

Telephone Manufacturing Co.

Standard Telephone Apparatus

... and ...

Standard Wiring Diagrams

GEORGE H. BUCKMINSTER & CO.,
155 MILK STREET,
BOSTON, MASS.

### **OUR TERMS**

### FAIR AND SQUARE DEALING.

# OUR AIM IS OUR CUSTOMERS' WELFARE.

# MONEY REFUNDED IF GOODS ARE NOT SATISFACTORY.

It is our desire to make dealings with us a pleasure. Fifteen years' experience has taught us how to do this. This, with your patronage, has been our success. We have taken especial care to furnish complete wiring diagrams, as well as other information, regarding special finishes.

Oak is the standard.

Use care in ordering; don't be afraid of saying too much. See pages 11 and 12 for directions for installing DeVeau Patented Automatic Switchless Intercommunicating Telephones.

# WE DO NOT SELL TO THE CONSUMER DIRECT. PROTECTION TO THE TRADE.

All shipments f. o. b. New York. Prices do not include batteries with telephone apparatus, except on Catalogue Nos. 131 and 132.

If you do not see what you want in the Catalogue—write us.

### HOW TO FIND WHAT YOU WANT.

### BATTERY TELEPHONES.

FOR LINES OF TWO THOUSAND FEET OR UNDER.

- Two Telephones: To work together. Catalogue Nos. 126, 1125, 1172, 287.
- Intercommunicating Automatic Switchless: Catalogue Nos. 157, 1167, 3250½, 159, 1159.
- Lever and Plug Switch Type: Catalogue Nos. 1180, 1187, 1123, 1287. Multiple Type: Catalogue Nos. 1157, 1158.
- Centerphone: Using automatic, or lever or plug switch type for central station with wall type 1172, 1125, or desk set 287 for outlying station. allowing any number of stations to be called from central point, wiring diagram page 29.
- Centerphone: Using two central stations with any number of outlying stations, wiring diagram page 35. Otherwise the same as Centerphone described above. Automatic switchless telephones best for centrals.
- Apartment House: Using 3250½ or 2250 for the vestibule, 157 for janitor's room, with wall 2252, 1172, 1125, for desk, 287 for apartments, allowing tenants to be called from vestibule or janitor's quarters, and tenants can call janitor's quarters. Wiring diagram page 40.
- Switchboard: Centralized batteries for any number of outlying stations, Catalogue Nos. 293B, 193B, 192B, 200, 201.

### MAGNETO TELEPHONES.

### BRIDGING.

For Exchange Service, Farmer's Lines, Toll Lines, Party Lines, and all cases where more than two telephones are wanted on a line. Catalogue Nos. 66Z, 151 and 290.

### SERIES.

For Exchange Service, Two on a Line, and for all short-line work. Catalogue Nos. 66X, 150, 75, 289.

### MAGNETO INTERCOMMUNICATING.

For Hospitals, Factories, etc.; for outlying building work, where battery call telephones would not be strong enough.

### SWITCHBOARDS.

- For Exchange Service: Factories, Hotels, Hospitals, etc., Catalogue Nos. 293B, 193B, 192B.
- Magneto Switchboards: For any number of stations, Bridging or Series.
- Central Energy Switchboards: For any number of stations.
- NOTE.—Full information will be given regarding central energy or common battery system, as to number of storage batteries required, and the size of motor generator, etc.

# - WHY -



# Patented Automatic Switchless Intercommunicating Telephones ARE THE BEST.

### MECHANICAL CONSTRUCTION

The best that brains, brawn and money can produce.

### AUTOMATICALLY

Restored by hanging up receiver.

### CENTRALIZED BATTERIES

All batteries grouped together at one central point.

### RUBBING CONTACT

One on ringing and two on talking circuit, insuring absolute contact.

### NAME PLATES

Plainly printed on celluloid; easily removed.

### EXCHANGE CONNECTIONS

Can be connected to city and long distance service.

### OUTLYING STATIONS

Single stations can be called from any phone on system.

SUPERINTENDENT'S CALL at small additional cost, master calling button will be included on superintendent's phone, allowing assistant to ring all phones on the system simultaneously, and by previously arranged signal (two or three rings) summon him to the nearest phone immediately.



CAT. No. 157.

### WALL TYPE.

Capacity, 6 to 31 stations inclusive.

Automatically restored by hanging up Receiver.

Solid Back Transmitter. Double Pole Receiver.

Hinged Backboard.

Oak Finish. Other finishes extra.

Wired C-A, Page 38, unless otherwise ordered.



CAT. No. 1167.

### WALL TYPE.

Capacity, 10 to 31 stations inclusive.

Automatically restored by hanging up Receiver.

Hinged Backboard. Double Pole Receiver.

Adjustable, Solid Back Transmitter.

Oak Finish. Other finishes extra.

Cat. No. 1167.—Ten Stations .......List Price, \$21.80

For each additional two stations over ten..... " 1.40

Wired C-A, Page 38, unless otherwise ordered.



### NEW FLUSH TYPE.

Capacity, 6 to 31 stations inclusive.
Automatically restored by hanging up Receiver.
Solid Back Bell Type Transmitter.
Double Pole Receiver.
Sets flush with the wall.
Pressed steel outlet boxes provided with necessary knock-out points for iron or flexible conduit.
Oak Finish. Other finishes extra.

### Wired ONLY C-A, Page 38.

# DeVEAU Patented Automatic Switchless Magneto Telephones.

### INTERCOMMUNICATING.



CAT. No. 720.

### FOR LONG DISTANCE INTERCOMMUNICATION.

Capacity, 6 to 31 stations inclusive.

Automatically restored by hanging up receiver.

Hinged Backboard.

Adjustable Solid Back Transmitter.

Double Pole Receiver.

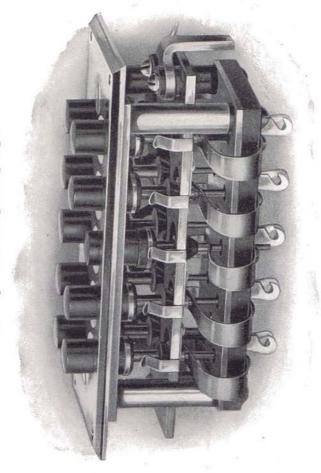
Oak Finish. Other finishes extra.

