
DATE NAILS *and* RAILROAD TIE PRESERVATION

Jeff Oaks

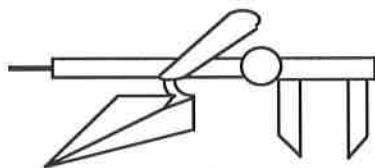
Volume III



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Jeff Oaks

Volume III



University of Indianapolis
Archeology and Forensics Laboratory
Special Report #3

Seventh printing, August 2006
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Typeset in Computer Modern Roman 10 using Plain T_EX
<http://facstaff.uindy.edu/~oaks/DateNailInfo.htm>

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Introduction to the Photographs

Shank markings

Glenn Wiswell and John Evans categorized date nails by their shank markings in the 1970's, and Joe Lewis coined the term "WESIS number." WESIS stands for Wiswell-Evans Shank Identification System. Wiswell and Evans fully explained WESIS in their book *Date Nails Complete* in 1976. They made some minor mistakes, but the thoroughness of their work is evident in the fact that WESIS is still universally used among date nail collectors. WESIS gave nailers a way to identify individual nails without having to resort to language like "I mean that square 17, the one with the flag and foot on the 1, which is rare on the Santa Fe."

Quoting *Date Nails Complete*: "Most manufacturers of nails use distinctive markings on the shaft of the nails they produce. These Manufacturer's Marks are used on many, but not all, nails made in the United States and are not limited to date nails.

"The Manufacturer's Mark may be any one of the following:

- 1) A distinctive mark usually below the head and above the anchors
- 2) Worked into the anchors themselves
- 3) The omission of one or more anchors a certain number down from the head
- 4) A change in the shape of the anchors." [DNC, 41]

WESIS works like this: a number is assigned to each nail company. Type (01) refers to nails made by Townsend Co., type (03) to Pittsburgh Steel Co., and so on. (type (02) is defunct.) Because each nail company had distinctive shank markings, the nails can be identified by manufacturer. Instead of being verbose and writing "Republic Steel Corp." to talk about a nail with a "V" above the anchors, we can just write "(04)". This makes the nail lists compact, also. I have reserved the blank type () for unclassified nails.

If you are holding a nail in your hand and are trying to identify it by the shank drawings, be aware of these things:

- Sometimes the Manufacturer's Mark is obscured by galvanizing. Sometimes it is missing altogether, as is the case with some early type (07) nails.
- Your mark might not be exactly like the picture. Remember that these marks are often crudely formed, and their design often changed gradually over time.
- Sometimes the mark of one company seems to be on another company's nail. Some thin type (07) nails seem to have the mark of (17), for example.
- Number style is as important as shank marking in identifying nails. Both should be used in identifying nails.

Notation

This section is repeated from the general introduction in Volume I.

Here is an example line decoded:

2 1/2 × 1/4 rnd I stl (07) 05,08:b,9,11-19,20:c

2 1/2 length of the nail, in inches. Because of the inaccuracy of nail making machines, your nail might not have exactly the nominal length. 2 1/2" nails, for example, generally fall in the 2 1/4" to 2 3/4" range.

1/4 diameter of shank, in inches. (1/4- is a diameter just under 1/4", and 3/16+ indicates a nail with a diameter just over 3/16".)

rnd round head (and shank). See the key below for other shapes.

I indented figures. (R = raised figures.)

stl steel.

(07) code for the manufacturer, identified by shank markings. (07) = American Steel & Wire Co. See the introduction to the photo section for other codes.

05 the numbers stamped on the nail's head. 05 stands for the year 1905. 08:b is the second 08 of the same dimensions shown in the photo section. These letters run up the alphabet: 08:c would

be the third 08, 08:d the fourth, and so on. 9 is a 9 with a dot or triangle under the date. 11-19 means all dates from 11 to 19 inclusive.

In the nail lists, the "/" means "over". So the EQUI / LEAS found on Illinois Central Gulf has "EQUI" over "LEAS".

Key

alm.....aluminum
 brs.....brass
 CL.....Chair-leg nail, stamped in sheet metal
 cop.....copper
 cp.....chisel point
 dia.....diamond head
 gm.....gripper marks

Used in addition to normal anchor markings. The proper term for a nail with gripper marks is "barbed," but nail collectors have called them gm for so long that I have decided not to change the terminology.

GM.....heavy gripper marks

Usually the only shank markings.

hb.....herringbone shank

These are really gripper marks on a square shank, so in turn "hb" really means "barbed." Again the notation has been used for so long among nailers that I leave it intact.

hex.....hexagonal head
 hs.....hand stamped
 I.....indented figures
 irr.....irregular head
 mi.....malleable iron

See type (11).

os.....oval shank
 pnt.....pentagon head
 R.....raised figures
 rnd.....round head
 rs.....round shank
 sqr.....square head
 ss.....square shank
 stl.....steel
 tri.....triangular head
 ts.....twisted shank

The shank is square, and was turned. Type (37) only.








Variations

It is easy to find nearly identical nails with minor differences, and these differences are usually insignificant to the nail collector. As an example, consider the $2\frac{1}{2} \times \frac{1}{4}$ rnd I stl (07) 12. I have seen many different versions of this nail, some with a fat flag on the 1, some with a funny point on the flag, others with a seemingly wider date, etc. Their shank markings are different, too. All are type (07) with the proper mark, but some have five anchor markings on each side, others up to fifteen or seventeen. Some anchors appear front and back (with respect to the numbers on the head), others left and right. None of these differences is marked enough to warrant a separate appellation. Keep in mind that railroads just needed legible nails. They did not need meticulous uniformity in size, shape, and number style.








But I have to draw the line somewhere. There are nails, though close, which are truly different and which merit different designations. Here are a couple examples to give you an idea of how I have done it.

Diameters with fractional, gauge, and decimal equivalents








$\frac{1}{32}$ increments (.03125")








						
$\frac{4}{32}$	$\frac{5}{32}$	$\frac{6}{32}$	$\frac{7}{32}$	$\frac{8}{32}$	$\frac{9}{32}$	$\frac{10}{32}$
$= \frac{1}{8}$		$= \frac{3}{16}$		$= \frac{1}{4}$		$= \frac{5}{16}$
.125	.15625	.1875	.21875	.25	.28125	.3125

$\frac{1}{40}$ increments (.025")

						
$\frac{6}{40}$	$\frac{7}{40}$	$\frac{8}{40}$	$\frac{9}{40}$	$\frac{10}{40}$	$\frac{11}{40}$	$\frac{12}{40}$
$= \frac{3}{20}$		$= \frac{1}{5}$		$= \frac{1}{4}$		$= \frac{3}{10}$
.15	.175	.2	.225	.25	.275	.3

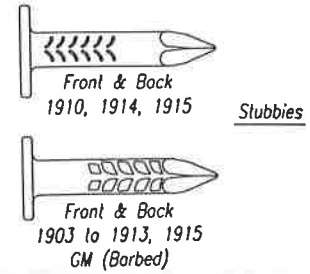
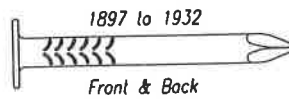
American Steel & Wire standard gauges

						
No. 12	No. 11	No. 10	No. 9	No. 8	No. 7	No. 6
.1055	.1205	.1350	.1483	.1620	.1770	.1920

						
No. 5	No. 4	No. 3	No. 2	No. 1	No. 0	No. 00
.2070	.2253	.2437	.2625	.2830	.3065	.3310

Type (01)

Townsend Co., Ellwood City, PA.
Went out of nail business around 1955.



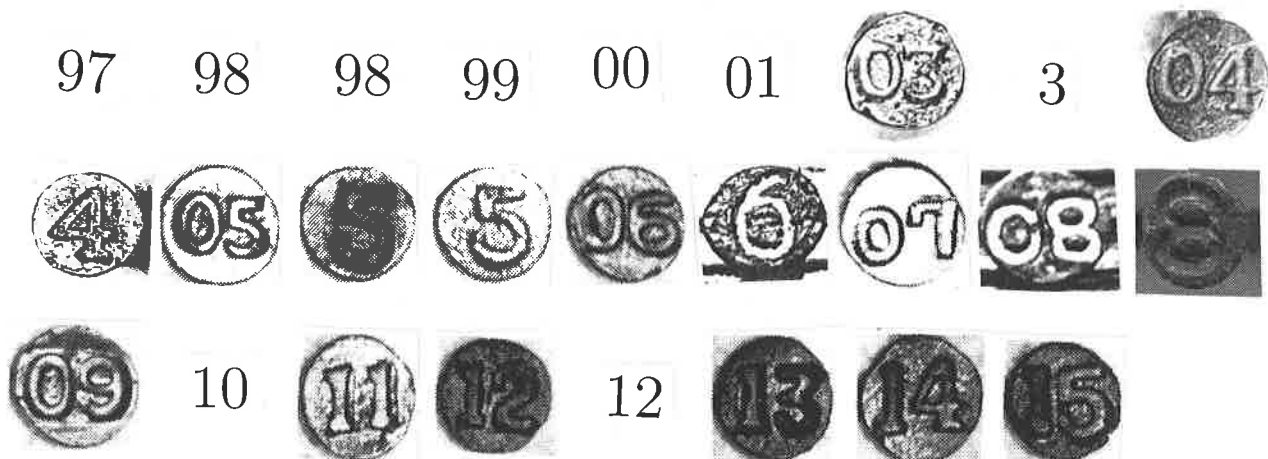
1 3/4 x 5/16 rnd I GM stl (01)



All of these nails, with the exceptions of the 14, 15:b, and a single 10 in Charles Sebesta's collection, have GM. The 15:b is a hybrid: it has type (07) numbers!

