
| 3-051B | 893203. | 2.25 | 2.03 | For BB Galv-Iron Wire |  |  |  |
| $3-064 \mathrm{~B}$ | 893204.. | 2.25 | 2.03 |  |  |  |  |
| 4-049B | 893205. | 3.00 | 2.70 | $\begin{aligned} & \text { 2-083C } \\ & \text { 2-083D } \end{aligned}$ | 893227. | 4.73 5.45 | 4.26 4.91 |
| For Hard Drawn Copper Wire |  |  |  | 2-109D | 893229. | 5.45 | 4.91 |
| 1-064C | 893206. | 4.10 | 3.69 | 4-109C | 893233 | 5.45 | 4.91 |
| 1-080C | 893207. | 4.28 | 3.85 |  |  |  | ICE PER 100 |
| 1-080D | 893208. | 7.49 | 6.74 | 2-134J | 893230. |  | \$10.47 |
| 1-102C | 893211. | 5.00 | 4.50 | 2-148J | 893231. |  | 11.55 |
| 1-102D | 893212.. | 7.49 | 6.74 | 2-165J | 893232. |  | 12.83 |
| 1-114D | 893215. | 7.49 | 6.74 |  |  |  |  |
| PRICE PER 100 |  |  |  |  |  |  |  |
| 1-128E | 893218. | . . | \$ 8.73 |  |  |  |  |
| 1-128J | 893219.. |  | 10.70 |  |  |  |  |
| 1-162J | 893220. |  | 10.70 |  |  |  |  |


| For "85" Grade Iron Wire. | PRICE PER HUNDRED |  | For Rusty Iron Wire Cat. No. <br> Stock No. |  | PRICE PER HUNDRED |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. Stock No. | -1.5000 | 5000 or more |  |  |  |  |
| 5-083C 893221. | \$ 6.26 | \$ 5.63 | 2-102C | 893243. | \$ 5.45 | \$ 4.91 |
| 5-109D-8.5 893235 | 9.00 | 8.10 | For Copperweld Wire |  |  |  |
| 2-083C 893227. | 4.73 | 4.26 |  |  |  |  |
| 2-083D 893228. | 5.45 | 4.91 | 1-064C | 893206.. | 4.10 | 3.69 |
|  | 1.100 |  | 1-060D | 893208. | 7.49 | 6.74 |
| 2-148J - 893231. | \$11.55 |  | 1-102J | 893214. | 10.70 | 9.63 |
| For "135" Grade Wire |  |  | 1-114J | 893217. | 10.70 | 7.29 |
|  | $1-5000$ 5000 or more |  | 3-102D | 895164. | 8.10 |  |
| 5-109D-135 893242. | \$10.50 | \$ 9.45 |  |  |  |  |
| 5-109D-190 897166. | 14.63 | 13.17 |  |  |  |  |
| For "190" Grade Wire |  |  |  |  |  |  |
| 5-190G-190 895831.. | 14.63 | 13.17 |  |  | $\cdots$ |  |

## Nicopress Reducing Sleeves

| For Copper Wire |  | PRICE PER HUNDRED | For Galvanized BB Wire |  | PAICE PER HUNDRED |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. |  | Cat. No. | Stock No. |  |
| 2-045X036B | 893309. | \$ 4.50 | 4-109X083C | 893339. | \$ 8.18 |
| 1-064X036C | 893310. | 6.42 | 2-109X083D | 893340. | 8.18 |
| 1-064X045C | 893311. | 6.42 | 2-134X083J | 893341. | 15.71 |
| 1-080X036C | 893312. | 6.42 | 2-134X109J | 893342. | 15.71 |
| 1-080X045C | 893313. | 6.42 | 2-148X109J | 893343. | 17.33 |
| 1-080X051C | 893314. | 6.42 | For Galvanized Line Wire to Drop, Bridle and Inside |  |  |
| 1-080X064C | 893315. | 6.42 |  |  |  |
| 1-102X036C | 893316. | 7.50 |  |  |  |
| 1-102X045C | 893317. | 7.50 | 2-083X036C | 893344. | \$ 7.10 |
| 1-102X051C | 893318. | 7.50 | 2-083X045C | 893345. | 7.10 |
| 1-102X064C | 893319. | 7.50 | 2-083X051C | 893346. | 7.10 |
| 1-102X080C | 893320. | 7.50 | 4-109X045C | 893347 | 8.18 |
| 1-114X036D | 893322. | 11.24 | 2-109X045D | 893348. | 8.18 |
| 1-114X045D | 893321. | 11.24 | 4-109X051C | 893349. | 8.18 |
| 1-114X051D | 893323. | 11.24 | 2-109X051D | 893350. | 8.18 |
| 1-114X064D | 893324. | 11.24 | 4-109X064C | 893351. | 8.18 |
| 1-114X080D | 893325. | 11.24 | 2-109X064D | 893352. | 8.18 |
| 1-114X102D | 893326. | 11.24 | 2-134X051J | 893353. | 15.71 |
| 1-128X051E | 893327. | 13.10 | 2-134X064J | 893354. | 15.71 |
| 1-128X064E | 893328. | 13.10 | 2-148X064J | 893355. | 17.33 |
| 1-128X080E | 893329. | 13.10 | 2-165X064J | 893356. | 19.25 |
| 1-128X102E | 893330. | 13.10 |  |  |  |
| 1-128X114E | 893331. | 13.10 |  |  |  |
| 1-162X064J | 893332. | 16.05 |  |  |  |
| 1-162X102J | 893333. | 16.05 |  |  |  |
| 1-162X114J | 893335. | 16.05 |  |  |  |
| 1-162X128J | 893336. | 16.05 |  |  |  |


| For Copper Wire |  | PRICE PER HUNDRED | For BB Galvanized Wire |  | PRICE PER HUNDRED |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. |  | Cat. No. | Stock No. |  |
| R-1-080C | 893296. | \$10.65 | R2-083C | 893303. | \$11.78 |
| R-1-080D | 893297. | 18.68 | R4-109C | 893304. | 13.58 |
| R-1-102C | 893298. | 12.45 | R2-109D | 893305. | 13.58 |
| R-1-114D | 893299. | 18.68 | R2-134J | 893306. | 26.18 |
| R-1-114E | 893300. | 21.83 | R2-148J | 893307. | 28.88 |
| R-1-128E | 893301. | 21.83 | R2-165J | 893308. | 32.03 |
| R-1-162 | 893 | 26.70 |  |  |  |

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| PRICE PER HUNDRED |  |  |  |  |  | PRICE PER HUNDRED |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | 1.5000 | 5000 or more | Cat. No. | Stock No. | . 1.5000 | 5000 or more |
| T2-045B | 894052 | \$ 4.13 | \$ 3.72 | T2-083C | 894874. | \$ 9.45 | \$ 8.51 |
| T2-109D | 894053. | 11.03 | 9.93 | T2-083X045C | 894875. | 14.44 | 13.00 |
| T2-109X045D | 894054. | 15.78 | 14.20 | T1-080C | 894876. | 9.00 | 8.10 |
| T2-109X083D | 894873 | 15.78 | 14.20 | T1-080X045C | 894877. | 13.88 | 12.49 |
| Nicopress Split Sleeves |  |  |  |  |  |  |  |
| 1727B | 895833. | 3.38 | - |  |  |  |  |
| 1744B | 895834. | 3.38 | - |  |  |  |  |
| Nicopress Off-set Dead-End Sleeves |  |  |  |  |  |  |  |
| For Copper Wire |  | PRICE PER HUNDRED |  | For BB Galvanized Wire |  | PRICE PER HUNDRED |  |
| Cat. No. | Stock No. |  |  | Cat. No. | Stock No. |  |  |
| 91-064C | 893252. |  | \$ 7.17 | 94-109C | 893277. |  | \$ 9.53 |
| 91-080C | 893253. |  | 7.49 | 95-109C | 893278. |  | 11.69 |
| 91-080D | 893254. |  | 13.10 | 95-109D-BB | 893279. |  | 13.13 |
| 91-102C | 893257. |  | 8.75 | 92-109D | 893280. |  | 9.53 |
| 91-102D | 893258. |  | 13.10 | 92-165J | 893285. |  | 22.44 |
| 91-114D | 893260. |  | 13.10 | For "85" Galvanized Iron Wire |  |  |  |
| 91-128E | 893263. |  | 15.29 | 95-083C | 893274 |  |  |
| 91-128J | 893264. |  | 18.72 | 95-083C $92-083 C$ | 893274. <br> 893275 |  | 10.95 |
| 91-162J | 893265. |  | 18.72 | 92-083D | 893276. |  | 8.57 9.53 |
| For Copper-Weld Wire |  |  |  | 95-109D-85 | 893290. |  | 15.75 |
| 91-064C | 893252.. |  | 7.17 | 92-134J | 893281. |  | 18.33 |
| 91-080C | 893253.. |  | 7.49 | 92-148J | 893283. |  | 20.22 |
| 91-080D | 893254. |  | 13.10 | For "135" Galvanized Iron Wire |  |  |  |
| 93-102D | 895183.. |  | 14.18 | 95-109D-135 | 893295... |  | 18.38 |
| 91-102J | 893270.. |  | 18.72 | 35-109D-135 | 833 |  | 18.38 |
| 91-114J | 893271. |  | 18.72 |  |  |  |  |