Wired M-C-A, Page 36, unless otherwise ordered.

# Not Dependent on Spiral Springs.

### DeVEAU AUTOMATIC SWITCHLESS MECHANISM.

Distinctly and Exclusively DeVEAU.



Note Superior Mechanical Construction,

Patented March 21, 1899. Other Patents pending.

We beg to advise the trade that we hold and own basic patents on Self-restoring and Interlocking Telephones, which rightfully revolutionized intercommunicating telephone practice (this is borne out by the recent action of other manufacturers who have seen fit to copy our various types of automatic telephones) and it is our intention to vigorously protect our rights.

Note Auxiliary Contact on Talking Circuit.

Two RUBBING Contacts—Insuring Perfect Connections.



CAT. No. 159.

### DESK TYPE.

Capacity, 6 to 16 stations inclusive. Automatically restored by hanging up Receiver. Solid Back Bell Type Transmitter. Double Pole Receiver. Nickel finish in stock. Other finishes extra. Complete with Silk Cable and Terminal Box.

In ordering Name Plates state which set of indications are to be used on above Desk Telephones.

> Wired C-A, Page 38, unless otherwise ordered. How to Find What You Want, Page 2.

# DeVEAU Patented Automatic Switchless Telephones.



CAT. No. 1159.

### DESK TYPE.

Capacity, 16 to 31 stations inclusive. Automatically restored by placing handphone on stand. Stations can be called with handphone on or off holder. Oak Finish. Other finishes extra.

Cat. No. 1159.—New Automatic Desk, 16 Stations, List Price, \$34.00

For each additional two stations over 16...... " 1.80

Wired C-A, Page 38, unless otherwise ordered.



How to Find What You Want, Page 2.

### IMPORTANT NOTICE.

It is absolutely necessary that we should know whether telephones are to be used on central talking, central ringing battery system, or local talking, central ringing batteries. Telephones wired for one system will **NOT** work on the other. In ordering phones for increasing system already in, state whether system is local or central talking batteries. If for centerphone system—using any of the instruments illustrated for a central station, with single phones for outlying stations—so state in ordering.

### DIRECTIONS

FOR THE

### Installation of DeVEAU Intercommunicating Telephones.



The installation of DEVEAU Intercommunicating Telephones is very simple and easy if the following instructions are carefully followed out:

**CABLE.**—Cables must be well insulated and damp-proof, having each conductor twisted one with another; damp-proof for interior work; rubber or lead-covered for exterior work. Do not run your cable in a very hot or damp place without some protection; use pipe wherever possible. Where no pipe is used, pull it straight and fasten it well with cable straps, having all joints soldered or made on connection strips.

It is very important to have the cable properly fanned out to each connection strip and telephone, screwing the terminals down very tight with machine screws or nuts.

**TELEPHONES.**—Telephones should be fastened firmly to the wall with screws or bolts about five feet from the floor, bringing the cable from the rear, fanning it out, and screwing the ends down tight to the binding posts, keeping the same side of the ringing and talking batteries on the marked terminals of each telephone.

The desk telephone has a connection box with silk cable attached, and is connected the same as the wall telephone. It is usually fastened with a swinging desk bracket.

**BATTERY.**—Storage, or any good open circuit battery, can be used. We have been using the DeVEAU Special Telephone Battery, large cell. It will run for one year on a well constructed system. The batteries should be placed in a battery-box in some out-of-the-way place that is not too hot, nor cold enough to freeze.

Polarity must be the same in every phone.

**RINGING BATTERY.**—Connect carbon of battery to terminal, R-B (ringing battery) on each phone; connect zinc to terminal, R-E-T (return) on each phone.

**TALKING BATTERY.**—Connect carbon of battery to upper terminal, marked T-B (talking battery); connect zinc to lower terminal, marked T-B.

**TROUBLE.**—This is usually caused by skinning the end of the wire too long and not making tight connections, and trying to connect telephones not wired alike on one system. If the telephones are connected up correctly, the following notes will make trouble-finding very easy:

Can talk but cannot ring-Weak ringing battery, or bell out of adjustment.

Can ring but cannot talk—Weak talking battery, or hook does not make good upper contact.

Can ring and talk but cannot hear—Bent receiver diaphragm, loose cap, dirt or iron rust between the poles of the magnets and receiver diaphragm.

Ringing two bells at once-Section wires crossed.

Scraping and rasping noise-Broken receiver cords or loose contacts.

When the cable is new and damp there is apt to be slight crosstalk, which will disappear as the cable dries out.

If you have trouble with your telephone apparatus, it no doubt is caused through accident or mistake in connecting up, and is easily remedied.

If the telephone is defective, we will be glad to replace it at our expense. If the fault is in the connecting up of the apparatus, due to faulty installation, we will be only too glad to help you overcome it.

Do not be afraid to call on us at any time; we are here for your convenience.

Do not, under any circumstances, start to dismantle your telephone apparatus if you find trouble in your system. Write us in detail just what your trouble is, and we will be only too glad to help you out of your difficulty.

**INSPECTION.**—Every telephone system should be inspected at least once a month; carefully testing the battery, tightening all the connections, and cleaning all the contacts.

ORDERS.-In ordering state Wiring Diagram used.

### DeVEAU MULTIPLE TELEPHONE.

INTERCOMMUNICATING.



CAT. No. 1157.

### WALL TYPE.

Capacity, 6 to 13 stations inclusive.

Permits of but one pair of wires being used at the same time.

Solid Back Bell Type Transmitter. Double Pole Receiver.

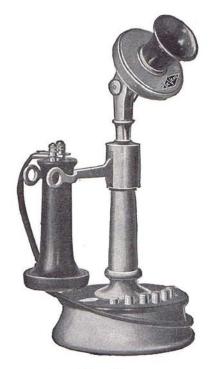
Oak Finish. Other finishes extra.

> Wired ONLY M, Page 32. Retardation Coils, \$1.50 Extra.



### DeVEAU MULTIPLE TELEPHONE.

### INTERCOMMUNICATING.



CAT. No. 1158.

### DESK TYPE.

Capacity, 6 to 13 stations inclusive.

Permits of but one pair of wires being used at the same time.