It is possible that the 3 is a code. Some collectors think that the 9 is a 6.

2 1/2 x 1/4 rnd I stl (01)



(continued)

$2\frac{1}{2} \times \frac{1}{4}$ rnd I stl (01) (continued)



$2 \times \frac{1}{4}$ rnd I stl (01)

14 15

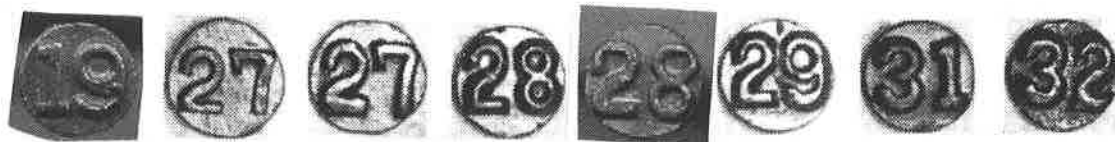
$1\frac{3}{4} \times \frac{1}{4}$ rnd I stl (01)

07 11

$2\frac{1}{2} \times \frac{1}{4}$ sqr I rs stl (01)



$2\frac{1}{2} \times \frac{1}{4}$ rnd R stl (01)



$2 \times \frac{1}{4}$ rnd R stl (01)

29 30

$1\frac{1}{2} \times \frac{1}{4}$ rnd R stl (01)



$2\frac{1}{2} \times \frac{9}{40}$ rnd R stl (01)



$2\frac{1}{2} \times \frac{1}{4}$ sqr R stl (01)



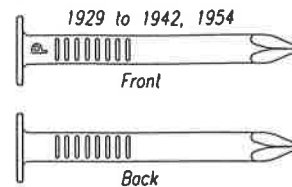
$1\frac{1}{4} \times \frac{3}{16}$ rnd I cop (01)



07

Type (03)

Pittsburgh Steel Co., Pittsburgh, PA.
 Now Wheeling-Pittsburgh Steel Corp.
 Discontinued all nail manufacturing in 1960.



2 1/2 x 1/4 rnd I stl (03)



30:b has a larger "P" on the shank, and has slightly squatter numbers.

1 1/2 x 1/4 rnd I stl (03)



2 1/4 x 1/4 cut I stl (03)



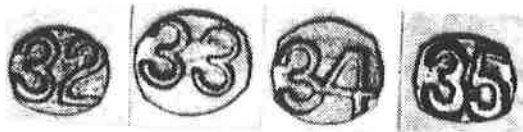
2 1/2 x 1/4 rnd R stl (03)



1 1/2 x 1/4 rnd R stl (03)

29

2 1/2 x 1/4 cut R stl (03)



2 x 1/4 cut R stl (03)



Type (04)

Republic Steel Corp., Cleveland, OH.
Plant located in Gadsden, AL.
Est. in 1902 as Alabama Steel and Wire Co.
Name changed 1906 to Southern Steel Co.
Reorganized in 1907 as Southern Iron
& Steel Co.

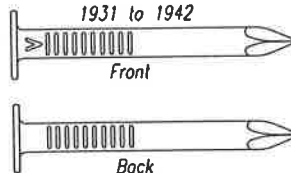
Purchased in 1913 by Gulf States Steel
Purchased in 1937 by Republic Steel Corp.
Discontinued making nails of any type in

the 1960's. Discontinued making date nails in the early 1950's.

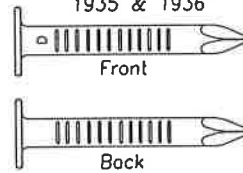
The 2 x 1/4 rnd R stl (04) 35,36 ("D" shank nails) were misidentified in DNC. They are not type (04), and were probably made by Atlantic Steel Co.

(Gulfsteel District)

1931 to 1942



Louisville & Nashville
1935 & 1936



2 1/2 x 1/4 rnd R stl (04)



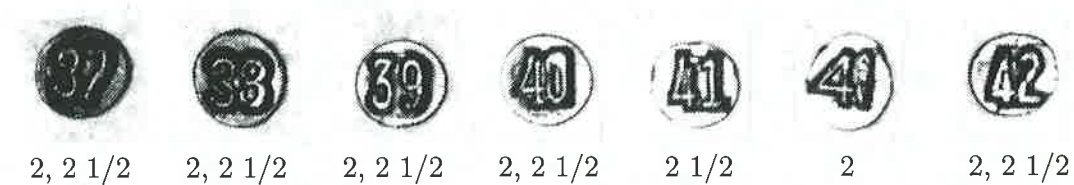
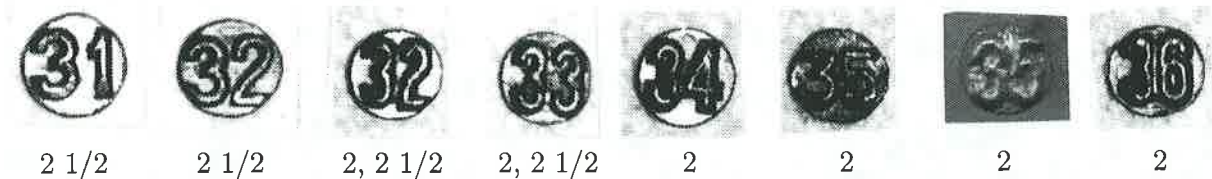
$2 \times 1/4$ rnd R stl (04)



The 35 and 36 were misidentified in DNC. They have a small "D" on the shank, and were probably made by Atlantic Steel Co.

$2 \text{ \& } 2 1/2 \times 1/5$ rnd R — stl (04)

1st 35 is really Atlantic Steel Co.



The $2 1/2$ " nails from 33 up have gm. The others don't.

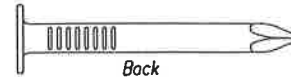
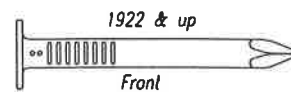
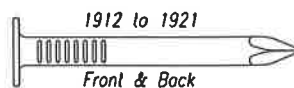
$2 1/2 \times 1/4$ sqr R stl (04)



Type (05)

Jones & Laughlin Steel Corp.,
Aliquippa, PA.

Discontinued making all nails April 1,
1966. Type (14) nails were also made
by Jones & Laughlin.



1 3/4 x 5/16 rnd I stl (05)



2 1/2 x 1/4 rnd I stl (05)



The 15 shown here is really type (14), with a "T" on each side of the shank. I include it with the type (05) nails because it is Jones & Laughlin's mark for the year. The 15 is also shown under type (14).

$2 \times 1/4$ rnd I stl (05)



$1 \frac{1}{2} \times 1/4$ rnd I stl (05)



$1 \frac{3}{4} \times 3/16$ rnd I stl (05)



$1 \frac{1}{2} \times 3/16$ rnd I stl (05)

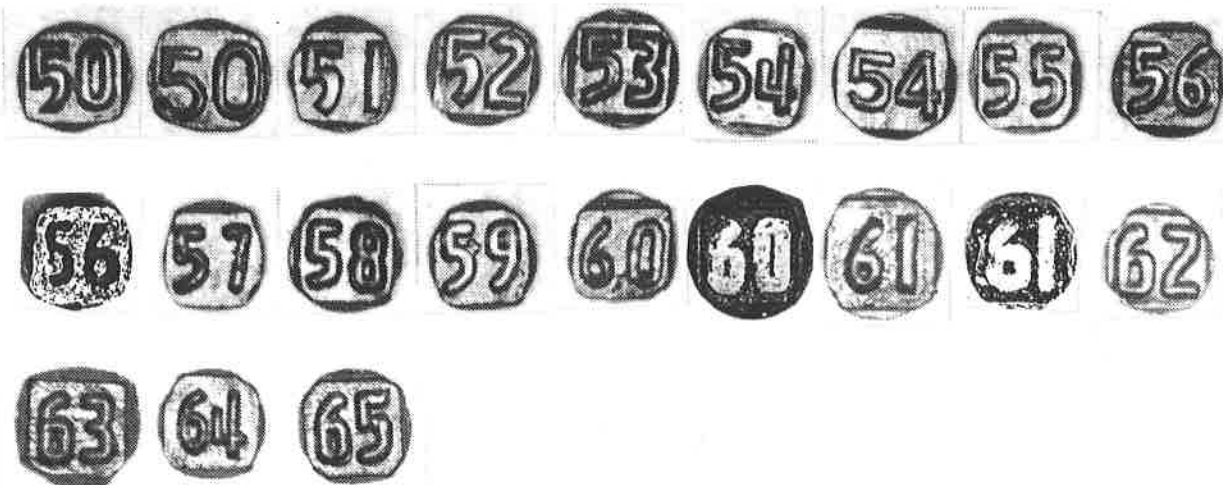


$2 \frac{1}{2} \times 1/4$ sqr I stl (05)