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## Squeez Sleeves

| For Solid Copper Wire |  | PRICE PER HUNDRED |
| :---: | :---: | :---: |
| Cat. No. | Stock No. |  |
| 14-C-1 | 895448. | \$ 4.09 |
| 12-C-1 | 895449. | 4.27 |
| 12-D-1 | 895450. | 7.48 |
| 10-C-1 | 895451. | 4.99 |
| 10-D-1 | 895651. | 7.48 |
| 9-D-1 | 895452. | 7.48 |
| 8-D-1 | 895453. | 7.48 |
| 8-J-1 | 895454. | 10.69 |
| 6-J-1 | 895455. | 10.69 |
| 4-M-1 | 895456. | 19.42 |
| 4-P-1 | 895457. | 19.42 |
| 2-X-1 | 895458. | 38.49 |
| 1-X-1 | 895459. | 38.49 |


| For Drop, Bridle and Inside WireCopper, Copperweld and Bronze. |  |  |
| :---: | :---: | :---: |
| 19-22-A-3 | 895460. | 2.25 |
| 17-18-B-3 | 895461. | 2.25 |
| 16-B-3 | 895462. | 2.25 |
| 14-B-3 | 895463. | 2.25 |


| For Solid Copperweld Wire |  |  |
| :---: | :---: | :---: |
| 14-C-1 | 895448. | 4.09 |
| 12-D-1 | 895450. | 7.48 |
| 10-D-3 | 895464. | 8.10 |
| 10-J-1 | 895465. | 10.69 |
| 9-J-1* | 895466. | 10.69 |
| 8-J-1 | 895454. | 10.69 |
| 8-J-3 | 895467. | 14.74 |
| 8-M-1* | 895468. | 18.00 |
| 8-P-1* | 895469. | 24.00 |
| 7-M-1 | 895470. | 18.00 |
| 6-P-1 | 895471. | 24.00 |
| 4-X-1 | 895472. | 38.49 |


| Stranded Copper Wire |  | PRICE PER HUNDRED |
| :---: | :---: | :---: |
| Cat. No. | Stock No. | * |
| 6 STR-J-1 | 895473. | \$ 9.98 |
| 4 STR-M-1 | 895474. | 18.13 |
| 4 STR-P-1 | 895475. | 18.13 |
| 2 STR-X-1 | 895476. | 35.92 |
| 2/3 STR-X-1 | 895477. | 35.92 |
| 3 No. 10-P-1 | 895478. | 18.13 |
| 4/3 STR-X-1 | 895479. | 32.33 |

For 3-Strand Copperweld

| 8A-M-1 | 895480. | 28.12 |
| :---: | :---: | :---: |
| 8A-P-1 | 895481. | 28,12 |
| 6A-P-1 | 895482. | 30.98 |
| 6A-X-1 | 895483. | 41.25 |
| 4A-X-1 | 395484. | 41.25 |
| 3 No. 12-M-1 | 895485. | 19.42 |
| 3 No. 12-P-1 | 895486. | 24.00 |
| 3 No. 10-P-3 | 895487. | 23.31 |

For Galvanized Steel Conductors_________

| 14-C-2 | 895488. | 4.72 |
| :---: | :---: | :---: |
| 14-C-5 | 895489. | 6.25 |
| 14-D-2 | 895490. | 5.44 |
| 12-C-2 | 895491. | 5.44 |
| 12-C-4 | 895492. | 5.44 |
| 12-C-5 | 895493. | 6.67 |
| 12-D-2 | 895494. | 5.44 |
| 12-D-5BB | 895495. | 7.50 |
| 12-D-5 | 895496. | 9.00 |
| 12-D-5-135 | 895497. | 10.50 |
| 10-J-2 | 895498. | 10.47 |
| 10-J-2-85 | 895499. | 10.47 |
| 9-J-2 | 895500. | 11.55 |
| 8-J-2 | 895501. | 12.82 |

For Stranded Copper Wire
On Application

## Repair and Transposition Squeez Sleeves

| For Solid Copper Wire |  | PRICE PER HUNDRED | For Galvanized Steel Conduciors Price per hundrid |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. |  | Cat. No. 14I-C-2 | Stock No. 895510 | \$11.77 |
| 12L-C-1 | 895502. | \$10.65 | 12L-C-4 | 895511. | 13.57 |
| 12L-D-1 | 895503. | 18.67 | 12L-D-2 | 895512. | 13.57 |
| 10L-C-1 | 895504. | 12.45 | 10L-J-2 | 895513. | 26.17 |
| 10L-D-1 | 895505. | 18.67 | 9L-J-2 | 895514. | 28.87 |
| 9L-D-1 | 895506. | 18.67 | 8L-J-2 | 895515. | 32.02 |
| 8L-D-1 | 895507. | 18.67 | 8L-J-2 | 895515. | 32.02 |
| 8L-J-1 | 895508. | 26.70 |  |  |  |
| 6L-J-1 | 895509. | 26.70 |  |  |  |

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## Reducing Squeez Sleeves

| Copper to Copper |  | PRICR PER HUNDRED | Steel to Steel |  | PRICE PER HUNDRED |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. |  | Cat No. | Stock No. |  |
| 12x17-18-C-1 | 895516. | \$ 6.42 | 12x14-C-4 | 895560. | \$ 8.17 |
| 12x17-18-D-1 | 895517. | 11.23 | 12x14-D-2 | 895561. | 8.17 |
| 12x16-C-1 | 895518. | 6.42 | 10x14-J-2 | 895562. | 15.70 |
| 12x14-C-1 | 895519. | 6.42 | 10x12-J-2 | 895563. | 15.70 |
| 12x16-D-1 | 895520. | 11.23 | 9x12-J-2 | 895564. | 16.98 |
| 12x14-D-1 | 895521. | 11.23 | $9 \times 10-\mathrm{J}-2$ | 895565. | 16.98 |
| 10x17-18-C-1 | 895522. | 7.50 | 8x10-J-2 | 895566. | 18.86 |
| 10x17-18-D-1 | 895523. | 11.23 | 8x9-J-2 | 895567. | 18.86 |
| 10x16-C-1 | 895524. | 7.50 |  |  |  |
| 10x16-D-1 | 895525. | 11.23 | Steel to AWG | op Wire |  |
| 10x14-C-1 | 895526. | 7.50 | 14x17-18-C-21 | 895568. | 7.09 |
| 10x14-D-1 | 895527. | 11.23 | 14x16-C-21 | 895569. | 7.09 |
| 10x12-C-1 | 895528. | 7.50 | 12x17-18-C-41 | 895570. | 8.17 |
| 10x12-D-1 | 895529. | 11.23 | 12x17-18-D-21 | 895571. | 8.17 |
| Other sizes available on request. |  |  | 12x16-C-41 | 895572. | 8.17 |
|  |  |  | 12x16-D-21 | 895573. | 8.17 |
|  |  |  | 12x14-C-41 | 895574. | 8.17 |
| Copperweld to Copperweld |  |  | 12x14-D-21 | 895575. | 8.17 |
| 10x12-C-1 | 895552. | 7.50 | 10x17x18-J-21 | 895576. | 15.70 |
| 10x12-D-1 | 895553. | 11.23 | 10x16-J-21 | 895577. | 15.70 |
| 10x12-J-1 | 895554. | 16.05 | 10x14-J-21 | 895578. | 15.70 |
| 9¢10-J-1 | 895555. | 16.05 | 9x17-18-J-21 | 895579. | 17.32 |
| 8x10-J-1 | 895556. | 16.05 | 9x16-J-21 | 895580. | 17.32 |
| $8 \times 9-\mathrm{J}-1$ | 895557. | 16.05 | 9x14-J-21 | 895581. | 17.32 |
| 6x8-P-1 | 895558. | 36.00 | 8x16-J-21 | 895582. | 19.24 |
| 6Ax8A-P-1 | 895559. | 46.46 | 8x14-J-21 | 895583. | 19.24 |

Squeez Taps

| For Copper, Copperweld and Bronze $\qquad$ |  | PRICE PER HUNDRED |
| :---: | :---: | :---: |
| Cat. No. | Stock No. |  |
| T-17-18-B-2 | 895584. | \$ 4.04 |
| T-14-16-B-2 | 895585. | 4.04 |
| T-12-C-1 | 895586. | 9.00 |
| T-12x17-18-C-1 | 895587. | 13.87 |
| T-12x14-16-C-1 | 895588. | 13.87 |
| T-10-D-1 | 895589. | 10.50 |
| T-10x17-18-D-1 | 895590. | 15.00 |
| T-10x14-16-D-1 | 895591. | 15.00 |
| -1-10x12-D-1 | 895592. | 15.00 |
| [-9-D-1 | 895593. | 10.50 |
| [-9x17-18-D-1 | 895594. | 15.00 |
| T-9x14-16-D-1 | 895595. | 15.00 |
| T-8-D-1 | 895596. | 10.50 |
| T-8x17-18-D-1 | 895597. | 15.00 |
| T-8x14-16-D-1 | 895598. | 15.00 |
| T-8-J-1 | 895599. | 22.12 |
| T-8x14-16-J-1 | 895600. | 32.25 |
| T-6-J-1 | 895601. | 22.12 |
| T-6x14-16-J-1 | 895602. | 32.25 |


| For Steel to Copper, Copperweld and Bronze |  | PRICE PER HUNDRED |
| :---: | :---: | :---: |
| Cat. No. | Stock No. |  |
| T-14x17-18-C-2 | 895603. | \$14.44 |
| T-12x17-18-D-2 | 895604. | 15.78 |
| T-12x14-16-D-2 | 895605. | 15.78 |
| T-10x17-18-J-2 | 895606. | 35.25 |
| T-10x14-16-J-2 | 895607. | 35.25 |
| T-9x17-18-J-2 | 895608. | 35.25 |
| T-9x14-16-J-2 | 895609. | 35.25 |
| T-8x14-16-J-2 | 895610. | 35.25 |
| T-8x12-J-2 | 895611. | 35.25 |
| For Steel to Steel |  |  |
| T-14-C-2 | 895612. | 9.45 |
| T-12-D-2 | 895613. | 11.02 |
| T-12x14-D-2 | 895614. | 15.78 |
| T-10-J-2 | 895615. | 27.37 |
| T-9-J-2 | 895616. | 27.37 |
| T-8-J-2 | 895617. | 27.37 |