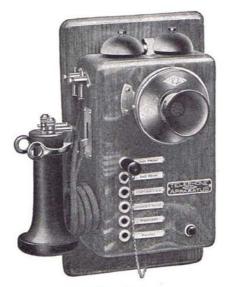
Solid Back Bell Type Transmitter. Double Pole Receiver.

Nickel finish in stock. Other finishes extra.

> Wired ONLY M, Page 32. Retardation Coils, \$1.50 Extra.

### DeVEAU PLUG TYPE TELEPHONE.

### INTERCOMMUNICATING.



Сат. No. 1180.

### WALL TYPE.

Capacity, 6 to 13 stations inclusive.

Stations can be called without returning plug to home station.

Solid Back Bell Type Transmitter.

Double Pole Receiver.

Oak Finish. Other finishes extra.

Wired C, Page 34, unless otherwise ordered.

Retardation Coils, \$1.50 Extra.

How to FIND WHAT YOU WANT, PAGE 2.

### DeVEAU PLUG TYPE TELEPHONE

INTERCOMMUNICATING.



CAT. No. 1187.

### DESK TYPE.

Capacity, 6 to 13 stations inclusive.

Stations can be called without returning plug to home station.

Solid Back Bell Type Transmitter. Double Pole Receiver.

Nickel finish in stock. Other finishes extra.

> Wired C, Page 34, unless otherwise ordered. Retardation Coils, \$1.50 Extra.

### DeVEAU LEVER TYPE TELEPHONE.

INTERCOMMUNICATING.



CAT. No. 1123.

### WALL TYPE.

Capacity, 6 to 13 stations inclusive.

Stations can be called without returning lever to home station.

Solid Back Bell Type Transmitter. Double Pole Receiver. Oak Finish. Other finishes extra.

> Wired C, Page 34, unless otherwise ordered. Retardation Coils, \$1.50 Extra.

### DeVEAU LEVER TYPE TELEPHONE.

### INTERCOMMUNICATING.



CAT. No. 1287.

### DESK TYPE.

Capacity, 6 to 13 stations inclusive.
Stations can be called without returning lever to home station.
Solid Back Bell Type Transmitter. Double Pole Receiver.
Nickel finish in stock. Other finishes extra.

> Wired C, Page 34, unless otherwise ordered. Retardation Coils, \$1.50 Extra.

### DeVEAU APARTMENT HOUSE TELEPHONE.

CENTERPHONE SYSTEM.



CAT. No. 2250.



CAT. No. 2252.

## To be Installed in VESTIBULE or SUPERINTENDENT'S APARTMENT.

Metal face finish, as desired.
Sets flush with wall.
Pressing button calls tenant.
Celluloid Removable Name Plates.
Mechanism attached to Face Plate.
Nickel Finish. Other finishes extra.
Any number of stations.

Size, 10 Stations, 93% in. long, 53% in. wide. Depth, back of face plate, 2½ inches.

List Price.

In ordering state for what System of Wiring wanted.

### For APARTMENTS, HOTELS, RESI-DENCES.

SAME STYLE AS ABOVE.

Provided with button for calling superintendent.

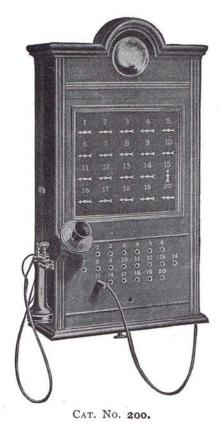
Both instruments provided with DEVEAU Solid Back Bell Type Transmitter.

Bi-Polar Aluminum Receiver. Nickel Finish. Other finishes extra.

Cat. No. 2252 ..... List Price, \$15.00

How to FIND WHAT YOU WANT,
PAGE 2.

### DeVEAU HOTEL TYPE TELEPHONE ANNUNCIATOR.



We can furnish this style Telephone Annunciator with any number of indications. Special designs made to architects' plans and specifica-Gravity or Needle tions. Type Drop can be fitted with Telephone Attachment. number of different Wiring Circuits can be used. The usual method is two direct Wires and one common return Wire. Wiring Diagram will be furnished promptly upon application. Central Ringing and Central Talking Battery is required for Annunciator Systems of this character.

Gravity Drop recommended.
Solid Back Bell Transmitter.
Double Pole Receiver.
Oak Finish.
Other finishes extra.

| Cat. | No.   | 200.—Hotel Telephone Annunciator, Needle Style, per numberLi        | st Pric | e, \$2.80 |
|------|-------|---|---------|-----------|
| "    | ٠, ۲, | 201.—Hotel Telephone Annunciator, Gravity Style, per number         | "       | 3.00      |
| "    | "     | 202.—Transmitter, Receiver and Automatic<br>Switch, attached, extra | "       | 10.00     |

### DeVEAU COMBINATION TELEPHONE.



CAT. No. 1172.

For two-party private line, outlying stations and hotel use. In ordering, state for which system desired.

Oak and Golden Oak in stock. Special woods and finishes at a small additional cost

Solid Back Transmitter. Double Pole Receiver.

| List Frices                  |
|------------------------------|
| Cat. No. 1172\$10.00         |
| Cat. No. 1125.—Same style as |
| above, with Diamond Grain    |
| Transmitter, Double Pole     |
| Watch Case Receiver, and     |
| small case 7.00              |

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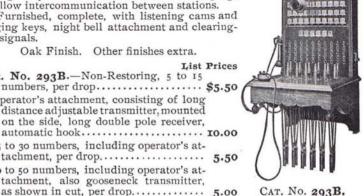
### DeVEAU Private Branch Exchange Switchboard. WALL TYPE.

This Switchboard is made to fasten on the wall to hinged backboard permitting of easy access to wiring. Is provided with sufficient cords and plugs to allow intercommunication between stations.

Furnished, complete, with listening cams and ringing keys, night bell attachment and clearingout signals.

Oak Finish. Other finishes extra.

List Prices Cat. No. 293B .- Non-Restoring, 5 to 15 numbers, per drop...... \$5.50 Operator's attachment, consisting of long distance adjustable transmitter, mounted on the side, long double pole receiver, automatic hook...... 10.00 15 to 30 numbers, including operator's attachment, per drop..... 5.50 30 to 50 numbers, including operator's attachment, also gooseneck transmitter,



CAT. No. 293B.

### DeVEAU STANDARD SWITCHBOARD.

DESK TYPE.





CAT. No. 193B.