(continued)

2 1/2 × 1/4 sqr I stl (05) (Continued)

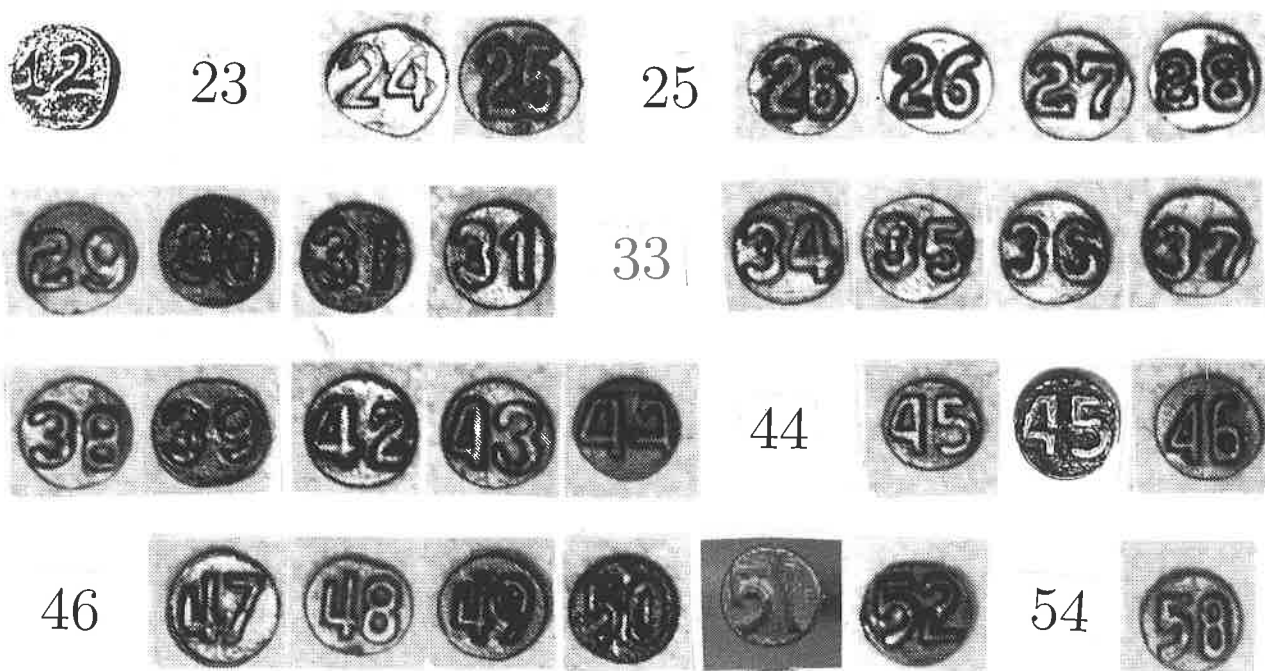


60:b, used as a date by Rochester Gas & Electric, is identical to the sqr I (05) pole height 60.

1 1/2 × 1/4 sqr I stl (05)



2 1/2 × 1/4 rnd R stl (05)



(continued)

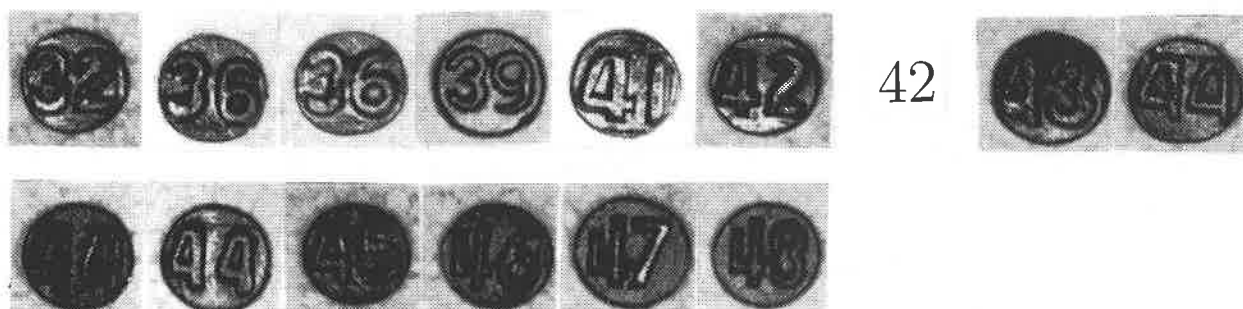
$2 \frac{1}{2} \times \frac{1}{4}$ rnd R stl (05) (Continued)

63 64

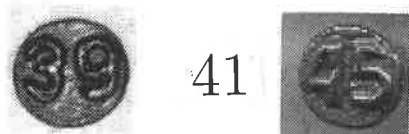
$2 \times \frac{1}{4}$ rnd R stl (05)



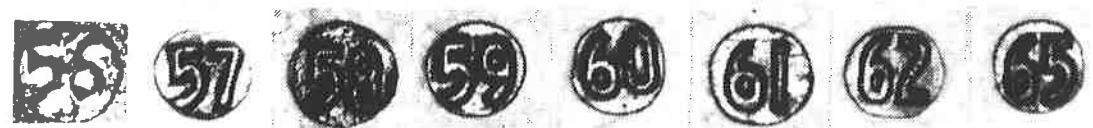
$1 \frac{1}{2} \times \frac{1}{4}$ rnd R stl (05)



$1 \frac{1}{2} \times \frac{1}{4}$ rnd R cp stl (05)



$1 \frac{1}{2} \times \frac{1}{5}$ rnd R stl (05)



$2 \frac{1}{2} \times \frac{3}{16}$ rnd R gm stl (05)



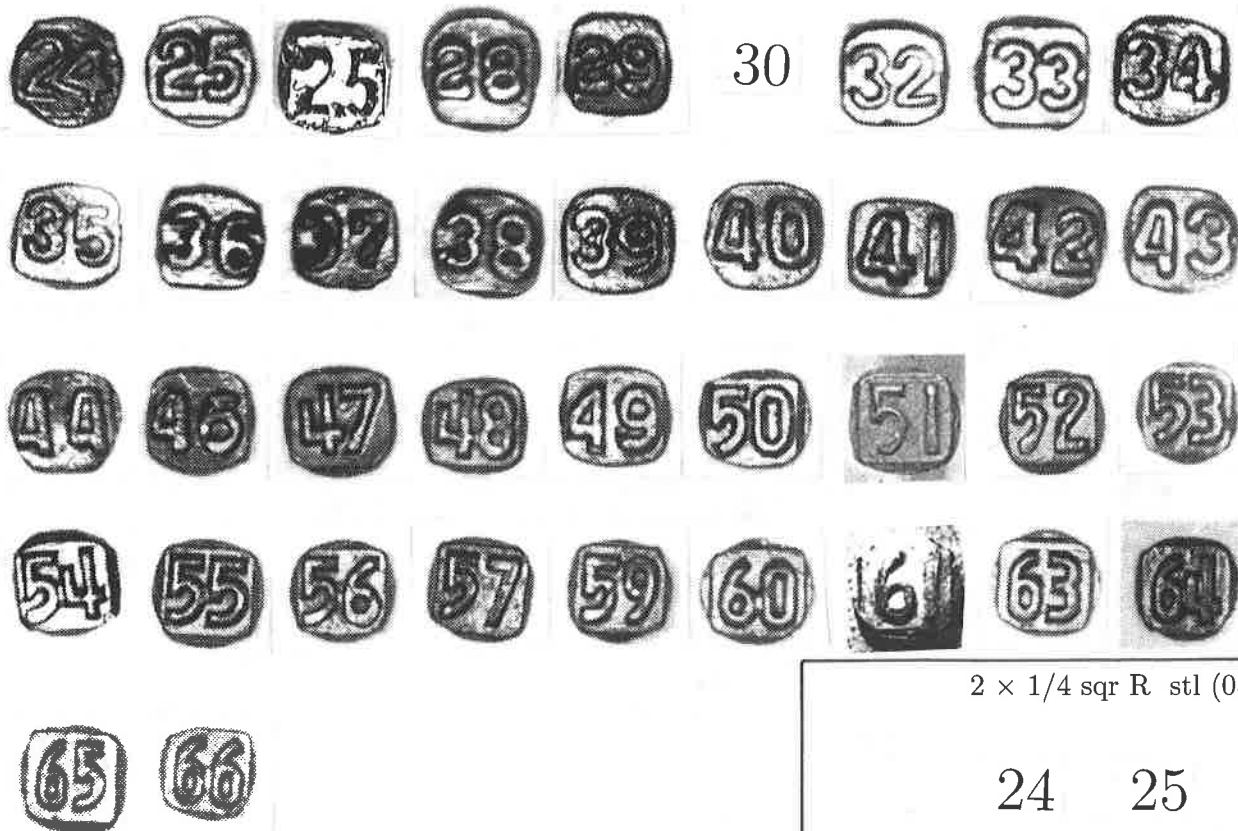
1 3/4 x 3/16 rnd R gm stl (05)