## Squeez Deadends

$\qquad$

| Copper Cond | rs | PRICE PER HUNDRED | Galvanized St | l Conductors | PRICE PER HUNDRED |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. |  | Cat. No. | Stock No. |  |
| DE-12-C-1 | 895618. | \$19.83 | DE-14-C-4 | 895635. | \$17.50 |
| DE-12-D-1 | 895619. | 17.50 | DE-14-D-2 | 895636. | 18.67 |
| DE-10-C-1 | 895620. | 17.50 | DE-12-C-4 | 895637. | 18.67 |
| DE-10-D-1 | 895621. | 18.67 | DE-12-C-5 | 895638. | 22.16 |
| DE-9-D-1 | 895622. | 19.83 | DE-12-D-2 | 895639. | 19.83 |
| DE-8-J-1 | 895623. | 28.58 | DE-12-D-5(BB) | 895640. | 22.16 |
| DE-6-J-1 | 895624. | 29.17 | DE-12-D-5(85) | 895641. | 24.50 |
| DE-6STR-J-1 | 895625. | 29.17 | DE-12-D-5(135) | 895642. | 25.66 |
|  |  |  | DE-10-J-2 | 895643. | 33.83 |
| Copperweld | nductors |  | DE-9-J-2 | 895644. | 33.83 |
| DE-12-D-1 | 895626. | 17.50 | DE-8-J-2 | 895645. | 29.17 |
| DE-10-D-3 | 895627. | 21.59 |  |  |  |
| DE-10-J-1 | 895628. | 29.17 |  |  |  |
| DE-9-J-1 | 895629. | 29.17 |  |  |  |
| DE-8-J-3 | 895630. | 28.00 |  |  |  |
| DE-8-M-1 | 895631. | 32.66 |  |  |  |
| DE-8-P-1 | 895632. | 43.16 |  |  |  |
| DE-7-M-1 | 895633. | 32.66 |  |  |  |
| DE-6-P-1 | 895634. | 43.16 |  |  |  |

## Squeez Tools

| Toggle | n Com | N T | PRICE EACH |  |
| :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Grooves | 1 to 24 | 25 or mare |
| 2-DC | 895648 | D \& C |  |  |
| 2-CJ | 895649 | C\& J | \$12.60 | \$12.00 |
| 2-DJ | 895650 | D\& J |  |  |
| 3-BA | 895646 | B \& A | 2.05 | 1.95 |
| 2-DD | 895647 | D\& D | discont |  |

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| Seymour-Smith Tree Pruners__ Price each |  |  |  |  | PRICE EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No |  | Cat. No. Stock No. |  |  |
| 12-18 | 892206. | \$19.50 | 111 | 892201. | \$ 3.30 |
| 12 | 892207. | 7.15 | 20-18 | 894824. | 12.35 |
| 111-18 | 892200. | 12.15 | 20 | 894825. | 3.50 |

## page 4 $\dagger$



| Atkins | Pruning | Saws |  | PRICE EACH | Everstick | Standard | Earth | Auge | ers PRICE | EACH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 40 | 892236 | $20^{\prime \prime}$ |  | \$ 6.60 | Cat. No. | Stock No. |  |  | Eastern Zone | Western Zone |
| 40 | 892237 | 24". |  | 8.40 | 8 | 892292. |  |  | \$ 9.95 | \$11.60 |
| 22 | 894741 | 18". |  | 3.90 | 6 | 892293. |  |  | 8.45 | 9.30 |
| 22 | 894742 | 22". |  | 4.05 |  |  |  |  |  |  |
| 22 | 894743 | $24^{\prime}$. |  | . - | Chance Telescopic Trip Auger |  |  |  |  |  |
| Newman Double Edge Saw |  |  |  |  | 610 | 892294. |  |  | 13.15 | 14.20 |
| 118 | 897240.. |  |  | 5.10 |  | 892295 |  |  |  | 15.35 |
| Iwan Auger Blades |  |  | PRICE EACH |  |  |  |  |  |  |  |
| Cat. No. | Stock No |  | Eastern Zone | Western Zone |  |  |  |  |  |  |
| 5 | 892299. |  | \$5.00 | \$5.50 |  |  |  |  |  |  |
| 6 | 892300. |  | 5.00 | 5.50 |  |  |  |  |  |  |
| 7 | 892301. |  | 5.00 | 5.50 |  |  |  |  |  |  |
| 8 | 892302. |  | 5.15 | 5.65 |  |  |  |  |  |  |
| 10 | 892303. |  | 6.00 | 6.50 |  |  |  |  |  |  |
| 12 | 892304. |  | 9.00 | 10.00 |  |  |  |  |  |  |

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| Post Hole DiggersCat. No. Stock No. |  | PRICE EACH |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Zone 1 | Zone 2 | Zone 3 | Zone 4 |
| 439 | 892282 | \$ 6.35 | \$ 6.40 | \$ 6.50 | \$ 6.65 |
| 440 | 892283 | 8.60 | 8.75 | 8.90 | 9.10 |
| 441 | 892284 | 10.10 | 9.20 | 10.35 | 10.55 |


| Shovels-Straight Wood Handles-Hickory or Ash |  |  |  | PRICE EACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Zone 1 | Zone 2 | zoue 3 | Zone 4 |
| 16 | 892312. | \$10.65 | \$10.75 | \$10.85 | \$11.05 |
| 17 | 892313. | 11.50 | 11.60 | 11.70 | 11.95 |
| 18 | 892314. | 12.45 | 12.55 | 12.70 | 12.90 |
| 19 | 892315. | 13.60 | 13.70 | 13.85 | 14.20 |
| Round Point Shovels |  |  |  |  |  |
| 823 | 892334 ( |  |  |  |  |
|  | 892335 ( | 4.95 | 5.00 | 5.05 | 5.15 |
| Spoons-Eastern Pattern |  |  |  |  |  |
| 55 | 892340. | 10.65 | 10.75 | 10.85 | 11.05 |
| 56 | 892341. | 11.50 | 11.60 | 11.70 | 11.95 |
| 57 | 892342 . | 12.45 | 12.55 | 12.70 | 12.90 |
| 58 | 892343. | 13.60 | 13.70 | 13.85 | 14.20 |
| 58A | 892344. | 15.20 | 15.35 | 15.50 | 15.90 |
| Spoons - Western Paftern |  |  |  |  |  |
| 50 | 892350. | 10.65 | 10.75 | 10.85 | 11.05 |
| 51 | 892351. | 11.50 | 11.60 | 11.70 | 11.95 |
| 52 | 892352. | 12.45 | 12.55 | 12.70 | 12.90 |
| 53 | 892353. | 13.60 | 13.70 | 13.85 | 14.20 |
| 54 | 892354. | 15.20 | 15.35 | 15.50 | 15.90 |


| Octagon Tamping and Digging Bars |  |  | PRICE EACH |  | Zone 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | $\underline{\text { Zone } 1}$ | Zone 2 | Zone 3 |  |
| 408 | 892260. | \$ 9.80 | \$ 9.95 | \$10.05 | \$10.35 |
| 409 | 892261. | 10.40 | 10.55 | 10.65 | 10.95 |
| 411 | 892262 . | 11.35 | 11.50 | 11.60 | 11.90 |
| 412 | 892263. | 12.65 | 12.80 | 12.90 | 13.20 |



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| Jenny Supports |  | PRICE EACH |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Zone 1 | Zone 2 | Zone 3 | Zone 4 |
| 301 | 892453. |  |  |  |  |
| 302 | 892454. | Prices o | cation |  |  |
| 303 | 892455. |  |  |  |  |

Raising Forks, Guarded Pike Poles


| Peavies-Hickory Handles |  | PRICE EACH |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat No. | Stock No. | Zone 1 | Zone 2 | Zone 3 | Zone 4 |
| 124 | 892369 | \$11.35 | \$11.40 | \$11.45 | \$11.55 |
| 125 | 892370 | 12.05 | 12.10 | 12.15 | 12.25 |
| 126 | 892371 | 12.80 | 12.85 | 12.90 | 13.00 |
| Chance Pole Tongs |  |  |  |  | PRICE EACH |
| C-200-T | 895666 |  |  |  | \$18.15 |


| Pay-out and Take-up Reels | PRICE EACH | Storeroom Reel |  | PRICE EACH |
| :---: | :---: | :---: | :---: | :---: |
| Cat. No. Stock No. |  | 800 | 897243. | \$46.00 |
| 5197 - 892461 | \$47.65 |  |  |  |
| Wire Reel with Meter |  | Tak | Reel |  |
| FSA 894772 Reel. | 54.50 | 4T | 897242. | 38.00 |





Putnam No. 105 Automatic Portable

## Ladder

$\qquad$
Cat. No. Stock No.
105 897216. . . . . . . . . . . . . . . . . . Price on Application
Putnam No. 2 Rolling Ladder Assembly
2 897217.................... Price on Application

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| Klein | Cutting | PRICE PER PAIR |
| :---: | :---: | :---: |
| Cat. No. | Stock No. |  |
| 201-6 | 892466. | \$ 2.77 |
| 201-7 | 892467 | 3.07 |
| 201-8 | 892468 | 3.47 |
| 201-9 | 892469 | 3.90 |


| Nos. 202-5 and 202-6 |  |  |
| :---: | :---: | :---: |
| 202-5 | 892479. | 2.23 |
| 202-6 | 892480. | 2.27 |


| With Sleeve Joint Twister |  |  |
| :---: | :---: | :---: |
| 212-6NE | 892474 | 2.93 |
| 212-7NE | 892475 | 3.23 |
| 212-8NE | 892476 | 3.67 |




| Round Nose N.E. Type |  | PRICE PER PAIR |
| :---: | :---: | :---: |
| Cat. No. | Stock No. |  |
| 201-6NE | 892470. | \$ 2.77 |
| 201-7NE | 892471. | 3.07 |
| 201-8NE | 892472. | 3.47 |
| 201-9NE | 892473 | 3.90 |
| Heavy Duty Pattern |  |  |
| 213-9NE | 895767. | 4.40 |
| With W Stripping Notches, Sleeve Opening andSkinning Holes |  |  |
| 202-5SW | 892481 | 2.73 |
| Nos. 240-5 and 240-6 |  |  |
| 240-5 | 892482 . | 2.40 |
| 240-6 | 892483 | 2.43 |
| Heavy Paftern |  |  |
| 242-6 | 892486. | 2.43 |


| Klein Long Nose Pliers without Culters $\qquad$ | PRICE PER PAIR |
| :---: | :---: |
| Cat. No. Stock No. |  |
| 301-5 892487. | \$ 1.93 |
| 301-6 892488 | 1.97 |
| 301-7 892489 | 2.17 |
| Long Nose Pliers-Side Cutting |  |
| 203-5 892490. | 2.37 |
| 203-6 892491 | 2.40 |
| 203-7 892492 | 2.53 |
| Long Nose Sleeve Pliers |  |
| 316-S 892493. | 2.27 |
| Long Needle Nose Pliers |  |
| 303-6 892494 | 1.97 |


