

# A Look Back: Railroad Tie Clock Dating

By Rolland Meyers

There were several ways to mark ties to show the year they were cut and treated or placed into service in the roadbeds: notching a specific position on the tie to indicate the year, branding the tie with the year, using a dated nail, or a unique system used for several years called the “clock dating system.”

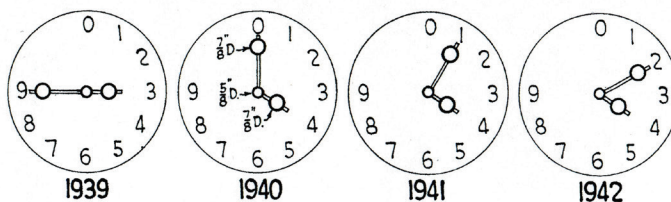
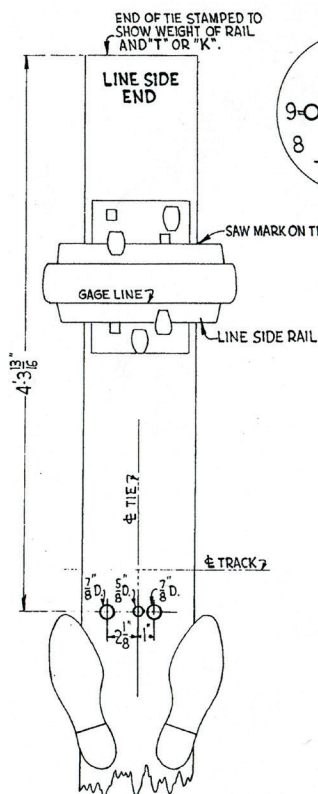
It was a system in which three auger holes of three-eighths to one-half inch deep were drilled into the tie. The center hole was five-eighths of an inch wide, and the two outside holes (minute and hour) were seven-eighths of an inch wide. All three of these holes were put 3 13/16 inches beyond the center of the tie measured from the line end.

In order to read the intended date, a person would find the three holes (slightly to one side or the other of the center of the tie) and would stand behind the holes on the shorter end of the tie. The center hole was smaller, and there were two larger holes, the closest to the center indicating the decade and the furthest indicating the year.

The clock had a zero where the 12 would normally be on a clock, with all other numbers the same as a clock and stopping at number nine.

In a correspondence with a retired maintenance-of-way worker for the Milwaukee Road, Tom Zerr answered the following question: Were the holes drilled when the sawmill and treatment plant made the tie, or were the holes put in on site as the ties were placed into service?

“We got the ties with the holes already drilled,” Zerr said. “The spike holes were



NOTE:- DATING HOLES ARE PLACED 4-3/16" FROM THE LINE SIDE END OF TIE. THE LINE SIDE END OF THE TIE HAS THE WEIGHT OF RAIL AND THE LETTERS "T" OR "K" STAMPED ON IT. THERE IS ALSO A SAWED LINE ACROSS THE FULL WIDTH OF THE TIE ON THE ADZED FACE. IN ORDER TO READ THE MARKS ON THE TIE PROPERLY STAND FACING THE LINE SIDE END OF THE TIE AS SHOWN IN THE DIAGRAM. THE HOLE NEAREST TO THE CENTER HOLE REPRESENTS THE HOUR HAND AND INDICATES THE FIRST FIGURE IN THE DATE. THE HOLE FARTHEST FROM THE CENTER HOLE REPRESENTS THE MINUTE HAND AND INDICATES THE SECOND FIGURE IN THE DATE. ALL TIES ARE ADZED ON SAP SIDE TO INSURE HEART SIDE BEING PLACED DOWN IN BALLAST.

NOTE:- THE CENTER HOLE SHALL BE 5/8" DIA. THE HOUR AND MINUTE HAND HOLES SHALL BE 7/8" DIA.

C. M. ST. P. & P. R. R.  
**METHOD OF MARKING TREATED TIES**  
 KNOWN AS  
**CLOCK DATING**  
 AUG. 24, 1939  
 CORRECT: *M. Shea* Supt. of Ties. APPROVED: *W.H. Penfold* Chief Engineer.  
 P-443 REV. A

drilled on the same side so they were inserted with the spike holes up. It was harder to spike a tie without the holes, so you made sure from a laborer’s viewpoint to do it right. The spike holes also lined up with the plate so you knew about how far to slide the tie in.”

Being a “confirmed” date nail collector, it was always a disappointment to see these ties when I walked a lot of the Milwaukee Road trackage. There were no nails. I did not recall seeing these clock dated ties on other railroads, and in a conversation with a long-retired Santa Fe maintenance-of-way foreman learned that he had no knowledge of them being used on the Santa Fe. So, I started asking around.

The ties were used on the Burlington Northern and confirmed by a friend who recently retired a senior engineer for the Burlington Northern Santa Fe in South Dakota.

Above is a 1939 diagram (updated in 1956) from the Milwaukee Road showing how the tie clock dating system works.

I have heard from a few people indicat-

ing that this system was also used on a couple of railroads in the East. Notably, the Seaboard Air Line Railroad and the Atlantic Coast Line Railroad.

If anyone reading this can confirm others using the clock dating system on other lines, I would like to hear about it, and photos would be welcomed.

## Acknowledgements

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*Rolland Meyers is a researcher specializing in collecting and writing about nails. He's the co-editor for the Nailer News, a magazine for the Date Nail Collectors Association, and has written several books on date, letter and code nails from the United States, Canada, Australia and New Zealand. For more info, email rolland@rollandmeyers.com.*