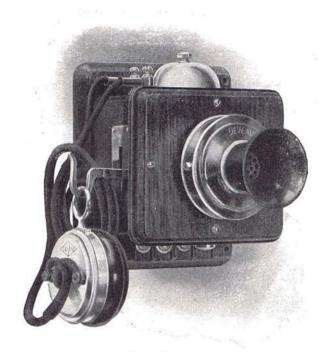
Standard Switchboard, drops easy of access, combined ringing and listening keys, nightbell attachment, supervisory signal, gooseneck pattern operator's attachment, long distance transmitter, hand or head receiver.

This board will be furnished with mechanical self-restoring drops at prices named.

Oak Finish. Other finishes extra.

| List  | Prices |
|---|--------|
| Cat. No. 192B.—Self-restoring, 30 to 50 numbers, per drop     | \$6.00 |
| Operator's attachment, as shown in cut, extra                 | 16.00  |
| 50 drops and over, operator's attachment included, per drop   | 6.00   |
| Cat. No. 193B.—Non-restoring, 30 to 50 numbers, per drop      | 5.60   |
| Operator's attachment, extra                                  | 16.00  |
| 50 numbers or over, including operator's attachment, per drop | 5.00   |

### DeVEAU PRIVATE LINE TELEPHONES.



CAT. No. 126.

### SUITABLE FOR TWO-PARTY LINE.

**EQUIPMENT**—Call Bell; Diamond Grain Transmitter; Bi-Polar Aluminum Watch-case Receiver.

WIRING DIAGRAM with each pair.

PACKED two in a box.

SERVICEABLE—2,000 feet; two or three cells of dry battery on each end.

OAK FINISH ONLY.

List Price, per Phone, Two-Party Line.....\$5.00

### WIRED FOR MULTIPLE SYSTEM,

Allowing any number to be connected on one system..... 6.00

Wired 126 M ONLY, Page 39. Retardation Coils, \$1.50 Extra.

### THE Deveau Handyphone



For Hotels, Apartment Houses,
Stores, Factories,
Private Residences,
Bank and Office
Buildings.



NOT AFFECTED BY HEAT OR COLD.

CAT. No. 1000.

Can be installed on present Push-Button Circuits without additional cost for wiring.

NOT A TEMPORARY MAKESHIFT. NICKEL, FINISH.

MADE TO LAST.

GUARANTEED BY US.

Wiring Diagram and complete information furnished with each instrument.

### DeVEAU SUNDRIES AND SUPPLIES.

### DESK BRACKETS.



### FOR ROLL TOP DESKS.

FINISHED IN NICKEL AND SPECIAL FINISHES.

Cat. No. 3249.-For all standard desk sets...... List Price, \$2.50 " 32491/2.- For Cat. 159, 1158..... 2.50



Cat. No. 3149. - For all standard desk sets......

Cat. No. 31491/2. - For Cat. 159, 1158 ......

List Price, \$3.50



### FOR FLAT TOP DESKS.

Cat. No. 2149. - For all standard desk sets ...

Cat. No. 21491/2. - For Cat. 159, 1158..... List Price, \$3.50



### CABLE CLIPS.

| Cat. No.               | Per 100        |
|------------------------|----------------|
| 300 (for 6 to 12 Cond) | actors) \$2.50 |
| 30I ( " 12 to 20 "     | 3.00           |
| 302 ( " 20 to 30 "     | 3.50           |



### DeVEAU SPECIAL TELEPHONE WIRE.

For use on Connecting Strips and Interior Work. Three insulations, No. 20 Tinned Copper.

Cat. No. 400.—Per Pound.......List Price, \$1.50

### DeVEAU SILK CABLE.

For Desk Sets and Bell Work. From 2 to 20 Conductors in stock. Over 20 Conductors, special.

Cat. No. 401.—Per Yard, per Conductor......List Price, \$0.12

### DeVEAU TELEPHONE CABLE.

### DeVEAU SPECIAL, RUBBER COVERED, LEAD INCASED.

|    |            |     |    |         |                          |      |   | P          | er Foot |  |
|----|------------|-----|----|---------|--------------------------|------|---|------------|---------|--|
| 6  | Conductor, | No. | 18 | Rubber, | $\frac{3}{32}$           | Lead | l | ist Price, | \$0.18  |  |
| 10 | **         | ••  | 18 | **      | 3 9                      | **   |   | "          | .241/3  |  |
| 20 |            | ••  | 13 |         | $^{6}_{2}^{1}$           | **   |   | "          | .44     |  |
| 30 | **         | **  | 18 | **      | $\frac{3}{3}\frac{2}{2}$ | "    |   | "          | .63½    |  |
| 34 | **         | •   | 18 | 4.6     | $\frac{3}{3}$            | **   |   | "          | .71     |  |

### DeVEAU OFFICE CABLE.

Our Office Cables will be found very desirable for all interior wiring, for which they are especially designed. They are composed of No. 18 B. & S. Gauge Wire, thoroughly insulated, compactly cabled and braided in any desired color or combination of colors, finished with our Patent Compound.

Cat. No. 1479.—Office Cable, Patent Finish, per lb..... List Price, \$0.60

Finer Conductors subject to special prices.

APPROXIMATE NUMBER OF FEET PER POUND OF OFFICE CABLES. No. 18 CONDUCTOR.

| 2 ( | Conductors | 60 | feet. | 22  | Conduct | ors | feet.   |
|-----|------------|----|-------|-----|---------|-----|---------|
| 4   | .,         | 26 | 4.0   | 24  | 44      |     | 1/2 "   |
| 6   | **         | 20 | 44    | 26  | **      |     | **      |
| 8   | 66         | 16 | **    | 30  |         |     | 1/6 "   |
| 10  | 4.6        |    | 44    | 34  | 44      |     | **      |
| 12  | 44         |    | 44    | 38  | **      |     | 3/4 "   |
| 14  | **         |    | **    | 40  | **      |     | 11/2 11 |
| 16  | **         | 0  | **    | 46  | **      |     |         |
| 18  | **         | 8  | **    | 50  | **      |     | 3/4 "   |
| 20  | **         | 7  | **    | 100 | **      |     | 1/2 "   |

### DeVEAU TELEPHONE CABLE.

For Inside of Buildings where exposed to Steam or Dampness.