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| Klein Long Duck Bill Pliers |  | PRICE PACH |
| :---: | :---: | :---: |
| Cat. No. | Stock No. |  |
| 205-6 | 892502 . | \$2.43 Pair |
| Klein Pump Plier |  |  |
| 510 | 897180. | \$3.00 Each |
| Klein Plier Grips |  |  |
| 60 | 895242. | \$ . 65 |
| 70 | 895243. | . 70 |
| 89 | 895244. | . 75 |
| 2100-5 | 892514 Scissors | \$1.85 Pair |
| Klein Linemen's Wrenches |  |  |
| 3146 | 892508 | \$ 2.75 |
| 3146-A | 892509 | 2.75 |


| Klein Adjustable Wrench | PRICE EACH |
| :---: | :---: |
| Cat. No. Stock No. |  |
| 500-6 897187. | \$ 2.25 |
| Hi-Wire Strippers |  |
| HS-02 897211. | 5.20 |
| HS-0 897212. | 5.20 |
| HS-01 897213. | 5.20 |
| HS-2 897214. | 5.20 |
| HS-3 897215. | 5.20 |
| Diamond B Braid Siripper |  |
| 779892513 | 1.95 |
| Parallel Wire Slitter |  |
| S-7508 895011. | 1.75 |

Whitney Blake Wire Slitter_ PRICE EACH
Cat No. Stock No


| Klein-Chicago Grips -For Bare Wire. |  |  |
| :---: | :---: | :---: |
| 1613-30 | 892515 | 3.20 |
| 1613-30-B | 892516 | 4.80 |
| 1613-40 | 892517. | 5.20 |
| 1613-40-B | 892518. | 7.40 |
| 1613-50 | 892519 | 9.50 |
| 1613-50-B | 892520 | 14.20 |


| Chicago Grips - For Messenger Strand and Cable |  |  |
| :---: | :---: | :---: |
| 1628-5 | 892521. | 9.60 |
| 1628-5-B | 892522 | 11.80 |
| 1628-6 | 892523 | 13.00 |
| 1628-6-B | 892524 | 17.25 |
| 1628-16 | 892525 | 23.00 |
| 1628-16-B | 892526 | 27.00 |

Issue Date: 4-15-57

| Self-Locking Tackle Blocks |  |  | PRICE EACH | Chance Hoist |  | PRICE EACH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. |  |  | Cat. No. | Stock No. |  |
| 1802-30 | 892538. |  | \$ 6.05 | 3010 | 895667. | \$ 51.00 |
|  |  |  | \$ 6.05 | 3010-S | 895668. | 52.00 |
| Hand Lines |  |  |  | Coffing Hoists |  |  |
| 1803-60 | 892539 |  | 5.95 |  |  |  |
| 443-A | 892541 |  | 1.60 | AG | 892550 | 58.00 |
|  |  |  |  | ATG | 892551 | 72.00 |
|  |  |  |  | FG | 892552 | 81.00 |
|  |  |  |  | FTG | 892553 | 103.00 |
|  |  |  |  | ZG | 892554 | 199.00 |
| Page 17t |  |  |  |  |  |  |
| Van-Web Hydraulic Pole Jack |  |  | PRICE EACH | Coffing Load Binders |  | PRICE EACH |
|  |  |  |  |  |  |  |  |
| Cat. No. | Stock No. |  |  | Cat. No. Stock No. |  |  |
| 100 | 894840 |  | \$75.00 | A | 892555 | \$31.65 |
| Coffing Mighty Midget Puller |  |  |  | F | 892556 | 42.35 |
| MP-5 |  | 894682 | Mighty Midget Puller. . | 32.50 | Simplex Aerial Cable Jack |  |  |
|  | 324 |  |  |  | 891026 | 36.65 |
| PAGE $18 \dagger$ |  |  | $\because$ |  |  |  |
| Simplex Pole Jacks |  |  | PRICE EACH | Wood and Malleable Iron Pulley Blocks |  |  |
| Cot. No. | Stock No |  |  | Prices on Application |  |  |
| 310A | 891484 | Jack Complete. | \$88.25 |  |  |  |
| 325 | 891482 | Jack Complete. | 86.35 |  |  |  |
| 1538 | 891483 | lack Complete. | 111.50 |  |  |  |
| A1538 | 897219 | Jack Complete . | 132.75 |  |  |  |

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| Klein Climber Straps and Pads |  | PRICE |
| :---: | :---: | :---: |
| Cat. No. | Stock No. | Per Set |
| 5301-1 | 892608 | \$ 5.80 |
| 5301-2 | 892609 | 6.20 |
| 5301-3 | 892610 | 6.20 |
|  |  | Per Pair |
| 5301-9 | 892619 | \$ 2.25 |
| 5301-10 | 892620 | 2.40 |
| 8203 | 892621. | 1.60 |
| 8204 | 892622. | 2.45 |
| 8205 | 892623 | 2.45 |
| 8200 | 892613 | 1.35 |
| 8201 | 892614 | 1.35 |
| 8202 | 892615 | . 95 |


| Buckingham Climber Pads |  | PRICE PER PAIR |
| :---: | :---: | :---: |
| Cat No. | Stock No. |  |
| 3122 | 894422. | \$ 3.25 |
| 3038 | 894418. | 1.60 |
| 3238 | 894419. | 2.10 |
| 3039 | 894410 | 1.35 |
| 3239 | 894411. | 1.60 |
| Buckingham Climber Straps |  |  |
| 2234 | 894426. | 1.70 |
| 2434 | 894427. | 1.75 |
| 2235 | 894424 | 2.10 |
| 2435 | 894425 | 2.35 |


| Buckingham Climbers <br> Cat. No. Stock No. |  | PRICE PER PAIR |
| :---: | :---: | :---: |
|  |  |  |
| 9126 | 894401 | \$ 7.00 |
| 9130 | 894517 | 10.35 |
| 9131 | 894567 | 10.35 |
| Klein Climbers |  |  |
| 1901-M | 892606 | 6.50 |


| Klain Tool Belts |  | PRICE EACH |
| :---: | :---: | :---: |
| Cat. No | Stock No. |  |
| 5228 | 892627. | \$19.90 |
| 5204 | 892624. | 9.30 |

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| Klein Safety Straps |  | PRICE EACH |
| :---: | :---: | :---: |
| Cat. No. | Stock No. |  |
| 5251 | 892628 | \$10.00 |
| 5250 | 892629 | 9.60 |
| 5253 | 892630 | 11.40 |
| 5251-S | 892631 | 11.40 |
| 5257-L | 892632 | 11.60 |
| 5233 | 892633 | 10.80 |
| KIein Combination Tool Pocket |  |  |
| 5126 | 897185. | 3.60 |
| 5127 | 897186. | 4.35 |
| Buckingham Belt Supporter |  |  |
| 6258 | 894451 | 3.50 |


| Buckingham Safety Straps |  | PRICE EACH |
| :---: | :---: | :---: |
| Cat. No | Stock No. |  |
| 3042 | 894452 . | \$ 9.50 |
| 3142 | 894453. | 9.00 |
| 3542 | 894460 | 10.50 |
| Buckingham Tool Pouches |  |  |
| 4650 | 894536 | 4.25 |
| 4652 | 894538 | 3.15 |

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| Buckingham Tool Belts |  | PRICI EACH |
| :---: | :---: | :---: |
| Cat. No. | Stock No. |  |
| 1060 | 894531 | \$19.00 |
| 1058 | 894438 | 19.00 |


| Buckingham |  | PRICE EACH |
| :---: | :---: | :---: |
| Cat. No | Stook No. |  |
| 6102 | 894408 | \$ 1.25 |
| Buckingham Thread Cleaner |  |  |
| 6103 | 894993. | 6.50 |


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## page 2bt

| Helwig Cutters. |  | PRICE EACH |
| :---: | :---: | :---: |
| Cat. No. | Stock No. |  |
| 4CG | 895656. | \$ 7.67 |
| 3CG | 895657. | 9.17 |
| 2CG | 895658. | 11.77 |
| H2CG | 895862. | 16.68 |


| Spintite Socket Wrenches |  | PRICE EACH |
| :---: | :---: | :---: |
| Cat. No. | Stock No |  |
| 3406 | 892700. | \$ . 77 |
| 3407 | 892701. | . 77 |
| 3408 | 892702 . | . 77 |
| 3409 | 892703. | . 77 |
| 3410 | 892704. | . 77 |
| 3411 | 892705. | . 77 |
| 3412 | 892706. | . 77 |
| 3414 | 892707. | 1.20 |
| 3416 | 892708 | 1.20 |
| 3418 | 892709. | 2.15 |
| 3420 | 892710. | 2.20 |

Style 8 Drill Holder
Stock No.
890094
1.60

Style C Drill Holder
890095
3.20





| Stock No. | Stre |  |
| :---: | :---: | :---: |
| 892711 | 11/2. | . 60 |
| 892712 | 2. | . 60 |
| 892713 | 3. | . 67 |
| 892714 | 4. | . 73 |
| 892715 | 5 | . 80 |
| 892716 | 6. | . 80 |
| 892718 | 8. | 1.87 |
| 892720 | 10. | 1.33 |