2 1/4 x 9/32 sqr R stl (05)



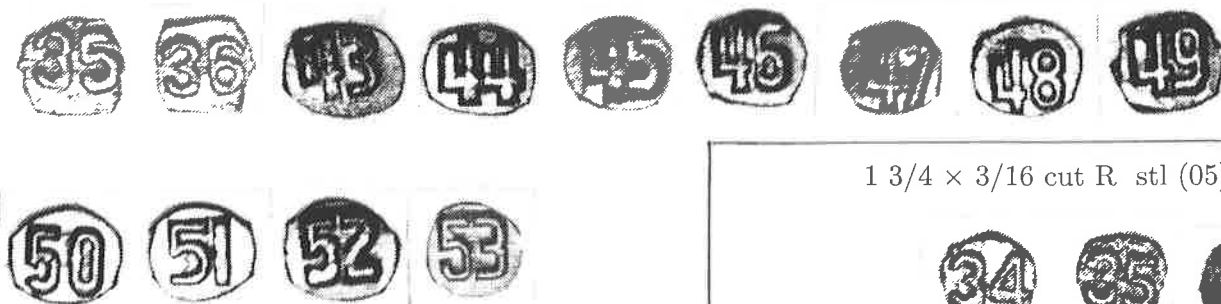
2 1/2 x 1/4 sqr R stl (05)



2 x 1/4 sqr R stl (05)

24 25

2 1/2 x 1/4 cut R stl (05)

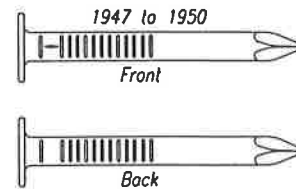
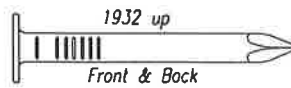


1 3/4 x 3/16 cut R stl (05)

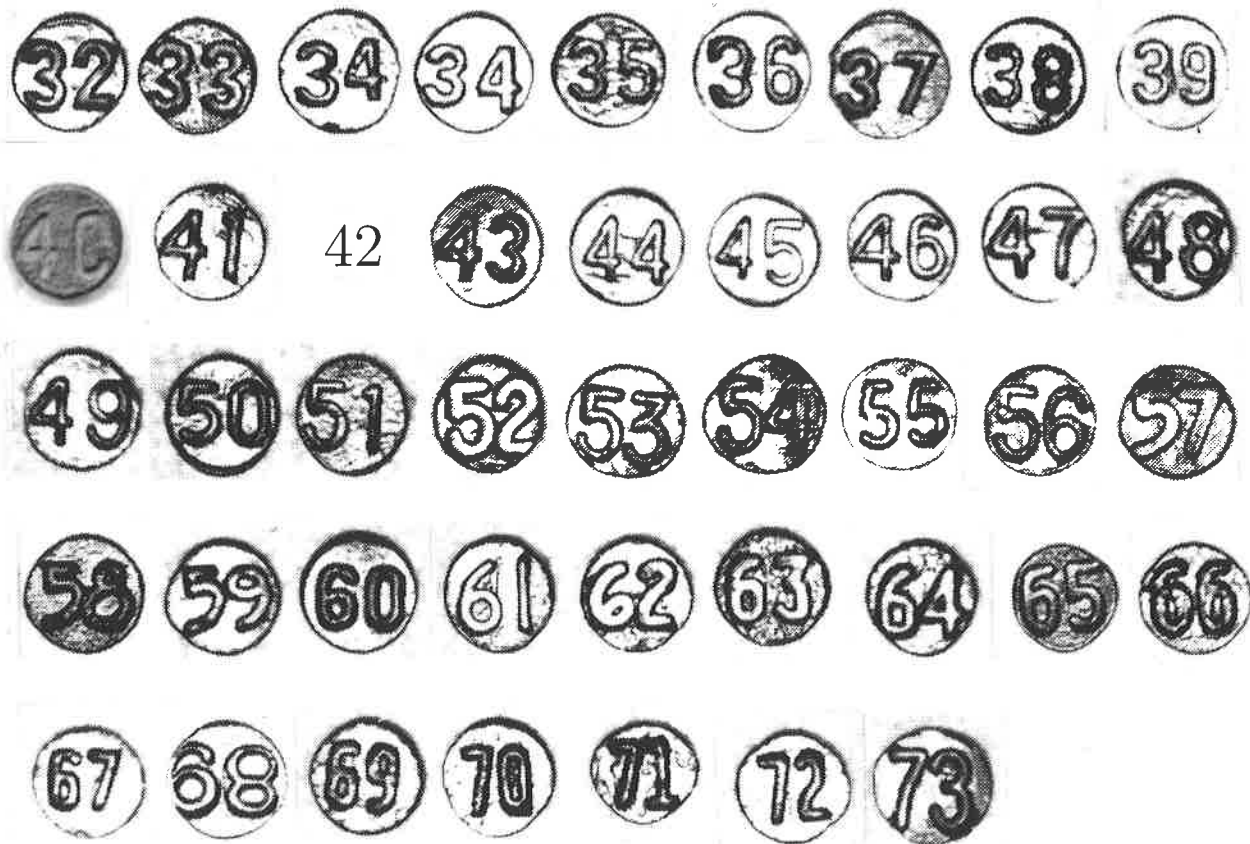


Type (06)

American Steel & Wire Co.,
Scott Street Works, Joliet,
IL. AS&W was later bought
by United States Steel Co.



2 1/2 x 1/4 rnd I stl (06)



2 x 1/4 rnd I stl (06)

53



1 1/2 x 1/4 rnd I stl (06)

62 63

1 × 1/4 rnd I stl (06)



1 1/2 × 1/5 rnd I stl (06)



66



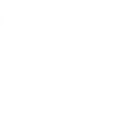
1 1/4 × 1/5 rnd I cp stl (06)



2 1/2 × 1/4 rnd R stl (06)



38



2 × 1/4 rnd R stl (06)

48



2 × 1/4 rnd R GM stl (06)

54 55

1 3/4 × 1/4 rnd R stl (06)



1 1/2 × 1/4 rnd R stl (06)



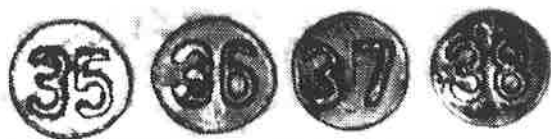
1 1/2 × 1/4 rnd R cp stl (06)



1 1/2 × 1/4 rnd R GM stl (06)



1 × 1/4 rnd R stl (06)



1 1/2 × 1/5 rnd R stl (06)

36 38 39 40



2 1/2 × 3/16 rnd R stl (06)

56

1 3/4 × 3/16 rnd R gm stl (06)



2 1/2 × 1/4 sqr R stl (06)



2 1/2 × 1/4 sqr R rs stl (06)

56

2 1/2 × 1/4 pnt R rs stl (06)



1 1/4 × 3/16 rnd I cop (06)

40

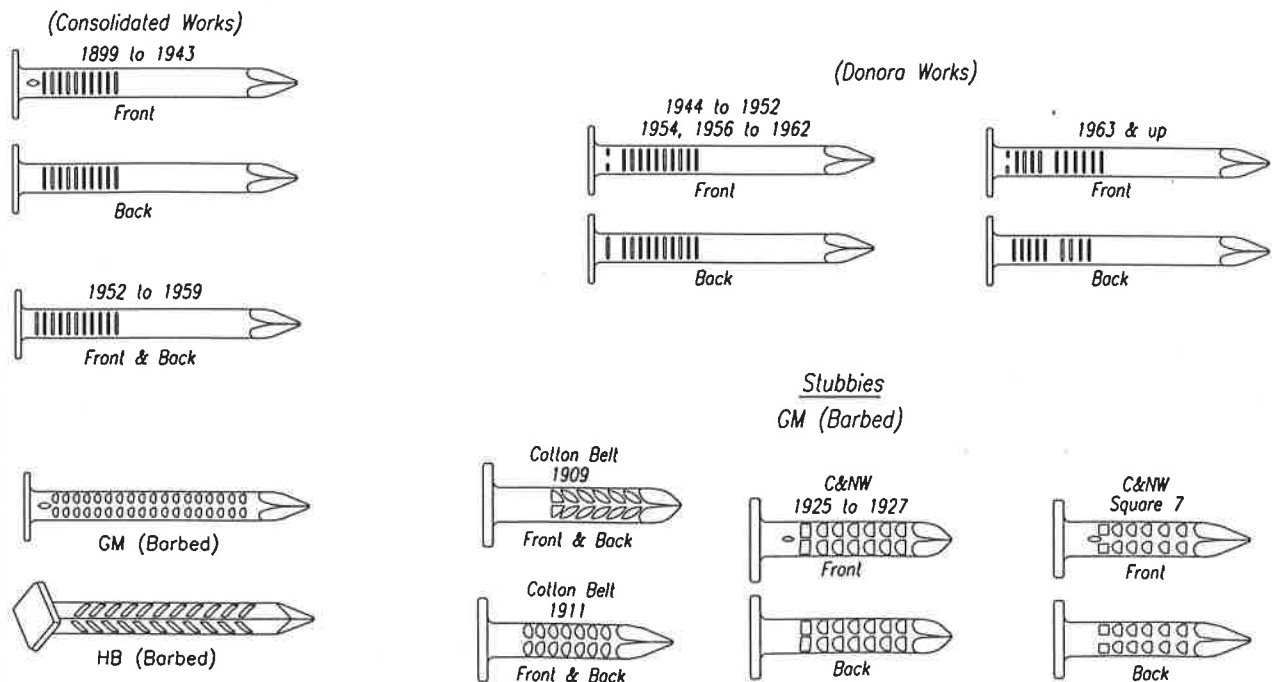
2 1/2 × 1/4 rnd R cop (06)