Made in from 2 to 100 conductors. Each conductor is double wound or braided, compactly cabled, thoroughly soaked in Patent Compound, and finished with braid and rubber tape, put on double thickness, and an outside braid over all.

Cat. No. 1494.—Telephone Cable......List Price. \$0.80

CAT. No. 1479.

APPROXIMATE NUMBER OF FEET PER POUND OF CABLES.

No. 18 CONDUCTOR.

| 4<br>6<br>8<br>10 | Conducto<br>""<br>" | rs251713119 | feet. | 12<br>14<br>16<br>18<br>20<br>22<br>24<br>26<br>30<br>34<br>38<br>40<br>46 |   | ors | 7½<br>7<br>6<br>5½<br>5¼<br>4½<br>4½<br>4½ | 11<br>11<br>11<br>11<br>11 | CAT. NO 1494. |  |
|-------------------|---------------------|-------------|-------|--|---|-----|--|----------------------------|---------------|--|
|                   |                     |             |       | 46<br>50<br>100  | " |     | 2½<br>2¼<br>1¼                             | ::                         | -454.         |  |

### DeVEAU RUBBER CABLE.

Made from 6 conductors up to 80 conductors, in twisted pairs, No. 18 B. & S. or No. 20 B. & S. wire. This cable is made of the very best soft copper, insulated with pure

rubber, then twisted in pairs. Over all is placed a weatherproof cover-

This cable will stand all sorts of outdoor climates and conditions, and is one of the best cables for telephone work made.

CAT. NO. Cat. No. 1480,—Per foot, per Conductor.... List Price, \$0.03 1480.

### DeVEAU CABLE TERMINAL STRIPS.



These strips are made standard in 7, 11, 16, 21 and 26 pairs, space staggered 3/4 inch between centers. They are used to end cables in block and other distribution work. They care for the spare cable conductor ends and make a test and connecting point for the lines to subscriber's stations.

Cat. No. 405.—Per Connector ......List Price, \$0.14

### DeVEAU TELEPHONE BATTERIES.

### SPECIAL DRY BATTERIES.

Cat. No. 350.—Size 21/2 x6 inches,

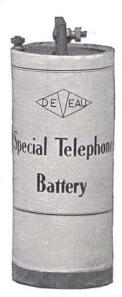
List Price, \$0.44

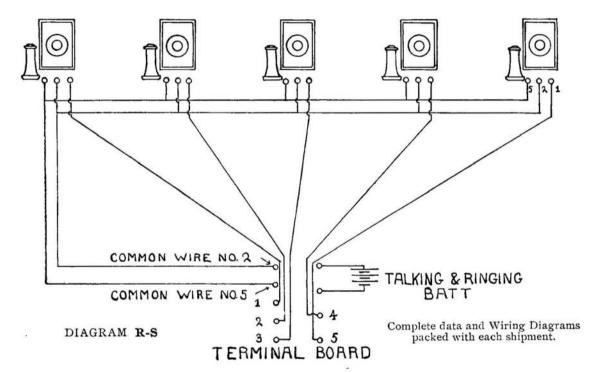
Cat. No. 351.-Size 31/2x8 inches,

List Price, \$1.60



NOTE.—This Battery is made especially for Telephone use. It has great recuperative powers and long life.





CENTER PHONE AND OUTLYING STATIONS.

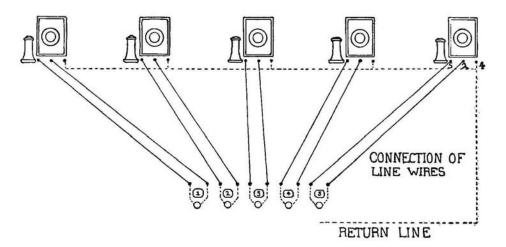


DIAGRAM S-B { Complete data and Wiring Diagrams packed with each shipment.

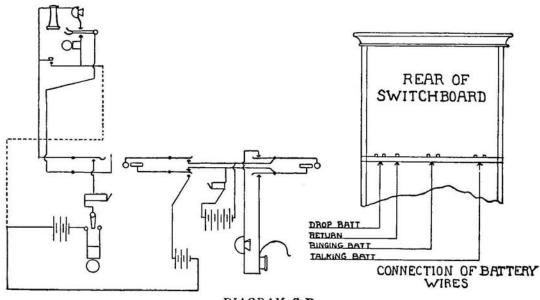
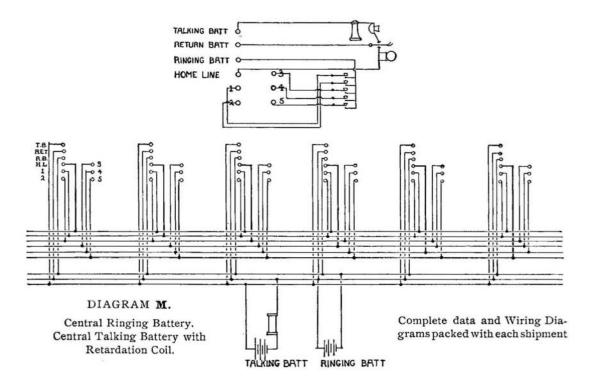
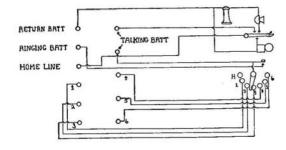


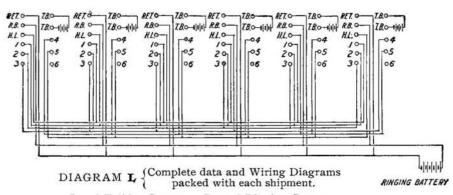
DIAGRAM S-B

Note arrows leading to terminals on rear of switchboard.

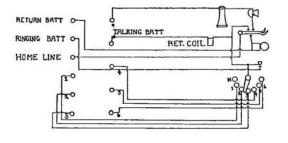
On the above diagram is shown the Battery Return-Call Switchboard system. Use two direct and one common line wire. Batteries all centrally located. Use one set of talking batteries, one set of batteries for calling up or ringing battery, and one set for calling down or drop battery, as shown on the above diagram. Use eight to twelve volts for talking, six to eight volts for calling up or ringing batteries, and five to eight volts for calling down or drop batteries, as distance may require. Storage batteries of two volts each should be used on large systems, any good open circuit battery on small systems. Motor Generator can also be used on large systems.