Other sizes available.

| No. 92 Screwdriver-Compo Tuff Handle |  |  |
| :---: | :--- | ---: |
| 892726 | $4 \ldots \ldots \ldots \ldots \ldots \ldots$ | .67 |
| 892727 | $6 \ldots \ldots \ldots \ldots \ldots \ldots$ | .87 |
| 892728 | $8 \ldots \ldots \ldots \ldots$. | 1.13 |

Greenlee Ship Auger Car Bits-
No. 64 Bit

| Stock No. <br> (Sise in Sixteenths) |  |  |  |
| :---: | :---: | :---: | :---: |
| 892895 | 4. | \$ | 1.79 |
| 892896 | 5 |  | 1.79 |
| 892897 | 6. |  | 1.79 |
| 892898 | 7 |  | 1.82 |
| 892899 | 8. |  | 1,86 |
| 892900 | 9. |  | 1.89 |
| 892901 | 10. |  | 1.93 |
| 892902 | 11. |  | 1.96 |
| 892903 | 12. |  | 2.00 |



| Yankee—Phillips Screwdrivers Heavy Duty $\qquad$ |  | PRICE EACH |
| :---: | :---: | :---: |
| Cat. No. | Stock No. |  |
| 901 | 892742 . | \$ . 63 |
| 902 | 892743. | . 67 |
| 903 | 892744. | . 80 |
| 904 | 892745. | 1.00 |
| Yankee-Phillips Screwdrivers-Regular |  |  |
| 941 | 892746 | . 33 |
| 942 | 892747 | . 40 |
| 943 | 892748 | . 49 |
| 944 | 892749 | . 65 |
| Yankee-No. 15 Screwdriver-Ratchet Style_ |  |  |
| 2 | 892759 | 1.33 |
| 3 | 892760 | 1.40 |
| 4 | 892761 | 1.40 |
| 5 | 892762 | 1.47 |
| 6 | 892763 | 1.47 |
| 8 | 892764 | 1.53 |


| Yankee-No. 10-A Screwdriver Ratchet Style $\qquad$ |  | PRICE EACH |
| :---: | :---: | :---: |
| Cat. No. | Stock No. |  |
| 3 | 892752. | \$ 1.47 |
| 4 | 892753. | 1.53 |
| 5 | 892754. | 1.67 |
| 6 | 892755 | 1.73 |
| 8 | 892756 | 1.87 |


| Yank | chet T |  |
| :---: | :---: | :---: |
| 250A | 892810. | 2.95 |
| 251A | 892811. | 3.20 |

Yankee Spiral Ratchet Screwdrivers-
Quick Refurn Style

| 130A | 892765. | 6.20 |
| :---: | :---: | :---: |
| 131A | 892766. | 7.86 |
| 135 | 892767. | 5.47 |
| Regular Style |  |  |
| 30-A | 892768. | 5.67 |
| 31 | 892769. | 7.33 |
| Yankee Automatic Drill |  |  |
| No. 41 | 892790. | 4.49 |

## page 30 t

| Yankee Chuck and Drill Points | ICE EACH |
| :---: | :---: |
| Cat. No. Stock No. |  |
| 30A 892715. | \$ 1.49 |
| 31A 894839. | 1.49 |
| 35892776 | . 80 |
| Yankee Offsef Ratchet Screwdrivers |  |
| 3400892781. | . 65 |
| 3800892782 . | 1.16 |
| Screwdriver |  |
| 3423 892783.... | 1.16 |


| Yankee Radio Drills |  | PRICE EACH |
| :---: | :---: | :---: |
| Cat No. | Stock No. |  |
| 1431 A | 892785 | \$ 6.60 |
| Yankee Ratchet Single-Speed Hand Drill |  |  |
| 1530A | 892784. | 8.80 |
| Yankee Plain Hand Drill |  |  |
| 1446 | 892788 | 12.86 |

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| Lufkin Boxwood Rules |  | PRICE EACH |
| :---: | :---: | :---: |
| Cat. No. | Stock No. |  |
| 651 | 892944 | \$ . 45 |
| Lufkin Spring Joinf Rules |  |  |
| 064 | 892945. | . 95 |
| 065 | 892946. | 1.20 |
| 066 | 892947 | 1.35 |
| 068 | 892948 | 1.75 |
| Lufkin Linen Tape Rules |  |  |
| 400 | 892956. | 5.85 |
| 403 | 892957. | 7.25 |
| 405 | 892958 | 9.25 |
| 406 | 892959 | 11.50 |

Cold Chisels
Prices on application

| Lufkin Steel Tape Rules |  | PRICE EACH |
| :---: | :---: | :---: |
| Cat No. | Stock No. |  |
| 260 | 892960 | \$ 6.75 |
| 263 | 892961. | 8.00 |
| 265 | 892962 | 10.50 |
| 266 | 892963 | 13.60 |
| Lufkin Michigan Chain Tapes |  |  |
| 3100 | 892965. | 15.50 |
| 3150 | 892966. | 22.50 |
| 3200 | 892967. | 29.00 |
| 3300 | 892968 | 41.00 |
| 3500 | 892969 | 62.50 |

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| Black and Decker |  | PRICE EACH |  |  | PRICE EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Cat. | Stock No. |  |
| 345 | 894763. | \$42.00 | 238 | 894765. | \$105.00 |
| 361 | 894764. | 68.00 |  |  |  |

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| Black and Decker Drills |  | PRICE EACH | Dillon Bisector |  | PRICE EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. |  | Cat. No. | Stock No. |  |
| 103 | 894767 | \$155.00 |  | 893406. | \$ 7.50 |
|  | 894761 1/4" Home Utility | 27.95 | Matthews | Telehe |  |
|  | 894762 1/2" Home Utility. | 53.50 | $c w$ | 892103. | 13.80 |

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| Model QS | 897245 | 1/4. | Price on Application |
| :---: | :---: | :---: | :---: |
| Model QS | 897246 | 3/8. | \$12.50 |
| Model QS | 897247 | 5/8. | 12.50 |
| Model QS | 897248 | 100 | 13.25 |


| CQS12 | 894872. | Carton | 1.92 |
| :---: | :---: | :---: | :---: |


| Wall Soldering Guns |  | PRICE EACH |
| :---: | :---: | :---: |
| Cat. No. | Stock No. |  |
| 2147 | 895659. | discontinued |
| 214TN | 895660. | \$14.95 |
| 212LT | 895661. | 16.95 |
| Pencil Type Soldering Guns |  |  |
| 147 | 895663. | 7.25 |
| 187 | 895662. | 6.25 |
| Kemode Soldering Tips |  |  |
| $1 / 4 / 1$ Pyramid | 897249 | . Price on Application |
| $3 z^{\prime \prime}$ Pryamid | 897250. | \$ 3.25 |
| 5/8" Pyramid | 897251. | 3.25 |
| 3/8" Chisel | 897252. | 3.25 |
| 5/8" Chisel | 897253. | 3.25 |
| 1" Chisel | 897254. | 4.00 |



| Wall Shields and Torches |  |  | PRICE EACH |
| :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. |  |  |
| 320G | 897257 | Shield | \$13.30 |
| 579 | 897258 | Shield | 29.00 |
| 41 | 897259 | Torch. | 17.00 |
| 42 | 897260 | Torch. | 18.50 |
| 331 | 897261 | Torch. | 9.50 |
| 331-S | 897262 | Torch. | 9.75 |


| Wall Furnaces |  |  | PRICE EACH |
| :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. |  |  |
| 50 | 897255 | Furnace | \$44.00 |
| 55 | 897256 | Furnace | 21.00 |

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| Cane Seat with Upholstered Back |  | PRICE SACH |
| :---: | :---: | :---: |
| Cat. No. | Stock No. |  |
| List 4 | 897339 | \$60.20 |
| List 8 | 897341 | 60.25 |
| List 10 | 897343. | 61.20 |
| List 12 | 897345. | 62.55 |



## Casters:

| 15/9" stem type ha | \$1.75 | 11/4" spring glides, per set of 4. . . . . . . . . . . . . . . \$ . 90 |
| :---: | :---: | :---: |
| 1\%" stem type soft wheel. | 2.00 | Sockets, per set of 4............................ . . . 90 |
| $2^{\prime \prime}$ stem type hard wheel casters | 2.10 | When ordering casters and sockets be sure to include the price of both. When ordering chairs equipped with casters, add the price of the casters only to the price of the chair. |
| $2^{\prime \prime}$ stem type soft wheel casters | 2.50 |  |
| $2^{\prime \prime}$ stem type hard wheel ballbearing | 3.70 |  |
| $2^{\prime}$ stem type soft wheel ballbearing | 3.70 |  |

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| Executives' Chairs__ |  | PRICE EACH |  |
| :--- | :--- | :---: | :---: |
| Cat. No. | Stock No. | Leather | Elastic Versilan <br> or Cloth |
| 1200-G | $897346 \ldots \ldots .$. | $\$ 66.40$ | $\$ 62.80$ |
| 840-G | $897347 \ldots \ldots .$. | 29.60 | - |

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| Churchill <br> Cat. No. | Telephone Booths Stock No. | PRICE EACH | Burgess Cat. Na. | Acousti-Booths Stock No. | PRICE EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 100-A | 893419. | \$298.00 | 211 | 894680. | \$265.00 |
| 100-B | 893420 | 298.00 |  |  |  |
| If unfinished booth is desired deduct \$5.00. |  |  |  |  |  |
| Seat available at $\$ 7.00$ each. |  |  |  |  |  |
| 500 | 895864 Outdoor. | Discontinued |  |  |  |
| Model A- | 1 Handi-Booth | PRICE EACH |  |  |  |
| Cat. No. | Stock No. |  |  |  |  |
| A-1 | 897263. | \$175.00 |  |  |  |
| A-1A | 897264. | 185.50 |  |  |  |
| A-1B | 897265. | 185.50 |  |  |  |