33 34 37

1 1/4 × 3/16 rnd R cop (06)



Type (07)



American Steel & Wire Co.

This firm later was bought by U.S. Steel, after which it was known as American Steel & Wire Division.

1 × 3/8 rnd I stl (07)



The shank diameter might be wrong.

1 3/4 × 5/16 rnd I GM stl (07)



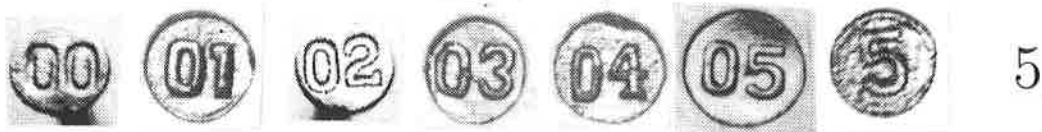
See Type (01) for a stubby 15 with type (07) numbers. The square 7 is probably a code nail, but I picture it here because it is found with the 25 and 26 on the C&NW. There are variations on the 25, 26, and 27 not shown here.

2 × 11/40 rnd I stl (07)



2 1/2 × 1/4 rnd I stl (07)

99



(continued)

2 1/2 × 1/4 rnd I stl (07) (continued)



2 1/2 × 1/4 rnd I GM stl (07)



2 1/2 × 1/4 rnd I bullseye stl (07)



2 × 1/4 rnd I stl (07)



1 1/2 × 1/4 rnd I stl (07)



1 × 1/4 rnd I stl (07)



1 1/2 × 1/4 rnd I stl (07)

3 4 5 6 7

1 3/4 x 3/16 rnd I stl (07)



1 1/4 x 3/16 rnd I stl (07)



1 1/4 x 3/16 rnd I cp stl (07)



2 1/2 x 1/8+ rnd I stl (07)



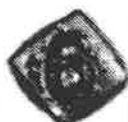
2 1/2 x — dia I stl (07) (diameters as shown)



1/4-



1/4-



1/4-



1/4-, 1/4



1/4



1/4-, 1/4



1/4-, 1/4



1/4-, 1/4



1/4-, 1/4+



1/4



1/4-, 1/4



1/4



1/4



1/4



1/4



1/4



1/4



1/4-



1/4, 1/4



1/4-



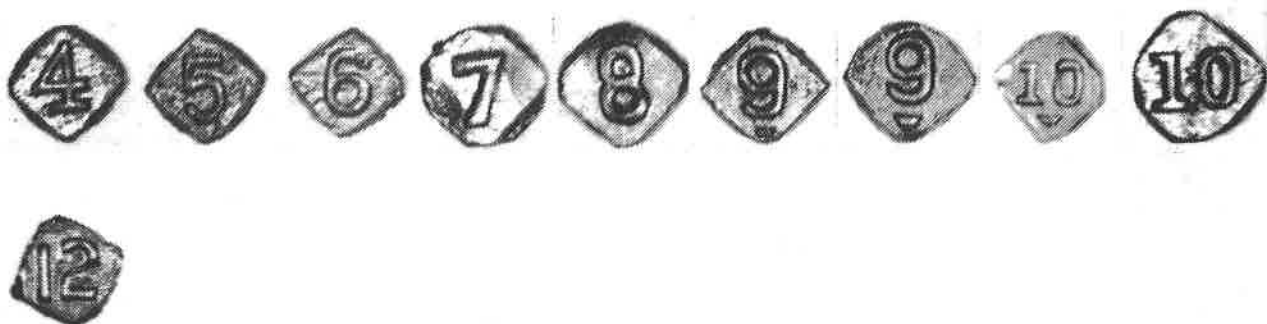
1/4



1/4

The shank of the 1/4+ 8, used by the CB&Q, measures about .260 without galvanizing, and .270 with galvanizing. There are still questions about the diameters of other nails. I have been told that the Big Four nails are 1/4-, but the 08 and 10 in my collection seem to be a full 1/4". Also, the Santa Fe 7, which is said to be 1/4", I measure at about .235".

2 1/2 x 1/4 dia I hb stl (07)

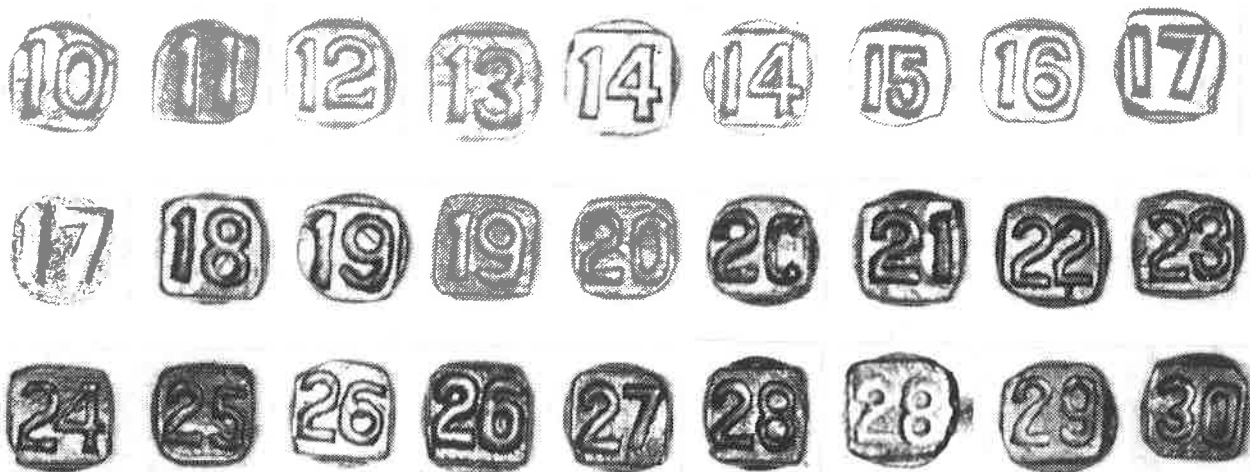


Some of the earlier nails, like the 4 and 5, measure 1/4-.

1 1/2 x 1/4 dia I stl (07)

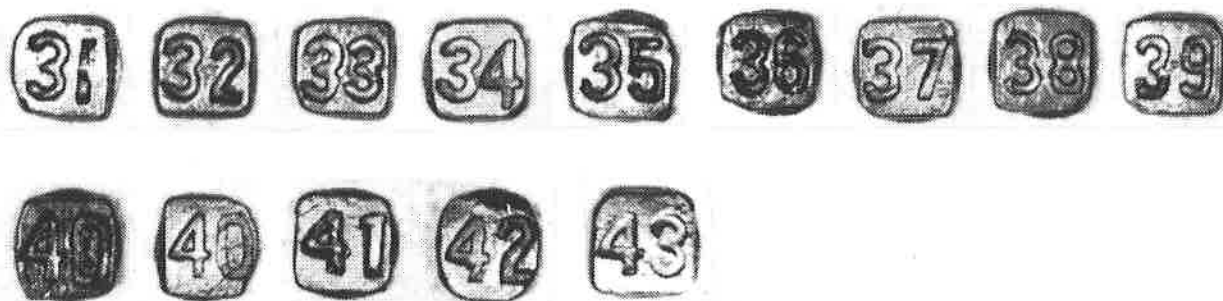
08 9. 9. 10 10

2 1/2 x 1/4 sqr I stl (07)



(continued)

$2\frac{1}{2} \times \frac{1}{4}$ sqr I stl (07) (continued)



$2\frac{1}{2} \times \frac{1}{4}$ sqr I hb stl (07)



$2 \times \frac{1}{4}$ sqr I stl (07)



$2\frac{1}{2} \times \frac{1}{4}$ - sqr I stl (07)