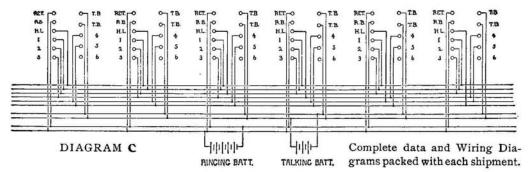






Local Talking Battery. Central Ringing Battery.





Central Ringing Battery and Central Talking Battery with Retardation Coil.

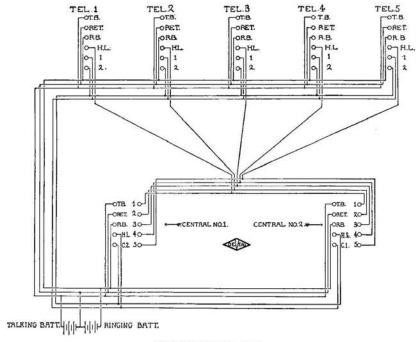


DIAGRAM R-C-A.

Using two centrals. Centralized ringing battery and centralized talking battery. Use from 3 to 5 batteries for talking and from 3 to 5 batteries for ringing.

Any intercommunicating telephone can be used for the outlying stations, excepting Catalogue Nos. 720, 1157 and 1158, and for the centrals as well.

Either desk or wall pattern can be used for the central. Complete data and Wiring Diagrams packed with each shipment.

Automatic switchless telephones best for centrals.

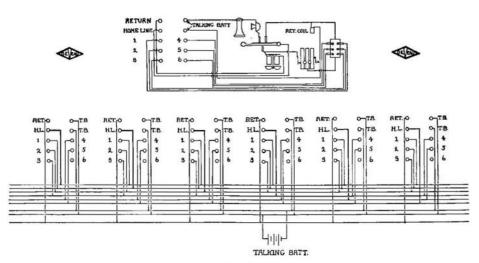
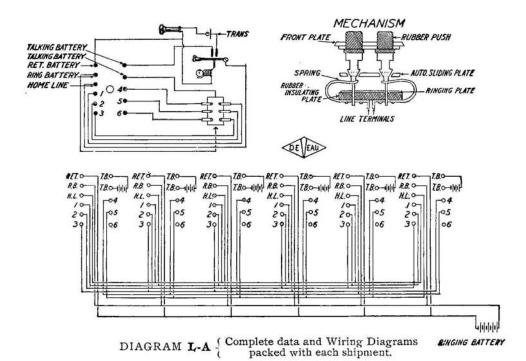


DIAGRAM M-C-A.

Using Catalogue No. 720 for the instruments. Central Talking Battery, using from 3 to 5 batteries. Connections made as shown on sketch.

NOTE that this is a Magneto Call Intercommunicating System. Complete data and Wiring Diagrams packed with each shipment.



LOCAL TALKING BATTERY AND CENTRAL RINGING BATTERY.

DIAGRAM C-A Complete data and Wiring Diagrams packed with each shipment.

CENTRAL TALKING BATTERY AND CENTRAL RINGING BATTERY.

38

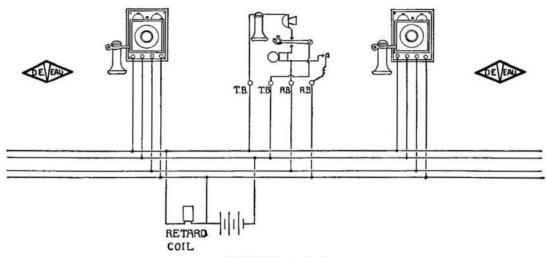
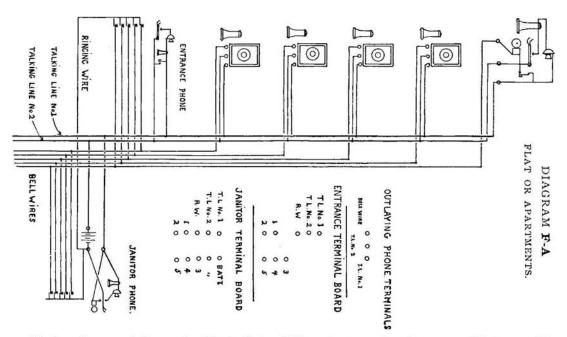


DIAGRAM 126 M.

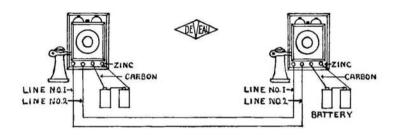
Use 2 to 4 batteries, centrally located (as shown in sketch), with retardation coil, and connect the terminals as shown on diagram. I to 6 of these telephones can be put on the system, having separate or different signals for each telephone. (Bells in multiple.) Complete data and Wiring Diagrams packed with each shipment.



We have, by request of several architects, designed this system to supplant the very unsatisfactory speaking tube systems previously used. We recommend Cat. Nos. 3250½ and 2250 for the vestibule telephones. The instrument is designed to set flush with the vestibule wall, and can be finished to match the surrounding trim. (Any type of intercommunicating telephone can be used.) For the janitor's apartment, Cat. No. 157. For the tenants' apartments, Cat. No. 172 and 2252. With this system the tenants or janitor can be called from the vestibule. The tenants can call the janitor or be called by him. Intercommunication between tenants can be made through janitor's telephone, if desired, by pressing any two buttons on janitor's phone simultaneously. More than one vestibule telephone can be installed on this system if desired. Batteries centrally located.

#### WIRING DIAGRAM 1125 L

This Wiring Diagram for Telephones Nos. 1172, 1125 and 126, if so ordered.



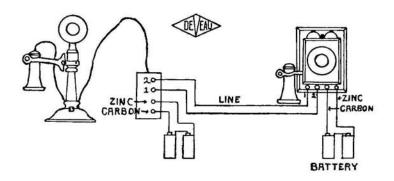
Wiring diagram for one pair of battery call wall telephones, using two line wires and a set of batteries at each end.

Lines No. 1 and No. 2 must connect to the marked terminals on each telephone, as shown on the diagram.

Any good open circuit battery can be used, connecting the carbon and zinc to the marked terminals on each telephone.

#### WIRING DIAGRAM 287 L

This Wiring Diagram for Telephones Nos. 1172, 1125 and 287, if so ordered.