Sherron Telephone Booths $\qquad$
Model 18-S type 1A* (Replaces Model 18-S type 1 discontinued.) 893433 (Indoor) $\$ 265.00$ ea. Plus $\$ 15.00$ Packing and Crating Charge.
*Model 18-S type 1-A is essentially the same design as the discontinued Model 18-S type 1 except that it includes the translucent plastic hinged ceiling assembly as standard equipment.

| Model 15-S type 1 (outdoor) | 895865.......... | $\$ 250.00$ |
| :--- | :--- | ---: |
| Complete including Packing and Crating. |  |  |
| Model 17-S type 1 with Peaked or Flat Roof .... | 275.00 |  |
| Model 17-S type 1 with Plastic Astra-Dome..... | 305.00 |  |
| Model 17-S type 7 with Peaked or Flat Roof..... | 300.00 |  |
| Model 17-S type 7 with Plastic Astra-Dome..... | 330.00 |  |
| Model 17-S type 2 (illustrated) with Astra-Dome. | 415.00 |  |
| Model 17-S type 2 with Peaked or Flat Roof..... | 385.00 |  |
| Add $\$ 25.00$ Packing and Crating Charge to all Model 17 type |  |  |
| Booths. |  |  |

Model 25-S type 2 with Peaked or Flat Roof. .... $\$ 475.00$
Model 25-S type 2 with Astra-Dome . . . . . . . . . . . . $\quad 505.00$
Model 25-S type 1............................... . . discontinued

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| Benner-Nawman Outdoor Aluminum Booth $\qquad$ |  |  | PRICE EACH |
| :---: | :---: | :---: | :---: |
| Stock No. |  |  |  |
|  |  | Type A | \$344.99 |
| 895784 | Knocked Down | B. | 362.15 |
|  |  | C | 359.15 |
|  |  | D. | 376.32 |

F.O.B. Oakland, California.

| Alcoa Outdoor Telephone Booth | uminu |  | PRICE EACH |
| :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. |  |  |
| AL 1-55020B-KD | 895783 | Knocked Down (cont. shelf). | \$440.00 |
| AL 2-55020B-KD | 895783 | Knocked Down (directory rack) | 445.00 |
| Freight allowed to | astination |  |  |

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| Burgess Indoor Booths |  | PRICE EACH |
| :---: | :---: | :---: |
| Model 45. |  | \$110.00 |
| Floor Stand for Model 45 Booth |  |  |
|  | 897266 | 91.00 |
| Model 601. |  | 110.00 |
| Model 602. |  | 90.00 |
| Telephone Booth Masts |  |  |
| Cat. No. | Stock No. |  |
| TBM-12 | 895868. | 42.50 |
| TBM-14 | 895869. | 44.50 |
| TBM-12S | 895870. | 64.50 |
| TBM-14S | 895871. | 66.75 |
| TBM-12SL | 895872. | 84.50 |
| TBM-14SL | 895873. | 87.50 |
| SM-122 | 895874. | 11.75 |
| (Prices for $16^{\prime}$ and $17{ }^{\prime}$ Masts are available on request.) |  |  |
| Gladwin Illuminated Telephone Booth Roof |  |  |
|  | 897267. | \$ 28.75 |


| Telephone Signs |  | PRICE EACH |
| :---: | :---: | :---: |
| Cat. No. | Stock No. |  |
| 1161 | 893506. | \$ 8.50 |
| 1163 | 893507. | 5.55 |
| 1R-1 | 895734. | 4.50 |
| 1R-2 | 895735 | 5.00 |
| 1R-3 | 895736 | 2.85 |


| Gladwin Tri-Directional Signs |  | PRICE EACH |
| :---: | :---: | :---: |
| Cat. No. | Stock No. |  |
| T-1145 | 897268. | \$ 22.50 |
| T-1146 | 897269. | 29.75 |
| T-1149 | 897270. | 22.50 |
| T-1150 | 897271. |  |

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Pay Stations and Accessories_ PRICE EACH

| $\begin{aligned} & \text { Cat. No. } \\ & 92 \end{aligned}$ | Stock No. 894929 | Manual | \$126.25 | *Lock, Card Holder, Signal Transmitter, handset, dial and |
| :---: | :---: | :---: | :---: | :---: |
| *92 | 894930 | Automatic | 134.05 | nded dial plate included in these prices. Any specitied |
| *94 | 894931 |  | 110.15 | nake of dial and handset will be furnished. |
| *96 | 894932 |  | 143.95 | Add price of coin receptacle, selected from list below, to |
| *98 | 894933 |  | 114.75 | prices shown. |

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(1) Where new chutes are required a credit of $\$ 2.00$ each net will be allowed for the return, transportation prepaid to manufacturer of each old chute on a one-for-one basis.
(2) Paystations having a " $c$ " suffix are already equipped with new coin chutes and, therefore, new chutes are not required for conversion to ten-cent service.
(3) Semi-postpay types in this category require a dial shunt spring change. New dials are recommended, which are priced at $\$ 6.25$ each.
(4) New chute covers only are required. Old covers are not returnable. Delivery of all types of kits can be made 60-90 days after receipt of order.

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| Model 564 Type 3-C Weston Volt-Ohmmeter $\qquad$ |  | PRICE EACH | Model <br> Stock No. | 00 Telohm | PRICE EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Stock No. |  |  | 892088 |  | \$17.50 |
| 892087 |  | \$64.50 |  | Carrying Case | 3.50 |
|  | Leather Case | 9.00 | Simpso | Volt-Ohmmeter |  |
| Volt-Ohm-Mil-Ammeters |  |  | 895768 | No. 355 Midgetester. | 29.95 |
| 894801 | Triplett Model 666-HH Carrying Case | $\begin{array}{r} 27.50 \\ 6.10 \end{array}$ | 895769 | Carrying Case No. 6355 | 2.95 |
| Model 689 Weston Ohmmeters |  |  |  |  |  |
| 892084 | Type 1E. | 29.75 |  |  |  |
| 892085 | Type 1F. | 28.25 |  |  |  |
|  | Leather Carrying Case | 11.00 |  |  |  |

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| L and N Wheatstone Fault Location Bridges |  | Dillon Dynamometers |  |  | PRICE EACH |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | PRICE EACH | Stock No. |  |  |
| Stock No. |  |  | 893409 | 0-500 Pounds. | \$ 116.00 |
| 892098 | Carrying Case No. 5431. | \$ 35.25 | 893410 | $0-1000$ Pounds | 116.00 |
| 892097 | No. 5430-A Type U. | 198.00 | 893411 | 0-2500 Pounds | 116.00 |
| Simpson Instruments |  |  | 893412 | 0-3500 Pounds. | 123.00 |
| Cat. No. | Stock No. |  | 893413 | $0-5000$ Pounds | 132.00 |
|  | Stock 894976. | 38.95 | 893414 | 0.7500 Pounds | 140.00 |
| 372 | 894977 | 25.50 | 893415 | 0-10,000 Pounds. | 147.00 |
|  |  |  | 893416 | 0-15,000 Pounds. | 176.00 |

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| $L$ and $\mathbf{N}$ Wheatstone |  |  |  |
| :---: | :---: | :---: | :---: |
| Fault Location Bridges |  |  | PRICE EACH |
| Cat. No. | Stock No. |  |  |
| 5300 | 892099 | Type S. | \$170.00 |
| 5431 | 892098 | Leather Case. | 35.25 |
| Shallcross Test Sets |  |  |  |
| 695 | 892096 |  | 112.00 |

No. 614-A Shallcross
Telephone Service Meter
PRICE EACH
Cat. No. Stock No.
894816.
$\$ 165.00$
No. 629 Shallcross Cable Fault Location Bridge

629 894817............................ . . 191.00

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| Northeas | ansmission Test Sets | PRICE EACH |
| :---: | :---: | :---: |
| Cat. No. | Stock No. |  |
| Model O | 897169. | \$125.00 |
| Model 1A | 897170. | 350.00 |
| Model 1B | 897171. | 350.00 |
| Model 3 | 897172. | 925.00 |

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Northeast Transmission Test Sets_ $\quad$ PRICE EACH

| Cat. No. | Stock No. | Price on Application |
| :---: | :---: | :---: |
| Model 1037A | 897178. |  |
| Model 1037B | 897178. |  |
| Model 1041A | 897176. |  |
| Model 1041B | 897177. |  |
| Model 1060A | 897174. | \$475.00 |
| Model 1060B | 897175. | 425.00 |
| Model 1 Bleepe | 897168 | 35.00 |

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Northeast Instruments
PRICE EACH
Cat. No. Stock No.
Model 1.897179 Tacholite............. \$70.00
Model 1897173 Reference Generator.. 270.00

| Benjamin FactoryNon-Weatherproof Howlers |  |  | PRICE EACH |
| :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. |  | \$13.15 |
| 8755 | 892123 | 12V. |  |
| 8755 | 892124 | 24V. |  |
| 8755 | 892125 | 110 V |  |
| 8755 | 892126 | 220 V |  |
| 8795 | 892131 | 12V | 18.25 |
| 8795 | 892132 | 24V |  |
| 8795 | 892133 | 110 V |  |
| 8795 | 892134 | 220 V |  |
| 8141 | 892135 | 12V. | 11.80 |
| 8741 | 892136 | 24V. |  |
| 8741 | 892137 | 110V. |  |
| 8741 | 892138 | 220 V . |  |


| Benja Weath | Heavy of How |  | PRICE EACH |
| :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. |  |  |
| 8546 | 892111 | 12V. | \$15.85 |
| 8546 | 892112 | 24V. |  |
| 8546 | 892113 | 110 V . |  |
| 8546 | 892114 | 220V. |  |
| 8590 | 892119 | 12V. | 21.05 |
| 8590 | 892120 | 24V. |  |
| 8590 | 892121 | 110 V . |  |
| 8590 | 892122 | 220 V . |  |

