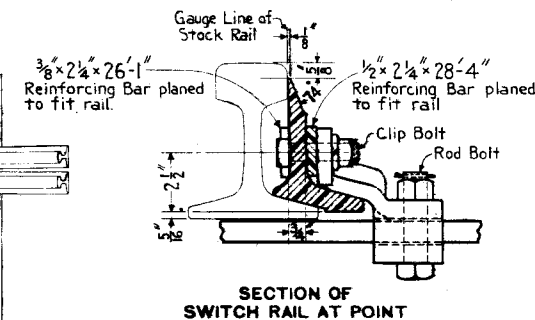




BILL OF MATERIAL FOR ONE SWITCH COMPLETE	
NO. OF PIECES	DESCRIPTION
2	SWITCH RAILS (With Foot Guards, Stops, Clips and Bolts Complete)
1	GAUGE PLATE - "S"
10	No. 1 PLATES
10	No. 1A "
2	No. 2 "
2	No. 2A "
4	No. 3 "
2	No. 4 "
4	No. 5 "
2	No. 6 "
14	ADJUSTABLE BRACES (With Bolts, Spring Washers, Obl. Nuts & Obl. Washers)
3	RODS (With Basket and Sleeve, Complete)
2	HEEL BLOCKS (With Bolts and Thimbles, Complete) Surfact as shown
2	JOINT BARS (Bent, Surfact and Sheared as shown.)

NOTE:- Requisition must specify length of switch, weight and type of rail desired, whether switch is to be insulated on non-insulated and the number of this plan. If the switch is non-insulated, gauge plates and switch rods must be furnished solid.

For details of switch plates, adjustable braces, switch clips, rod bolts, gauge plate and switch rod insulation, switch rods and basket, etc. see standard plans covering these details.

When switches are used with front and lock rods, the clearance between gauge plate and No. 1 rod may be increased by moving clips back one pair of holes and reversing the switch rod.

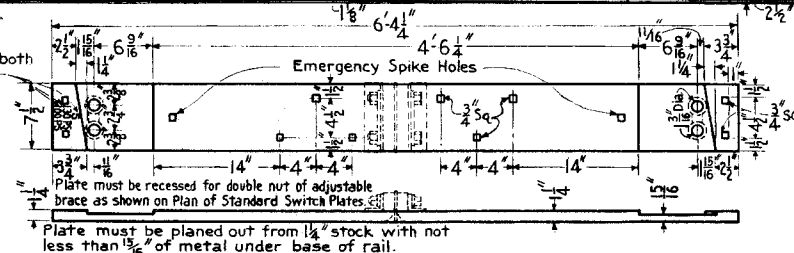
All rail parts must meet the requirements of No. 1 Rails as prescribed by The Pennsylvania Railroad Company's Specifications for Carbon Steel Rails.

Heel joint bolts, switch point bolts and clip bolts must conform to The Pennsylvania Railroad Company's Specifications for Quenched Carbon and Alloy Steel Track Bolts.

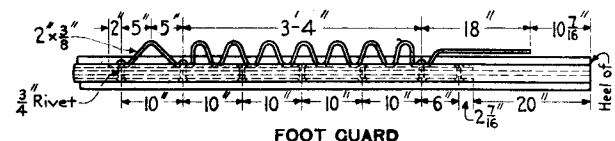
All spring washers must conform to The Pennsylvania Railroad Company's Specifications for Helical Spring Washers - basic number C E 7 ()

Gauge plate shall be marked by deeply cut characters, not less than one half inch high, with the plate designation in the position as shown.

A Malleable Iron Marker Plate, indicating in raised or deeply cut characters, not less than one half inch high, the name of the manufacturer, the month and year shipped, the length, weight and type of switch rail, must be securely fastened to each switch rail in position as indicated on this plan.



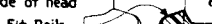
GAUGE PLATE



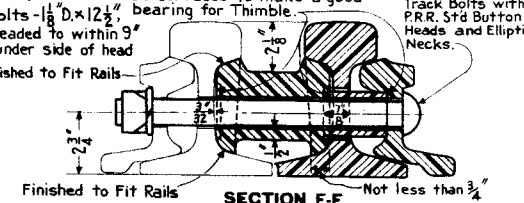
FOOT GUARD

BOLTS FOR ONE
HEEL JOINT
5 Bolts - $\frac{1}{8}$ " D. x $1\frac{1}{2}$ "
Threaded to within 9"
of under side of head
Finished to Fit Rails—

Joint Bar and Heel Block must
be surfaced to make a good
bearing for Thimble.



The diagram shows a cross-section of a rail joint. A horizontal rail is shown with a vertical joint bar passing through it. A heel block is attached to the bottom of the rail. A thimble is shown at the bottom of the joint bar, resting on the heel block. A dimension line indicates a distance of 1 1/2 inches from the bottom of the rail to the top of the thimble. The text 'BOLTS FOR ONE HEEL JOINT' is written above the diagram, and '5 Bolts - 1/8" D. x 1 1/2" Threaded to within 9" of under side of head Finished to Fit Rails—' is written below it. To the right of the diagram, the text 'Joint Bar and Heel Block must be surfaced to make a good bearing for Thimble.' is written.



SECTION E-1

THE PENNSYLVANIA RAILROAD
STANDARD
30 FT. SPLIT SWITCH
FOR 130 LBS. P.S. RAILS
DRILLED 2 $\frac{1}{2}$ " - 6 - 7

DRILLED 2 - 32 - 6 - 7
OFFICE OF CHIEF ENGINEER, PHILA. PA. APRIL 1822

Correct 
Engineer of Standards

Approved 
Chief Engineer