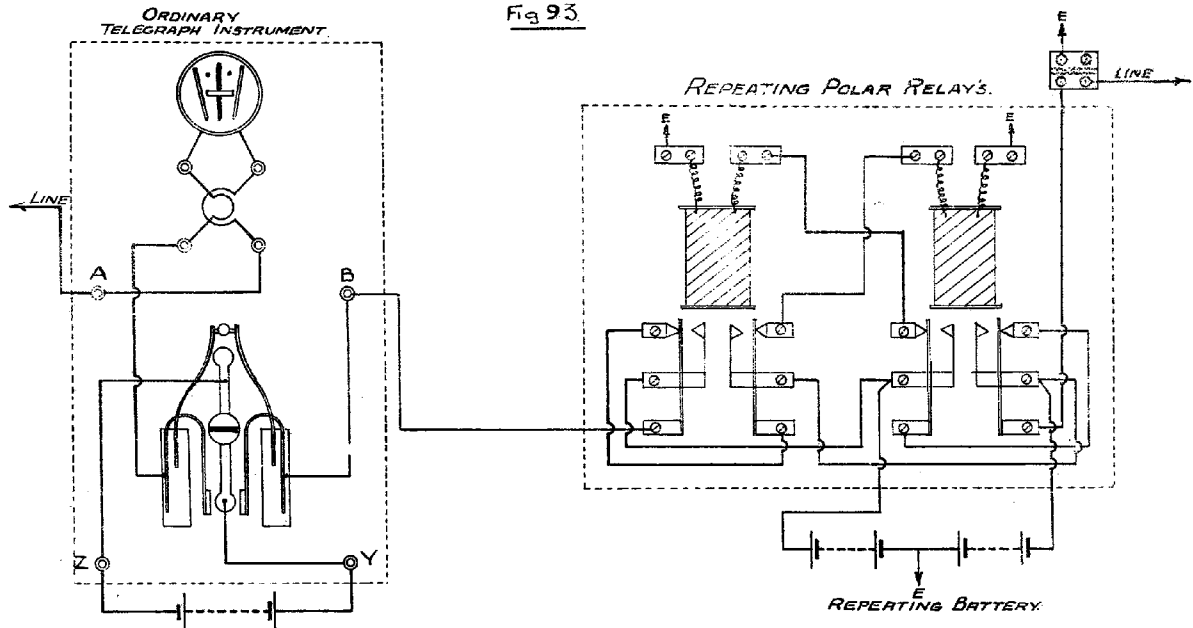


# LNER STANDARD SINGLE NEEDLE TELEGRAPH CIRCUITS

| DGM       | TITLE   | DATE    |
|-----------|---|---------|
| 29-ES-276 | TELEGRAPH REPEATING STATION   | 15-8-28 |
| 30-ES-191 | DOUBLE-CURRENT SOUNDER WITH RELAY                                   | 7-7-37  |
| 30-ES-193 | DIRECT SOUNDER  | 9-7-37  |
| 30-ES-201 | SINGLE-CURRENT SOUNDER WITH RELAY                                   | 9-7-37  |
| 35-ES-280 | ARRANGEMENTS FOR COMMON BATTERY<br>WORKING FOR TERMINAL INSTRUMENTS | 20-9-35 |
| 35-ES-336 | ARRANGEMENTS FOR COMMON BATTERY<br>WORKING ON THROUGH CIRCUITS      | 18-9-35 |

THESE DIAGRAMS ARE FROM JOHN MIDCALF'S COLLECTION, TO WHOM MANY THANKS

Fig 93



Approved *A.S. Mansell*  
 Signal & Telegraph Engineer  
 Date 4.12.29

Approved *J. Nuttall*  
 Assistant Engineer  
 Date 6/12/29

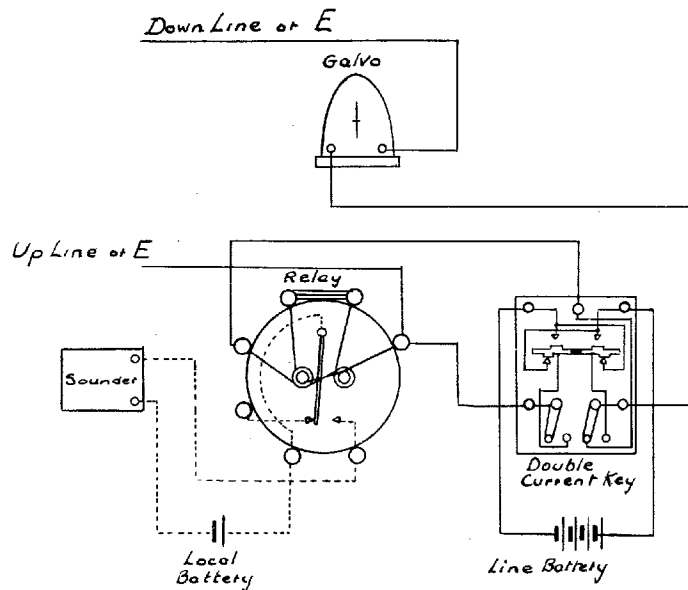
Approved *John Mee*  
 Engineer  
 Date 19.12.29

|            |            |         |
|------------|------------|---------|
| Drawn by   | P. Peacock | Correct |
| Traced by  | P. Peacock | Date    |
| Checked by |            |         |