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Price on application

| Pyrene Fire Extinguishers <br> Cat. No. Stock No. |  | PRICE EACH |
| :---: | :---: | :---: |
|  |  |  |
| C-21 | 893509. | \$13.70 |
| CllP | 895961 | 5.95 |
| PDC-5P | 897272. | 40.60 |
| PDC-10P | 897273. | 60.15 |
| Pyrene Fire Extinguisher Fluid |  |  |
| CR-2 | 893512 | 1.50 pe |

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| Calculagraphs and |  |  | Accessories | PRICE EACH | Portable Pedestal Mounting | PRICE EACH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cat. No. | Stock No. |  |  | Stock No. |  |
| $\rightarrow$ | 6 | 893434 |  | \$155.00 | 893444. | \$20.00 |
| $\rightarrow$ | 33 | 893440 |  | 166.00 |  |  |
|  | 30 | 893438 |  | 150.00 | Snap-on-Ribbons | 1.00 |
| Transformers |  |  |  |  | Dozen lots $\$ 8.00$ per doz. |  |
|  |  | $\begin{aligned} & 893443 \\ & 893442 \end{aligned}$ | $\left.\begin{array}{l} \text { Single Unit. . } \\ 7 \text { Unit. ..... } \end{array}\right\}$ | Prices on application |  |  |

## page 8 W

| Dorson Toll Timer |  |  | PRICE EACH | Leather Protectors |  | PRICE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. |  |  | Cat. No. | Stock No. |  |
|  | 895686. |  | \$39.50 | 1055 | 892653.. | .\$2.25 Pair |
| Veeder-Root Counters. |  |  |  | 1260 | 892654. | 4.25 Pair |
| A-102304 | 893418. |  | 9.15 | Rubber Glove Carrier |  |  |
| A-107815 | 893417. |  | 4.90 | 1106 | 892656. | 3.80 each |
| Linemen's Rubber Gloves |  |  |  | Rubber Coated Cotton Gloves |  |  |
| A | 892651 | (15000 Volt). | \$9.50 Pair | 1041 | 894868.. | 1.00 Pair |
| B | 892652 | (10000 Volt) | .. 8.20 Pair |  |  |  |

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| Neoprene Latex Clothing |  |  |  |
| :--- | ---: | :--- | :--- |
| PRICE EACH |  |  |  |
| Cat. No. | Stock No. |  |  |
| 534-L | 894865 | Jacket. $\ldots \ldots \ldots \ldots \ldots$ | $\$ 8.25$ |
| 530-L | 894866 | Pants. $\ldots \ldots \ldots \ldots \ldots$ | 7.00 |
| 661 | 894867 | Hat. $\ldots \ldots \ldots \ldots \ldots$ | 1.75 |


| G-E Model | PRICE |  |  |
| :---: | :---: | :---: | :---: |
|  | 895690 | Complete w/attachments Cleaner only . Attachments only.... | $\begin{aligned} & \$ 134.00 \text { each } \\ & \cdot \quad 99.50 \\ & . \quad 34.50 \end{aligned}$ |
| Lyon Metal Cabinet |  |  |  |
| 5401-7 | 894992 | Locker............. | . $\$ 89.75$ each |

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| Ly | Cabin |  | PRICE EA |
| :---: | :---: | :---: | :---: |
| EX-1279 | 894988 | Cord Cabinet. | \$40.70 |
| EX-1278 | 894987 | Material Cabinet | 73.15 |
| EX-1615-D | 894989 | Material Cabinet | pplication |


| Steelmaster |  |  | PRICE EACH |
| :---: | :---: | :---: | :---: |
| Cat No. | Stock No. |  |  |
| JD4 | 895975 | Mobiler Directoire | \$ 91.50 |
| D6 | 895976 | Directoire. | 145.00 |


| Homelite Generators |  | PRICE EACH |
| :---: | :---: | :---: |
| Cat. No. | Stock No. |  |
| Model 23All5 | 895971. | \$440.00 |
| Model 32A115/230-1 | 895979. | 895.00 |

$\qquad$

| Homelite Chain Saw |  |  | PRICE EACH |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. |  | 147 Blade | $18^{\prime \prime}$ | 20" | $23^{\prime \prime}$ | $28^{\circ}$ |
| Model 17 | 895980. |  | \$259.00 | \$268.80 | \$274.50 | \$277.40 | \$286.05 |
| U-C Lite Lamps (Less Bafteries) |  |  |  |  |  |  |  |
| No. 164 | 897274 |  |  |  |  |  | \$10.50 |
| No. 211 | 894800. |  |  |  |  |  | 12.50 |
| Exide Lightguard Lamps |  |  |  |  |  |  |  |
| 48263 | 895981 | Model M |  | Single Lamp | \$85.35 | Double I | mp \$90.70 |
| 48255 | 895982 | Model T . |  | Single Lamp | 78.70 | Double | mp 84.05 |
| Benjamin Reels |  |  |  |  |  |  |  |
| Model 995 | 895698. |  |  |  |  | .... | 9.95 each |
| Model 700-18-ML | 895699* |  |  |  |  | ..... | 5.00 each |
| "Less Floodlamp. 150 Watt Lamp. |  |  |  |  |  |  | 1.55 each |

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| Dry Ce | PRICE |  |  | PRICE |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Stock No. 890302 | No. 6 Columbia (carton of 12) \$70.00 per 100* | Stock No. |  | Less than 10 | 10 or more |
| 894 |  | 894803 | No. 487 Minimax. | \$3.95 each | \$2.77 each |
|  | ad | 890308 | 386-C Specialty. |  | 1.54 each |
| reight | paid when ordered in quantities of $\{48$-Columbla | 890309 | 489-C Specialty. |  | 2.65 each |
|  | or 50 -Ray-O-Vac | 890307 | 4945-C Specialty. |  | 7.40 each |
|  |  | 890304 | No. 6 Ray-O-Vac | of 25) . . $\$ 7$ | per 100* |


| Gould Multi-Lite, Rechargeable Flashlight and Battery- $\qquad$ |  |  | PRICE EACH |
| :---: | :---: | :---: | :---: |
| Cat. No. Stock No. |  |  |  |
| 2DRF-1 | 895983 | All Chrome C |  |
| 2DRF-2 | 895984 | Two-tone Case | \$11.95 |
| 2DRF-3 | 895985 | Safety Case |  |
| Charger only |  |  | 4.70 |
| Above Flashlights w/batteries only |  |  | 7.25 |
| Paragon Battery Boxes |  |  |  |
| 2 | 890305. |  | 1.40 |
| 3 | 890306 . |  | 1.65 |


| Eveready | Air Cells | PRICE EACH |
| :---: | :---: | :---: |
| Cat. No. | Stock No. |  |
| T-1600 | 894203. | \$ $6.91{ }^{\text { }}$ |
| T-2600 | 894204. | 12.04 |
| T-2300 | 894805. | 9.40 |
| Retractile (Koiled Kords) Cords |  |  |
| 5001-1 | 894826 |  |
| 5001-2 | 894827 |  |
| 5001-3 | 894828 | . 80 |
| 5001-4 | 894829 |  |
| 5001-5 | 894830 |  |

## page l6w

| Hands-Free Telephone |  |  | PRICE EACH | Gai-Phone |  |  | PRICE EACH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | With Dial | \$135.00* | Cat. No. 100 | Stock No 895344 | Desk Model | \$12500* |
| F.O.B. Reading, Penna. |  |  |  | F.O.B. Reading, Penna. |  |  |  |
| *Slight additional warehouse adder for Stock Shipment. |  |  |  | *Slight additional charge for Warehouse Stock Shipment. |  |  |  |

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| Earphon | Headset Pads | PRICE EACH |
| :---: | :---: | :---: |
| Stock No. |  |  |
| 895433 | Headset \& Earphone Pads-Complete | \$ . 65 |
| 895434 | Earphone Pads only. | . 35 |
| 895435 | Headset Pads only. | . 35 |

Telex Boom-Type Headset
No. 9650 Headset with No. 9259 Cord Unit-
No Plug furnished. . . . . . . . . . . . . . . . . . . . . . . \$21.48
Specify Plug desired which will be furnished at extra cost.

| Rubero | ul |  |
| :---: | :---: | :---: |
| 894196 | 3/4". | . $\$ 1.15$ per lb. |
| $894197$ | 2". | 1.15 per lb. |


| No. 1501 Friction Tape Stock No. |  | PRICE PER ROLL |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 1.99 Rolls | 100.499 | 500 or more |
| 890751 | $3 / 4^{\prime \prime}$ | \$ . 50 | \$ . 46 | \$. 42 |
| 890752 | 2" | 1.35 | 1.25 | 1.12 |