$2\frac{1}{2} \times \frac{1}{4}$ irr I rs stl (07)



$2 \times \frac{1}{4}$ irr I rs stl (07)



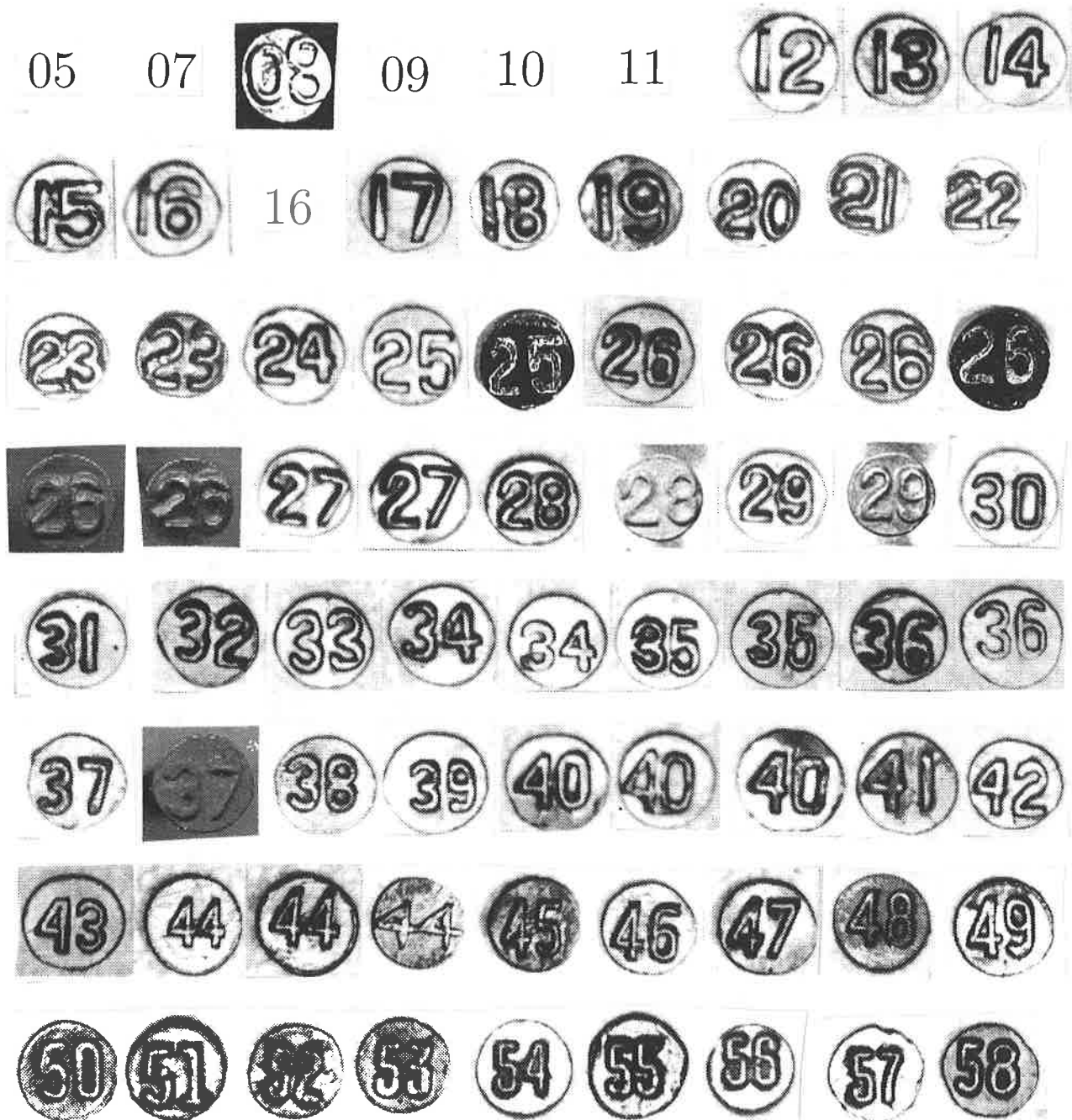
2 × 5/16 rnd R stl (07)



2 1/4 × 9/32 rnd R stl (07)



2 1/2 × 1/4 rnd R stl (07)



(continued)

2 1/2 × 1/4 rnd R stl (07) (continued)



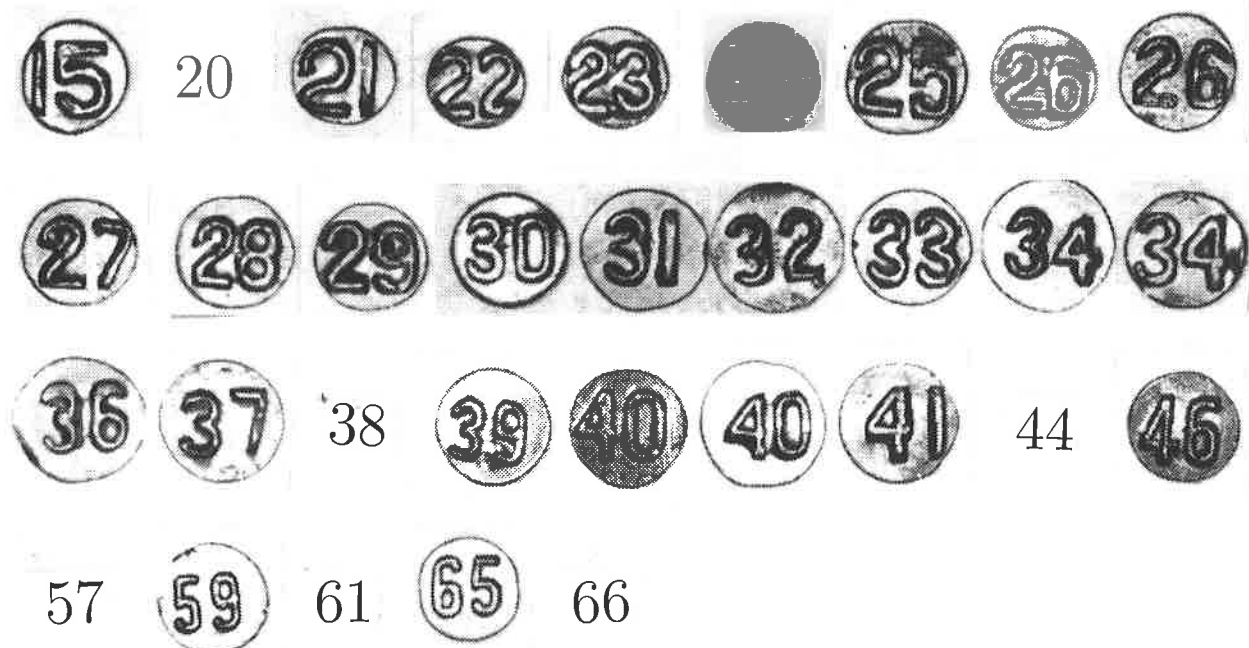
2 1/2 × 1/4 rnd R gm stl (07)



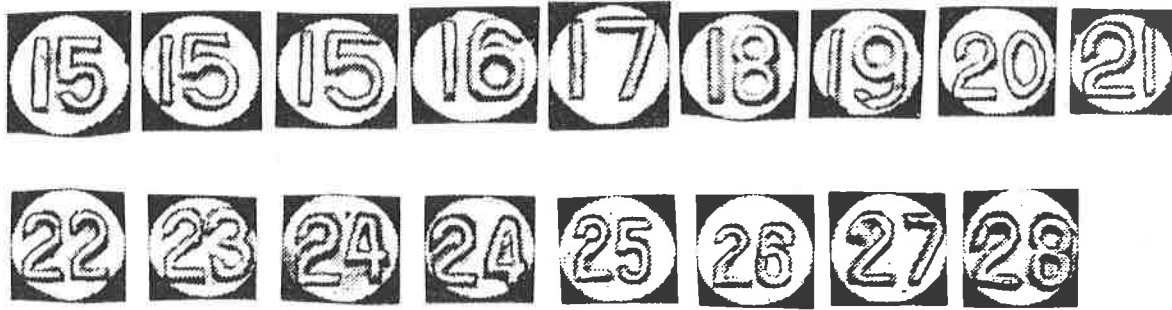
2 1/2 × 1/4 rnd R GM stl (07)



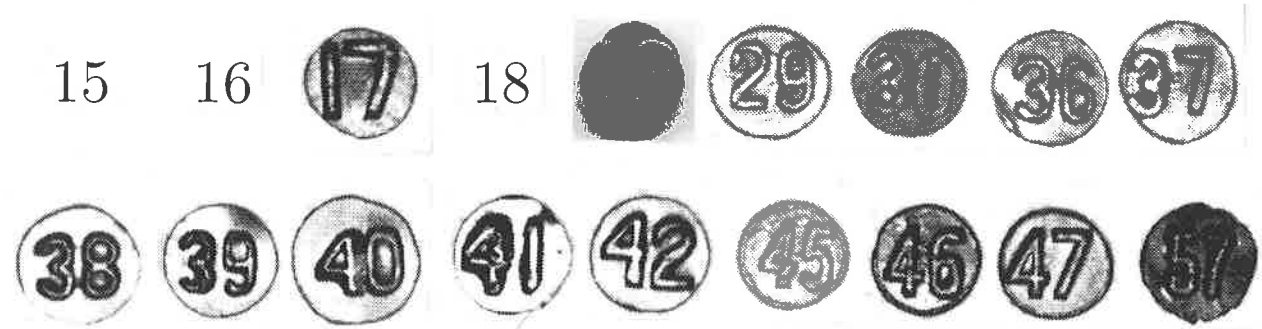
2 × 1/4 rnd R stl (07)



1 3/4 × 1/4 rnd R stl (07)



1 1/2 × 1/4 rnd R stl (07)



1 1/2 × 1/4 rnd R cp stl (07)



1 1/2 × 1/5 rnd R stl (07)



1 1/4 × 1/5 rnd R stl (07)



2 1/2 × 3/16 rnd R gm? stl (07)



Some of these, the 32 included, might not have gm.