L.N.E.R. NORTH EASTERN AREA  
 Wiring diagram for  
 TELEGRAPH REPEATING  
 STATION  
 Drawing No 29-ES-276.  
 ENGINEER'S OFFICE, YORK. 15-8-28

|                |  |
|----------------|--|
| File           |  |
| Correspondence |  |
| Authority      |  |

32

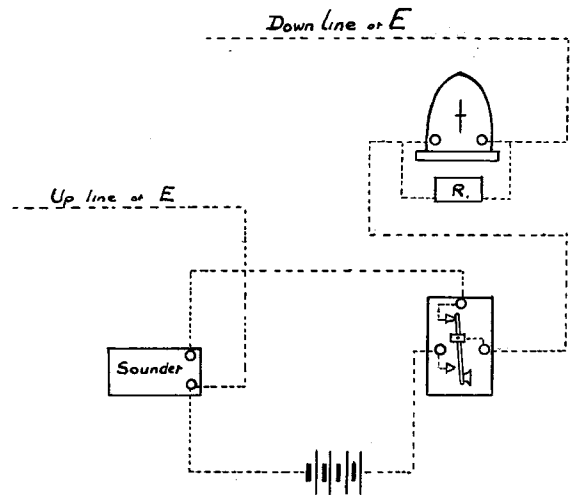


LNER NORTH EASTERN AREA  
STANDARD WIRING FOR  
DOUBLE CURRENT SOUNDER  
with Relay  
DRAWING N<sup>o</sup> 30 ES 191  
Engineer's Office York 18-6-30  
7-7-37

|             |        |                           |                             |
|-------------|--------|---------------------------|-----------------------------|
| DRAWN BY    | W.A.F. | APPROVED                  |                             |
| EXAMINED BY | R.P.   | <i>Charles</i><br>11.3.38 | <i>J. Hamson</i><br>11.3.38 |

|                |  |
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| File           |  |
| Correspondence |  |
| Authority      |  |

30

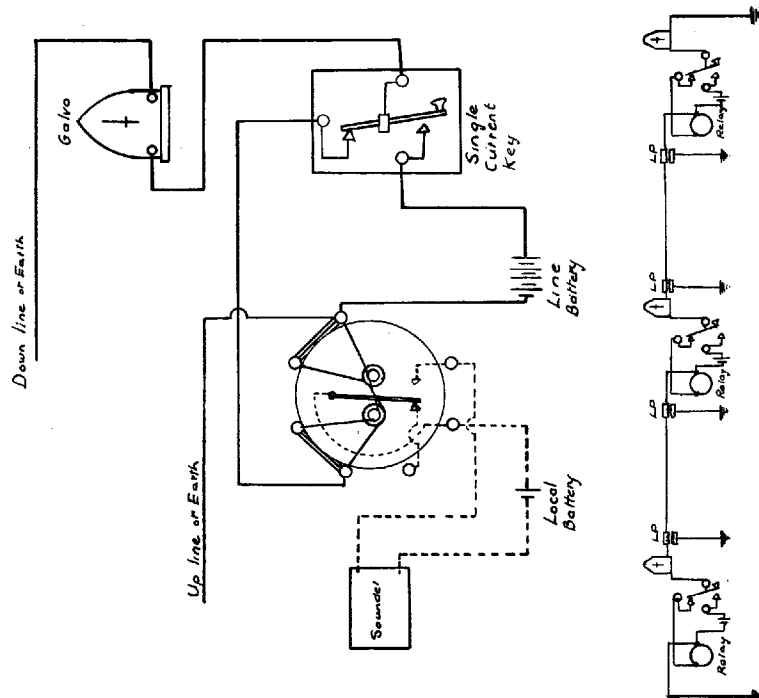


NB LIGHTNING PROTECTOR TO BE  
INSERTED IN THE LINE

LNER NORTH EASTERN AREA  
STANDARD WIRING FOR  
DIRECT SOUNDER  
DRAWING N°30 ES 193  
Engineers Office York 13-5-38  
9-7-37

|             |      |                |                |
|-------------|------|----------------|----------------|
| DRAWN BY    | W.F. | APPROVED       |                |
| EXAMINED BY | L.P. | <i>Charles</i> | <i>F. Hand</i> |
|             |      | 11.3.38        | 11.3.38        |

