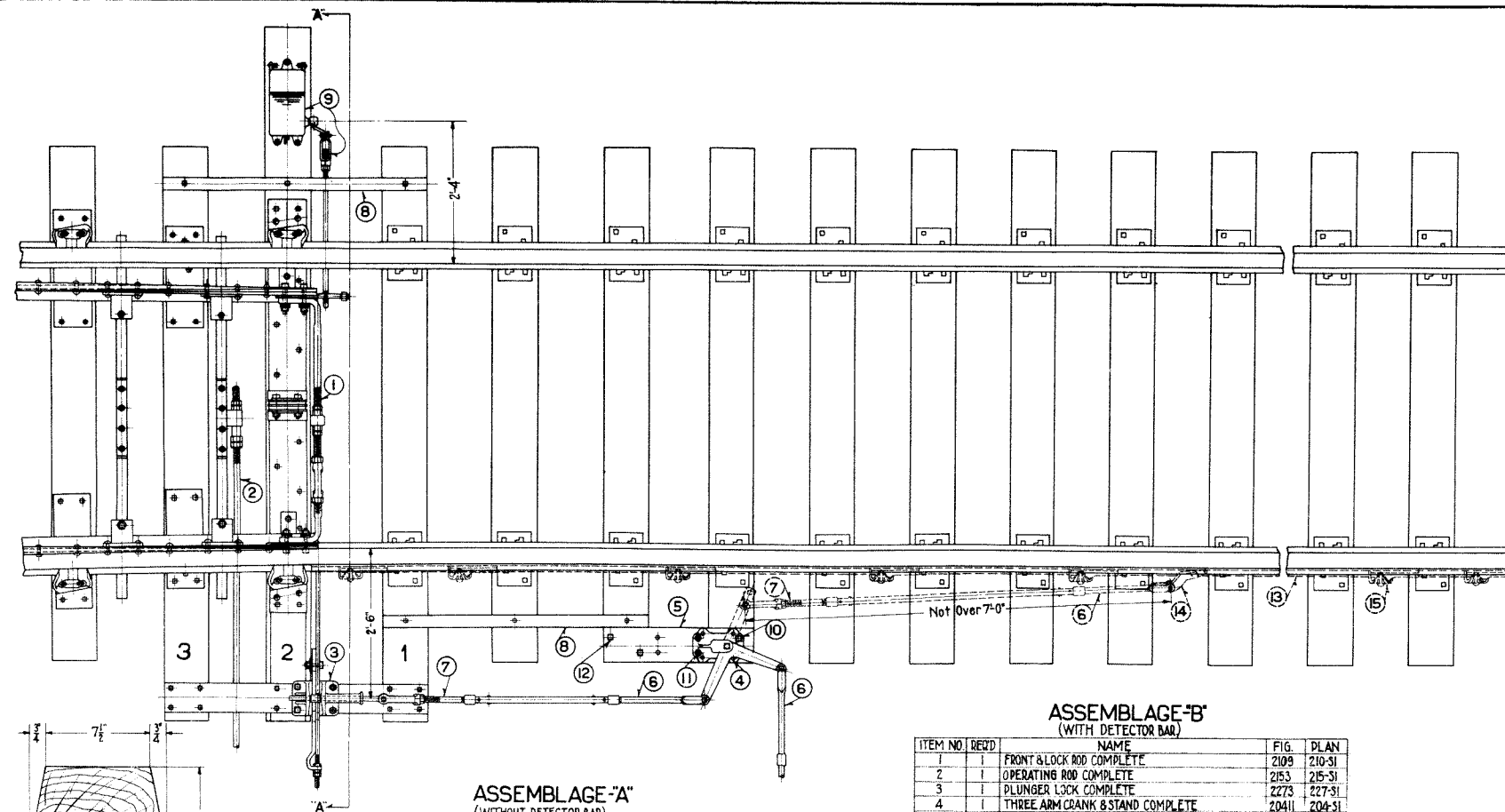
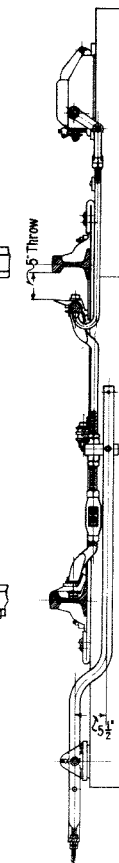