1 3/4 × 3/16 rnd R gm stl (07)



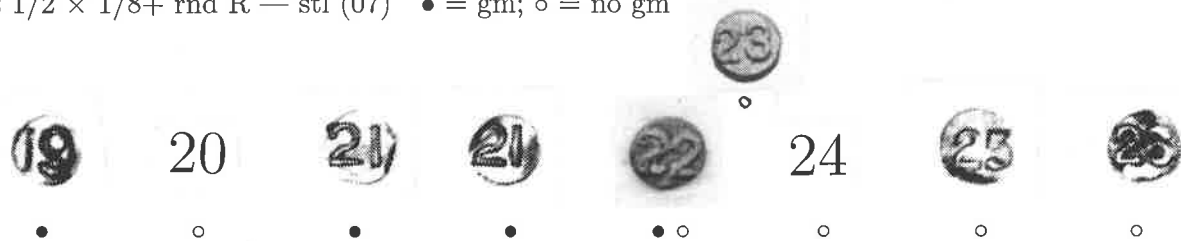
1 1/2 × 3/16 rnd R stl (07)

37

2 1/2 × 7/40 rnd R — stl (07) • = gm; ○ = no gm



2 1/2 × 1/8+ rnd R — stl (07) • = gm; ○ = no gm



$1\frac{1}{2} \times 1/8+$ rnd R stl (07)

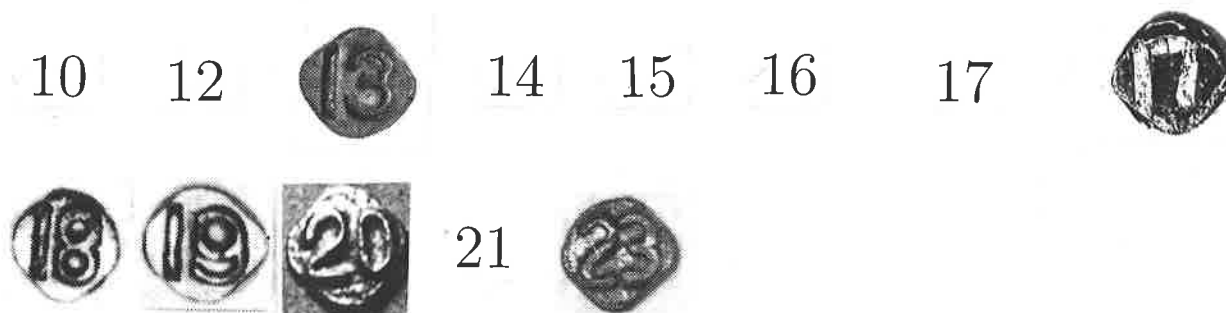


28

$2\frac{1}{2} \times 1/4$ dia R stl (07)



$2\frac{1}{2} \times 1/4$ dia R rs stl (07)



$2\frac{1}{4} \times 9/32$ sqr R stl (07)



33 34

$2\frac{1}{2} \times 11/40$ sqr R stl (07)



$2\frac{1}{2} \times 1/4$ sqr R stl (07)



(continued)

2 1/2 × 1/4 sqr R stl (07) (continued)



2 1/2 × 1/4 sqr R rs stl (07)



2 × 1/4 sqr R stl (07)



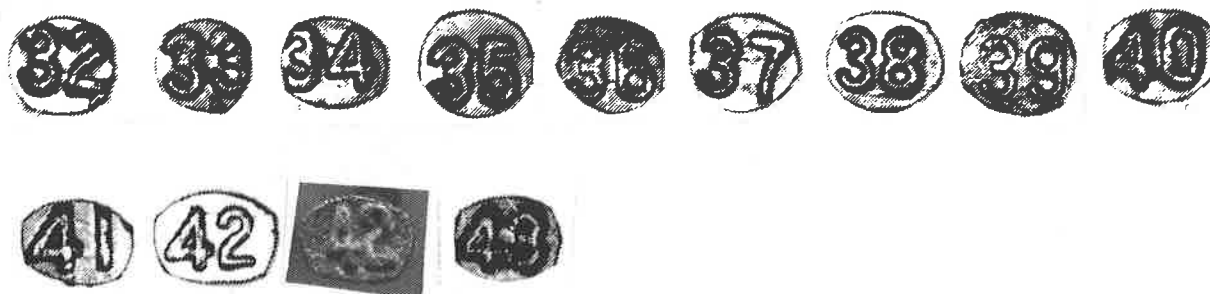
$1\frac{1}{2} \times 1/4$ sqr R stl (07)



$2 \times 3/16$ sqr R stl (07)



$2\frac{1}{2} \times 1/4$ cut R stl (07)



$2\frac{1}{2} \times 1/4$ pnt R rs stl (07)



$2\frac{1}{2} \times 1/4$ hex R rs stl (07)



$2\frac{1}{2} \times 1/4$ tri on rnd R rs stl (07) 17



2 1/2 × 1/4 irr R rs stl (07) diamond shank: 51-55,58,59,63; square shank: 52,53,56,57,60-62,64



2 1/2 × 1/4 rnd R-I hs stl (07)

42 43 44

2 1/2 × 1/4 rnd I ss cop (07)



1 × 1/4 rnd I cop (07)



1 3/4 × 3/16 rnd I cop (07)



1 1/4 × 3/16 rnd I cop (07)

03 05 06



1 1/4 × 3/16 rnd I cp cop (07)



1 1/2 × 3/16 rnd I gm cop (07)



1 1/4 × 3/16 sqr I rs cop (07)



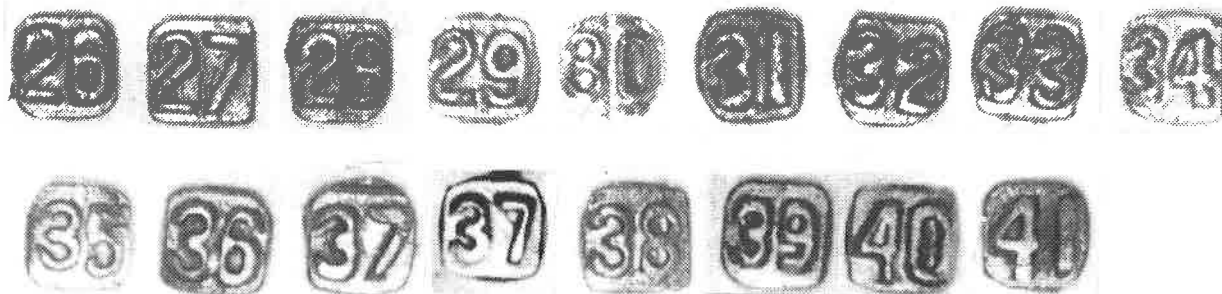
2 1/2 × 1/4 rnd R cop (07)

32

2 × 1/4 rnd R cop (07)

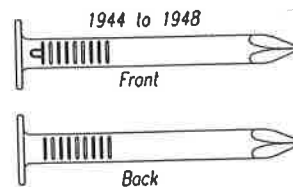


2 1/2 × 1/4 sqr R cop (07)



Type (08)

American Steel & Wire Co., Donora works.
This mark is the direct predecessor of the
double dash mark of type (07).



2 1/2 × 1/4 rnd I stl (08)



2 1/2 × 1/4 sqr I stl (08)



2 × 1/4 sqr I stl (08)



2 1/2 × 1/4 rnd R stl (08)



2 1/2 × 1/4 sqr R stl (08)

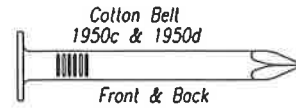
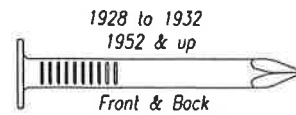
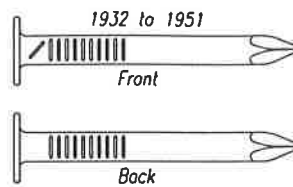


2 1/2 × 1/4 irr R ss stl (08)



Type (09)

Keystone Steel & Wire Co.