SI Brand Plastic Electrical Tape___ PRICE

## Cat. No. Stock No.

60895693 3/x60'. . . . . . . . . . . . . . . . . . $\$ 1.35$ per roll
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| Bi-Seal Self-Binding Tape |  |  |
| :---: | :---: | :---: |
| Cat. No. | Stock No. |  |
| $12^{\prime \prime}$ "-30'. | . 895187 | \$ . 94 per roll |
| $3 / 1{ }^{\prime \prime}-30^{\prime}$. | . 895188 | 1.38 per roll |
| $1^{\prime \prime}-30^{\prime}$. | . 895189 | 1.78 per roll |
| $2^{\prime \prime}-30^{\prime}$. | 895987 | 3.56 per roll |
| Kearney Airseal |  | PRICE EACH |
| Cat. No. |  |  |
| 18415 | Box of 20 Pads $212^{\prime \prime} \times 4^{\prime \prime}$. | . $\$ 1.65$ box |
| 18415-1 | Box of 20 Pads $8^{\prime \prime} 8^{\prime \prime}$ | 9.50 box |
| 18415-4 | Box of 40 Pads $2^{\prime \prime} \mathrm{x} 21 / 2^{\prime \prime}$ | 1.75 box |
| 18415-2 | 10 ft . Roll $21 / 2^{\prime \prime}$ | 2.50 roll |


| Bishop Vinyl Electrical Tape No. 2-36 Yard Rolls $\qquad$ | PRICE EACH |
| :---: | :---: |
| Stock No. 897294 $1 / 2 \prime$ | \$ 1.95 |
| 897295 3/4". | 2.40 |
| $897296 \mathrm{l}^{\prime \prime}$. | 3.00 |
| 897297 11/2" | 4.80 |
| 897298 2". | 6.00 |
| Bishop No. 125 Filler Tape |  |
| 896077 11/2" width $\times 5 \mathrm{ft}$. | \$1.58 per roll |
| Hi-Tape-Mate Winder |  |
| 897279. | \$ 3.75 |
| Holub Fish Tape-Less Reel |  |
| 897280 HI-205. | 1.30 |
| 897281 HI-206 | 2.35 |
| Holub Fish Tape-With Reel |  |
| 897282 HI-140. | 2.85 |
| 897283 HI-200. | 7.10 |



| Kearney | Drop Wire Grips | PRICE |  | Kearney Lay-Cip Grips |  | PRICE PER HUNDRED |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Cat. No. | Stock No. | Less than 100 | 100 or over |
|  |  | Less Than 1000 | $\begin{gathered} 1000 \\ \text { or More } \end{gathered}$ | 19234 | 895035. | \$66.00 | \$60.00 |
| 6715-1 | 893045 | \$24.15 | \$23.00 | 19235 | 895036. | 71.50 | 65.00 |
| 615-1 | 893045. | \$24.15 | \$23.00 | 19234-5 | 895226. | on applic |  |
|  |  |  |  | 19235-5 | 895227. | . $\}$ on applic |  |



## page 22w

Issue Date: 4-15.57


## page 23w

| U | rsal Test Clips | PRICE EACH IN LOTS OF |  |  | Universal Test Clips |  | PRICE EACH IN LOTS OF |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. | Leas than 10 | 10.99 | 100 or more | Cat. No. | Stock No. | Less than 10 | 10.99 | 100 or more |
| 27 | 892181 | \$ . 11 | \$ . 08 | \$ . 07 | 85 | 892185. | \$ . 08 | \$ . 06 | \$ . 05 |
| 27 | 892182 with ins. | . 28 | . 20 | . 17 | 85 | 892186 with ins. | . 18 | . 12 | . 10 |
| 50 C | 894927. | . 25 | . 18 | . 15 | 45 | 892180. | . 07 | . 05 | . 05 |
| $60-5$ | 894108. | . 08 | . 06 | . 05 | 48-B | 892184. | . 08 | . 06 | . 05 |
| 60HS | 894109 | . 14 | . 10 | . 09 |  |  |  |  |  |

## page 24w

| Blake Staples |  | PRICE PER THOUSAND |  |  | Washer Type Nails |  |  | PRICE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. Stock No. Less than 5000 |  |  | 5000-10,000 | 10,000 or more | Stock No. |  |  | $.\} \$ 2.50 \text { per } \cdot \mathrm{M}$ |
| 1 | 893070. | \$1.95 | \$1.70 | \$1.50 | 893076 | $\begin{aligned} & 1 / 2^{0} \\ & 1 / 2^{0} \end{aligned}$ |  |  |
| 3 | 893071. | 1.95 | 1.70 | 1.50 | 893077 |  |  |  |
| 5 | 893072. | 1.95 | 1.70 | 1.50 | Diamond Hammer Drive Anchors |  |  | PRICE PER 100 |
| 6 | 893073.... 2.10 |  | 1.85 | 1.65 | 890125 | 3/4" $\times 7 / 9^{\prime \prime}$ | Anchors. |  |
|  |  |  | 890125 |  | 3/6" $\times 1 / 8^{\prime \prime}$ |  | $\$ 4.32$ 4.86 |  |
| No. 1 Insulated Rhodestaples |  |  |  |  | 890126 | 3/6" $\times 11 / 4^{\prime \prime}$ |  | 4.86 5.40 |
| Stock No. |  |  |  |  | 890127 | 1/4"x ${ }^{\prime \prime}{ }^{\prime \prime}$ |  | 5.40 5.94 |
| 895262 | \% $\begin{aligned} & 1 / 2 \\ & 5 / 8\end{aligned}$ |  |  |  |  | 890128 890129 | $1 / 4^{\prime \prime} \times 11 / 4^{\prime \prime}$ $1 / 4^{\prime \prime} \times 112^{\prime \prime}$ |  | 5.94 6.48 |
| 895263 |  |  | \$3.00 per M |  | $\begin{aligned} & 890129 \\ & 890130 \end{aligned}$ | $\begin{aligned} & 1 / 4^{\prime \prime} \times 11 / 2^{\prime \prime} . \\ & 5 / 4_{6}^{\prime \prime} \times 114^{\prime \prime} . \end{aligned}$ |  | $\begin{aligned} & 6.48 \\ & 7.56 \end{aligned}$ |
| No. 18 Nails-Perfection Type |  |  |  |  | Other sizes on application. |  |  |  |
| Stock No. |  | Lesa than 5000 | 5000-10,000 | 10,000 or more | Diamond Multi-Size Screw Anchors |  |  |  |
| 893067 | $1 / 2^{\prime \prime}$. |  |  |  | 890113 | 6 to $8 \times 3 / 4^{\prime \prime}$. |  | 3.40 |
| 893068 | \%" | . $\$ 2.80$ | \$2.70 | \$2.60 | 890114 | 10 to $14 \times 1$ ". |  | 3.80 |
| 893069 | \%" |  |  |  | 890115 | 10 to $14 \times 1 \frac{1}{2^{\prime \prime}}$. |  | 5.44 |
|  |  |  |  |  | 890116 | 16 to $18 \times 11 / 2^{\prime \prime}$. |  | 6.12 |


| Diamond Toggle Bolts |  | PRICE PER HUNDRED |
| :---: | :---: | :---: |
| Stock No. |  | Spring |
| 890138 | $1 / 8^{\prime \prime} \times 2$. | \$ 7.04 |
| 890139 | $1 / 8^{\prime \prime} \times 3$. | 7.92 |
| 890140 | $1 / 2^{\prime \prime} \times 4$. | 8.80 |
| 890142 | $3 / 16^{\prime \prime} \times 3$ | 8.36 |
| 890143 | $3 / 16^{\prime \prime} \times 4$. | 8.80 |
| 890144 | $3 / 16^{\prime \prime} \times 5$. | 10.56 |
| 890145 | $3 / 16^{\prime \prime} \times 6$. | 11.00 |
| 890146 | $1 / 4^{\prime \prime} \times 3$. | 9.24 |
| 890147 | $1 / 4^{\prime \prime} \times 4$. | 9.68 |
| 890148 | $1 / 4^{\prime \prime} \times 5$. | 12.32 |
| 890149 | $1 / 4 \prime 10$. | 13.64 |


| Common Nails-Hot Galvanized PRICE PER 100 LBS. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. |  | $100 \mathrm{lbs}$. | and over |
| 6D | 893621. |  |  |  |
| 8D | 893622. |  |  |  |
| 10D | 893623. |  |  |  |
| 20D | 893624. |  |  |  |
| 30D | 893625. |  | \$20.00 | \$17.50 |
| 40D | 893626. |  |  |  |
| 50D | 893627. |  |  |  |
| 60D | 893628. |  |  |  |
| 60D | 893629 | Stub. | 24.50 | 22.50 |

Diamond Wing-Ding Anchors_PRICE PER hundred
7922
897167.
\$ 5.53

Elco Iron Wood Screws (Specify Galvanized or Blued) Flat or Round Head


| Diamond Drive Rings |  |  | PRICE PER HUNDRED |  |
| :---: | :---: | :---: | :---: | :---: |
| Size | Stock | No. |  |  |
| $1 / 2^{\prime \prime}$ | 8930 |  |  | \$ 1.20 |
| 5/9" | 8930 |  |  | 2.20 |
| \%" | 8930 |  |  | 3.20 |
| Bridle Rings |  |  |  |  |
| Style | Stock No. Galvanized |  |  |  |
| A | 893052 |  |  | 7.50 |
| C | 893053. |  |  | 6.50 |
| E | 893054 |  |  | 3.00 |
| F | 893 |  |  | 27.00 |
| (Enameled Rings on application) |  |  |  |  |
| Flexiducts |  |  | PRICE |  |
| $\begin{aligned} & \text { cat. } \\ & \text { No. } \end{aligned}$ | $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ |  | $\begin{aligned} & \text { Less Than } \\ & 100^{\prime} \end{aligned}$ | $\begin{aligned} & 100^{\prime} \text { or } \\ & \mathrm{O}_{\mathrm{ver}} \end{aligned}$ |
| 1 | 895728 | ( $100{ }^{\prime}$ per carton) | \$ .35 per ft. | \$ . 33 per ft. |
|  | 895729 | ( 50 ' per carton) | . 53 per ft . | . 50 per ft. |
| 3 | 895730. |  |  | \$ . 50 each |
| 4 | 895731. |  |  | . 50 each |
| 5 | 895732. |  |  | . 50 each |
| 6 | 895733. |  |  | . 50 each |



| T-25 | aple Ta |  | PRICE |
| :---: | :---: | :---: | :---: |
| Cat. No. | Stock No. |  |  |
| T-25 Tacker | 897074 |  | \$12.00 each |
| T-25 Staples | 897075 | $3 / 81$. | 4.50 per box* |
| T-25 Staples | 897076 | $766^{\prime \prime}$ | 4.50 per box* |
| T-25 Staples | 897077 | 9/6" | 5.00 per box* |
| *Packaged 500 | per box. |  |  |

Telephone Instrument Sample Case PRICE Stock No. 896040 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$20.00 each

TCI Library www.telephonecollectors.info


[^0]:    Cat. Descrip-
    4T (897242) Payout-

[^1]:    Cat. No. Stock No.
    7135 (894972)
    Description
    Tip only, for new S-400 and D-440

[^2]:    Weight, 8 pounds.

[^3]:    Cancelling Sheet Dated: 6-1-56
    All prices subject to change without notfce