**ASSEMBLY "A"**  
(WITHOUT DETECTOR BAR)

| ITEM NO. | REQD | NAME                                                        | FIG.  | PLAN   |
|----------|------|-------------------------------------------------------------|-------|--------|
| 1        | 1    | FRONT & LOCK ROD COMPLETE                                   | 2109  | 210-SI |
| 2        | 1    | OPERATING ROD COMPLETE                                      | 2153  | 215-SI |
| 3        | 1    | PLUNGER LOCK COMPLETE                                       | 2273  | 227-SI |
| 4        | 1    | RAIL CRANK & STAND COMPLETE                                 | 20414 | 204-SI |
| 5        | 1    | SUPPORTING PLATE                                            | 20417 | 204-SI |
| 6        | 2    | SOLID JAWS                                                  | 2066  | 206-SI |
| 7        | 1    | SCREW JAW                                                   | 20612 | 206-SI |
| 8        | 2    | TIE STRAPS                                                  | 2374  | 237-SI |
| 9        | 1    | SWITCH CIRCUIT CONTROLLER COMPLETE                          | 2598  | 259-SI |
| 10       | 2    | 3/4" x 8 3/4" SQ. HD. BOLTS (Each With PL Washer & Hex Nut) |       |        |
| 11       | 2    | 3/8" x 2" " " " " Hex Nut                                   |       |        |
| 12       | 2    | 3/8" x 4 1/2" LAG SCREWS                                    |       |        |

**ASSEMBLY "B"**  
(WITH DETECTOR BAR)

| ITEM NO. | REQD | NAME                                                        | FIG.  | PLAN   |
|----------|------|-------------------------------------------------------------|-------|--------|
| 1        | 1    | FRONT & LOCK ROD COMPLETE                                   | 2109  | 210-SI |
| 2        | 1    | OPERATING ROD COMPLETE                                      | 2153  | 215-SI |
| 3        | 1    | PLUNGER LOCK COMPLETE                                       | 2273  | 227-SI |
| 4        | 1    | THREE ARM CRANK & STAND COMPLETE                            | 20411 | 204-SI |
| 5        | 1    | SUPPORTING PLATE                                            | 20417 | 204-SI |
| 6        | 2    | SOLID JAWS                                                  | 2066  | 206-SI |
| 7        | 2    | SCREW JAWS                                                  | 20612 | 206-SI |
| 8        | 2    | TIE STRAPS                                                  | 2374  | 237-SI |
| 9        | 1    | SWITCH CIRCUIT CONTROLLER COMPLETE                          | 2598  | 259-SI |
| 10       | 2    | 3/4" x 8 3/4" SQ. HD. BOLTS (Each With PL Washer & Hex Nut) |       |        |
| 11       | 2    | 3/8" x 2" " " " " Hex Nut                                   |       |        |
| 12       | 2    | 3/8" x 4 1/2" LAG SCREWS                                    |       |        |
| 13       | 1    | 53'-0" DETECTOR BAR COMPLETE                                | 20725 | 207-S3 |
| 14       | 1    | DETECTOR BAR DRIVING PIECE                                  | 20732 | 207-S4 |
| 15       | 16   | " " " " " " RAIL CLIPS COMPLETE 100 LBS P.S.                | 20724 | 207-S2 |
|          | 16   | " " " " " " " " 85 LBS P.S.                                 | 20722 | 207-S2 |
|          | 16   | " " " " " " " " 100 LBS P.R.R.                              | 20710 | 207-S1 |
|          | 16   | " " " " " " " " 85 LBS P.R.R.                               | 20712 | 207-S1 |



ELEVATION AT "A-A"

**NOTE:**

Plunger Lock Casting shall be bolted to Base Plate with 2 - 3/4" x 2" Bolts and 2 - 3/4" x 4 1/2" Lag Screws into head tie. Base Plates secured otherwise with 10 - 3/4" x 4 1/2" Lag Screws. Crank stand bolted to supporting plate with 2 - 3/4" x 2" Bolts (1) and 2 - 3/4" x 8 3/4" Bolts (2) through tie. Supporting Plate secured to other tie with 2 - 3/4" x 4 1/2" Lag Screws (3). For P.S. rail set Bottom of Plunger Lock Plate 5/8" below base of rail. For P.R.R. rail set Bottom of Plunger Lock Plate 3/4" below base of rail. For P.S. or P. R. R. rail set Bottom of Crank Supporting Plate 5/8" below base of rail. Ties No. 1 and No. 3 - 9'-6" long and Tie No. 2 - 11'-6" long. Switch Rods, Bridge Plate and Rail Braces to be furnished with Switch Points. For details see M. W. Plans covering these details. Detector Bar (when used) shall be arranged to give 53' 0" continuous protection and shall lap Switch Point a distance equal to the stroke of Bar. The first and second Rail Clips at each end of Bar, shall be spaced 8' and 26' respectively from end, the remaining Clips approximately 3'-9".



**STANDARD  
MECHANICAL SWITCH LAYOUT  
APPLICATION TO SINGLE SWITCH**

PHILA. MARCH 7, 1917.

Correct

Approved - *[Signature]*  
Signal Engineer

Approved - *[Signature]*  
Engineer M. W.

224-S1

1/2" TYPICAL

Redrawn & Revised - March 7, 1917 - per order  
Reference has changed Detector Bar  
shown dotted & Circuit Controller added.  
Approved - *[Signature]*