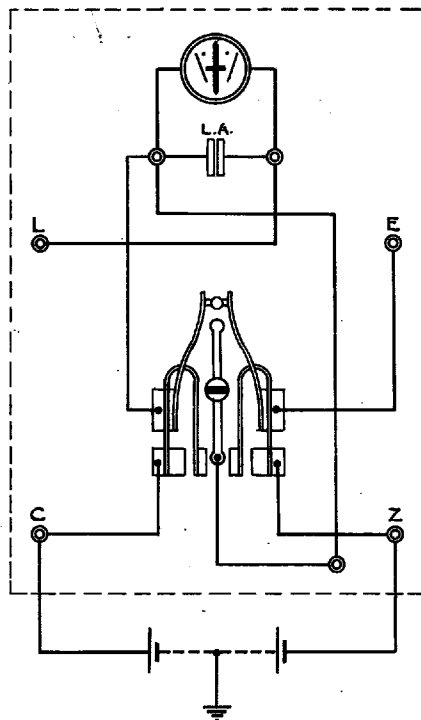
|                |  |
|----------------|--|
| File           |  |
| Correspondence |  |
| Authority      |  |



LNER NORTH EASTERN AREA  
STANDARD WIRING FOR  
SINGLE CURRENT SOUNDER  
WITH RELAY  
DRAWING N° 30ES 201  
Engineer's Office York

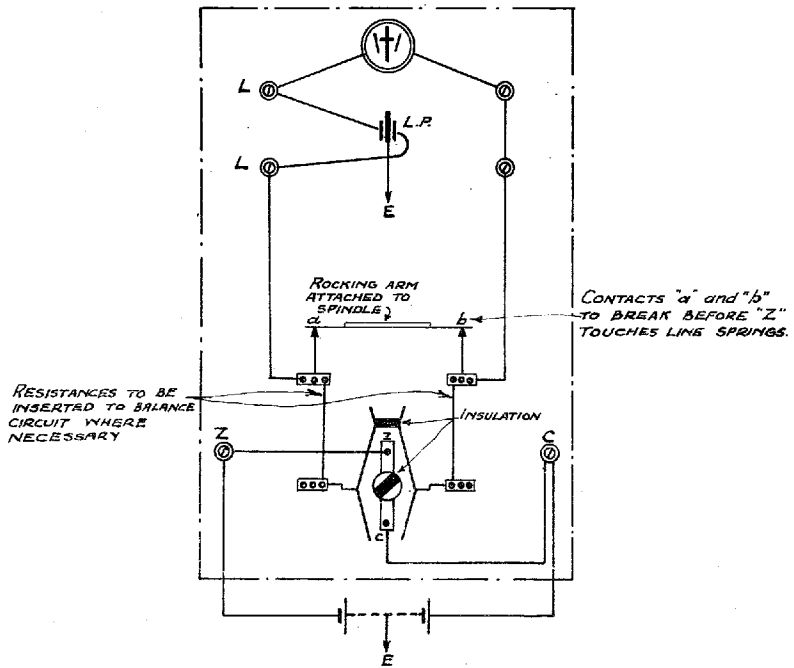
17-6-38  
 9-7-38

|             |      |               |                  |
|-------------|------|---------------|------------------|
| DRAWN BY    | REL. | APPROVED      |                  |
| EXAMINED BY | P.P. | <i>Clarke</i> | <i>Stranahan</i> |
|             |      | ... 11.3.38   | ... 11.3.38      |



|            |                     |                     |          |                     |  |
|------------|---------------------|---------------------|----------|---------------------|--|
| DRAWN BY   | <i>R.P. Peacock</i> | CORRECT             | APPROVED |                     |  |
| TRACED BY  | <i>L.S.</i>         | <i>R.P. Peacock</i> |          | <i>John Wheeler</i> |  |
| CHECKED BY | <i>R. D. ...</i>    | 20-9-35             | 19 11 35 | 21. 11 35           |  |

L.N.E.R. (N.E. AREA)  
 Standard drawing of  
**S.N. SPEAKER**  
 Arrangement for Common Bty.  
 Working for Terminal Insts.  
 DWG. N° 35-ES-280  
 Engineer's Office, YORK. 20-9-35



L.N.E.R. (N.E. AREA.)  
 Standard drawing.  
**S.N. SPEAKER**  
 Arrangement for Common  
 Bty. Working on through cts.  
 Dwg. No 35-ES-336  
 Engineer's Office, York 18-9-35

|            |                |           |                  |  |                 |
|------------|----------------|-----------|------------------|--|-----------------|
| DRAWN BY   | <i>Rank</i>    | CORRECT   | APPROVED         |  |                 |
| TRACED BY  | <i>Rank</i>    | <i>dd</i> | <i>R.T. ...</i>  |  | <i>John ...</i> |
| CHECKED BY | <i>Edwards</i> | 19.9.35   | <i>W. J. ...</i> |  | <i>21.11.35</i> |