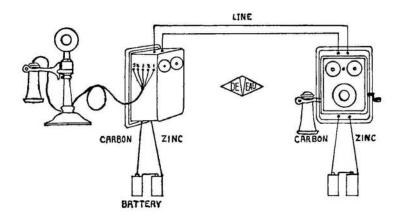
Wiring diagram for one pair of battery call telephones, using two line wires, connecting one wall and one desk set, using a set of batteries at each end.

Lines No. 1 and No. 2 must connect to the marked terminals on each telephone, as shown on diagram.

Any good open circuit battery can be used, connecting the carbon and zinc to the marked terminals on each telephone.

#### WIRING DIAGRAM 289 L

This Wiring Diagram for Telephones Nos. 66x, 150, 75 and 289, if so ordered.



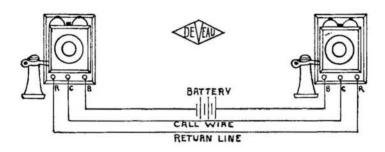
Wiring diagram for one pair of magneto call telephones, using two line wires connecting one wall and one desk set, using a set of batteries at each end.

Lines must be connected to the terminals, as shown in diagram.

Any good open circuit battery can be used, using two cells at each end.

#### WIRING DIAGRAM 1172 C

This Wiring Diagram for Nos. 1172 and 287 only, if so ordered.

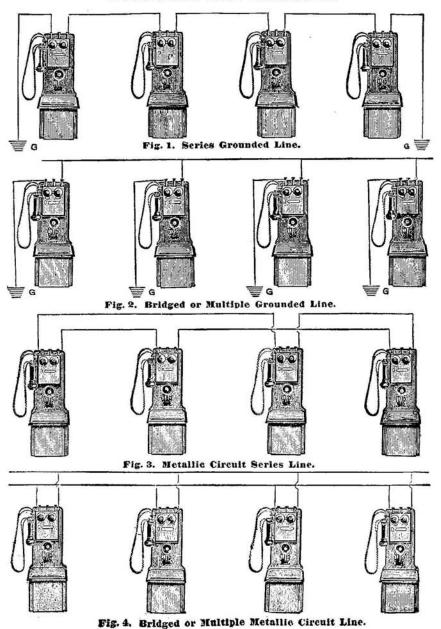


Wiring diagram for one pair of battery call wall telephones, using three line wires and one set of three batteries.

Lines R, C and B must connect to marked terminals on each telephone, as shown on diagram.

Any good open circuit battery can be used, connecting the battery in circuit with the line marked B at any convenient point between the two telephones.

#### TELEPHONE LINE DIAGRAMS.



# MAGNETOS AND EXCHANGE TELEPHONE APPARATUS, SWITCHBOARDS AND ACCESSORIES.

For Switchboards, See Pages 21 and 22.



We manufacture every known telephone apparatus and part for same. We can furnish cords, coils, generators, lightning arresters, switchboard parts and every conceivable thing necessary for a telephone, and have them in stock.

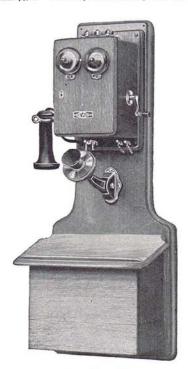
We make a specialty of Marine Telephones and Switchboards for vessels of every description, also for diving purposes.

Telephones specially adapted for use on fire alarm circuits. Made so as to attach to lightning arresters in any fire alarm box and converse with central station operator over the fire alarm circuits while signals are being transmitted.

We have a large Catalogue (11th Edition) showing a full line of construction tools and materials, long distance and common battery telephone apparatus and switchboards.

#### DeVEAU

## Long Distance Series or Bridging Type Telephones. HIGHEST TYPE MAGNETO PHONE.



CAT. No. 66z.

#### EQUIPMENT:

DeVeau Solid Back Bell Type Transmitter.

Solid Bi-Polar Receiver.

Long Lever Switch Hook. Rubbing Contacts.

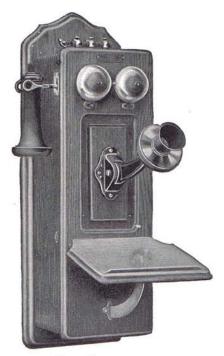
Case, Quartered Oak. High Finish.

Cat. No. 66x.—25,000 Ohm Series Generator......List Price, \$18.00
" " 66z.—50,000 " Bridging " ...... " 23.00

HOW TO FIND WHAT YOU WANT, PAGE 2.

#### DeVEAU NEW EXCHANGE TYPE TELEPHONES.

Our Most Reliable Telephone.



CAT. No. 150.

This illustration represents one of our new style Wall Telephones for Exchange use. It is suitable for residences and many other places where a compact and neatly designed Telephone is desired. It is furnished with our DeVeau Solid Back Bell Type Transmitter and Solid Double Pole Receiver. The Magneto Bell is enclosed in the case with room at the bottom for two Cells of Dry Battery. Oak Finish.

Cat. No. 150.—25,000 Ohm Series Generator..... List Price, \$18.00
" " 151.—50,000 " Bridging " ..... " 23.00

HOW TO FIND WHAT YOU WANT, PAGE 2.

#### DEVEAU COMBINATION TYPE TELEPHONES

#### WITH

#### DeVEAU DIAMOND GRAIN TRANSMITTERS.



CAT. No. 75.

These Telephones are for Short Line, Factory and Office use. Their compact form makes them most desirable where larger Instruments look awkward. Oak Finish.

| Cat.<br>No.  | List<br>Prices |
|--|----------------|
| 74.—10,000 Ohm Series Generator, Watch Case Receiver |                |
| 75.—As above, with Long Bi-Pole Receiver             |                |

#### DeVEAU LINEMAN'S TESTING SET.

Compact, strong and powerful.

Dimensions: 7½ inches long, 5¼ inches high, 5 inches wide.

For use where Portable Telephone is desired. Battery included.

Oak Finish.



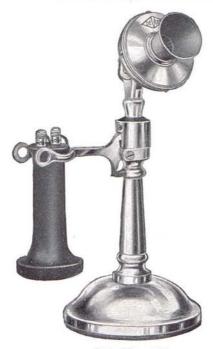
CAT. No. 131.

HOW TO FIND WHAT YOU WANT, PAGE 2.

### DeVEAU Standard Nickel Desk Type Telephones.

#### DeVEAU SOLID BACK BELL TRANSMITTER.

DOUBLE POLE RECEIVER.



CAT. No. 286.

The All-Nickel Bell Type Desk Set, illustrated herewith, is made for Central Energy, Magneto or Battery Call Systems.

Cat. No. 286.—One Standard Nickel Central Energy Desk Set without Signal Bell or Condenser......\$16.00

" 288.—One Standard Nickel Desk Set, complete, for use with Magneto (Magneto not included)...... 16.00

" 289.—One Standard Nickel Desk Set, complete, for use with Magneto and including Series Magneto..... 22.00

" 290.—One Standard Nickel Desk Set, complete, for use with Magneto and including Bridging Magneto ... 25.00

How to Find What You Want, Page 2.

#### DeVEAU WALL TELEPHONES.



Central Energy Wallphone with Solid Back Bell Type Transmitter, Double Pole Receiver, Condenser and High Resistance Ringer. Oak Finish.

Cat. No. 1841/2..... List Price, \$17.00

#### DeVEAU Central Energy Type Signal Bell.

This style Signal Bell is designed to be used in connection with our Central Energy Desk Set, which is shown on page 50. It is fitted with Condenser, High Resistance Ringer, Special Central Energy Coil and Line Terminals. Oak Finish.

Cat. No. 185.—One Central Energy Signal Bell and Coil...\$11.00



CAT. No. 185.

How to FIND WHAT YOU WANT, PAGE 2.

#### DeVEAU TELEPHONE TRANSMITTERS.

#### DeVEAU SOLID BACK BELL TYPE TRANSMITTER.



## THE BEST TRANSMITTER MANUFACTURED.

| Cat.<br>No.              | List<br>Prices |
|--------------------------|----------------|
| 216.—For Desk Sets       | \$3.00         |
| 2161/2With Lugs (same as |                |
| Cat. No. 229             | 2.70           |
| 217.—For Adjustabe Arms  | 2.50           |

#### DeVEAU DIAMOND GRAIN TRANSMITTER.



CAT. No. 229.



CAT. No. 230.

| Cat.  | List   |
|---|--------|
| No.   | Prices |
| 229.—One Diamond Grain Stationary Transmitter     | \$2.00 |
| 230.—One Diamond Grain Adjustable Arm Transmitter | 3.00   |

These Transmitters work equally well on Long Distance and Interior Lines.

#### DeVEAU TELEPHONE TRANSMITTERS.

## DeVEAU SOLID BACK BELL TYPE TRANSMITTER WITH ADJUSTABLE ARM.



- Cat. No. 97.—One Long Adjustable Arm, with Solid Back Bell

  Type Transmitter, Induction Coil in base......List Price, \$6.00
- Cat. No. 96.—One Long Adjustable Arm, with Solid Back Bell

  Type Transmitter, without Induction Coil .....List Price, \$4.80
- Cat. No. 218.—One Long Adjustable Arm, Diamond Grain Transmitter, with Induction Coil in base.....List Price, \$4.20
- Cat. No. 219.—One Long Adjustable Arm, Diamond Grain Transmitter, without Induction Coil......List Price, \$3.50
- Cat. No. 220.—Transmitter Mouth Pieces, only.....List Price, \$0.14

#### DeVEAU STANDARD EXTENSION BELL.

One or more of these Bells can be connected with a Telephone and placed in different parts of a building so as to ring simultaneously with the Telephone, or they may be placed in different parts of a factory and connected with a Magneto Bell in office. Oak Finish.

List Prices

Cat. No. 2130.—One Extension Bell, Series...\$2.80

Cat. No. 3220.—One Extension Bell, Bridging, 5.50
For Fancy Gongs add \$1.00.



CAT. No. 2130.

#### DeVEAU LOUD RINGING EXTENSION GONGS

FOR TELEPHONE CIRCUITS.

OAK FINISH.



CAT. No. 2131.

Cat. No. 2131.—Resistance of Ringer, 80 Ohms; Diameter of Gongs, 6 in.; without Condensers......\$10.44

Cat. No. 2132.—Resistance of Ringer, 1,000 Ohms; Diameter of Gongs, 6 in.; without Condensers...... 11.04

Cat. No. 2133.—Resistance of Ringer, 1,600 Ohms; Diameter of Gongs, 6 in.; without Condensers...... 11.50

Condensers are supplied, when desired, with bells having a resistance of 1,000 ohms or over, for which an additional charge is made.

Gongs with Mahogany finish at slightly advanced prices.

#### DeVEAU "Solid" New Type Bi-Polar Receivers.

#### WITHOUT BINDING POSTS.



CAT. No. 222.

This Receiver is moulded "solid" in its case, but has an added advantage in that it has Inside Connecting Screws for the Receiver Cord instead of Outside Binding Posts. The Cord passes through the Receiver Cap and also through an additional Washer. The Cord is held in place by a button on under side of this Washer before connection is made to the Binding Screws. By this method all strain is taken off the Cord Connections. It is so constructed as to readily allow the replacing of an old Cord with a new one when necessary.

There is nothing of a metallic nature on the outside of the Receiver, all metal parts being completely enclosed in the shell, thereby entirely obviating the possibility of receiving a shock while handling this Receiver.

#### RECEIVER BOBBINS EASILY REMOVED.

Cat. No. 222. - One "Solid" Bi-Polar Receiver, with Inside Binding Posts, including Cord, each ......List Price, \$1.80

Cat. No. 223. - Without Cord, with Outside Binding Posts, 1.60

#### DeVEAU NEW STYLE HEAD RECEIVER.



Leather covered spring. Receiver held by spring clamp. Self-adjusting to the head. Double pole pattern, aluminum case, very light, with six feet of silk cord attached.

List Price Cat. No. 2097...\$5.00 Including Cord.

#### DeVEAU New Type Double Pole Watch Case Receiver.

Very strong rubber cap. Aluminum case, which makes it very light. With anchor button and cords. No strain comes on cord connections.

Cat. No. 2241/2.....List Price, \$1.80
Including Cord.





## Telephone Manufacturing Co.

Standard Telephone Apparatus

... and ...

Standard Wiring Diagrams