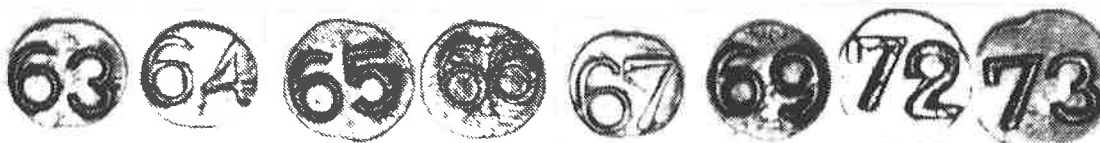
2 1/2 x 1/4 rnd I stl (09)



2 1/2 x 1/4 rnd R stl (09)



38 38



1 1/2 x 1/4 rnd R stl (09)



2 1/2 x 1/5 rnd R gm stl (09)

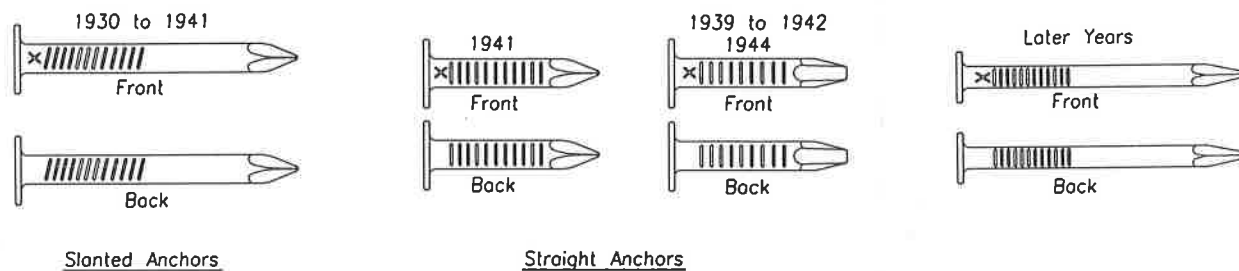


1 1/2 x 1/5 rnd R stl (09)



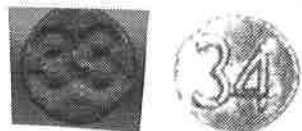
Type (10)

Igoe Brothers, Inc.(?), Newark, NJ.



Other companies used an "x" on their shanks. Youngstown Sheet & Tube Co. is another candidate for some of these nails. Based on both the number and shank styles, the 36-44 were made by a different company than the other nails. Also, some nails classified as type (21) were made by the same plant as the (10) 28-34. Both type (10) and (21) need reorganization.

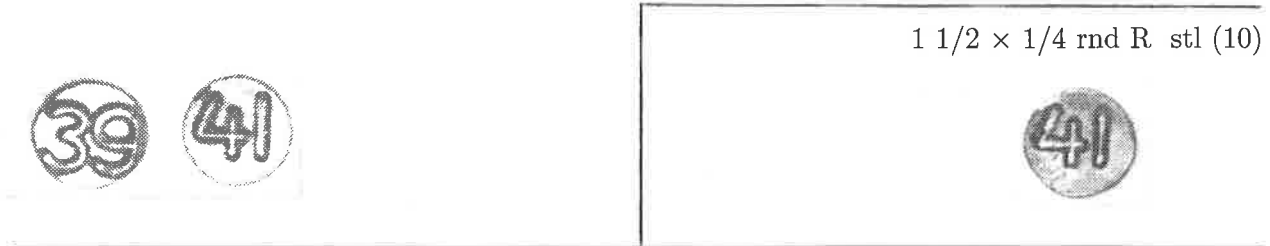
2 1/2 x 1/4 rnd I stl (10)



2 1/2 × 1/4 rnd R stl (10)



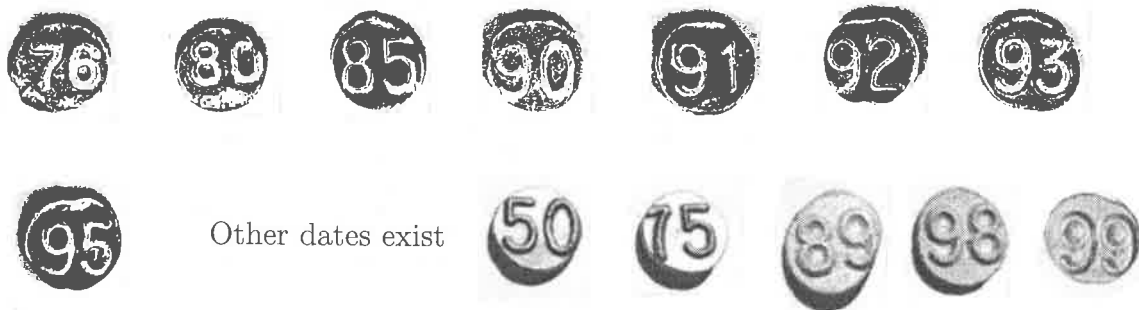
37



1 1/2 × 1/4 rnd R cp stl (10)



2 1/2 × 3/16 rnd R stl (10)



2 1/4 × 9/32 sqr R stl (10)

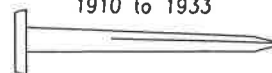


Type (11)

American Casting & Manufacturing Corp., Brooklyn, NY.

Malleable Iron - No marks

1910 to 1933



These nails are made of malleable iron. The heads are cast and are welded to the shanks. The shanks are tapered, and the diameters vary greatly near the head. I have assigned all 2 1/2" nails the nominal diameter 1/4", and the other nails, from 1" up to 2", the diameter 3/16". Though shorter nails do have thinner shanks, it is the length which matters for type (11) nails.

The rnd R nails come in different lengths, with identical heads. Lengths are given below the photos for these.

2 1/2 x 1/4 rnd I mi (11)



2 1/2 x 1/4 rnd I gm mi (11)



2 x 3/16 rnd I mi (11)



1 1/4 x 3/16 rnd I mi (11)



2 1/2 x 1/4 rnd R mi (11). Other lengths are noted.



(continued)

$2\frac{1}{2} \times 1\frac{1}{4}$ rnd R mi (11). Other lengths are noted. (continued)



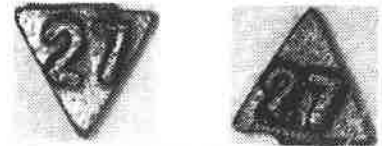
2

2

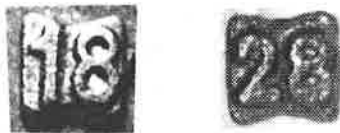
$2\frac{1}{2} \times 1\frac{1}{4}$ sqr R rs mi (11)



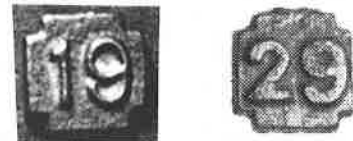
$2\frac{1}{2} \times 1\frac{1}{4}$ tri R rs mi (11)



$2\frac{1}{2} \times 1\frac{1}{4}$ bowtie R rs mi (11)



$2\frac{1}{2} \times 1\frac{1}{4}$ cross R rs mi (11)



$2\frac{1}{2} \times 1\frac{1}{4}$ octagon R rs mi (11)

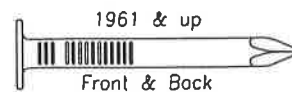
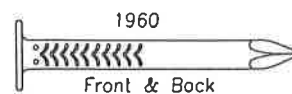
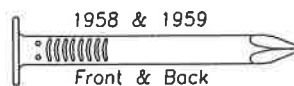


$2\frac{1}{2} \times 1\frac{1}{4}$ tombstone R rs mi (11)

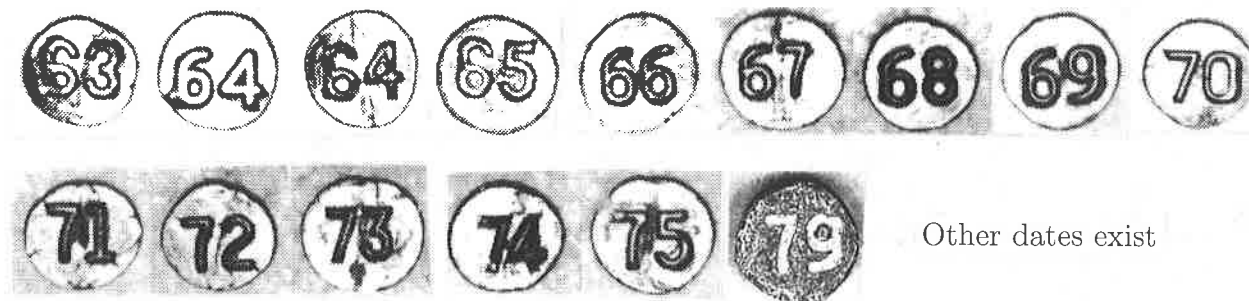


Type (12)

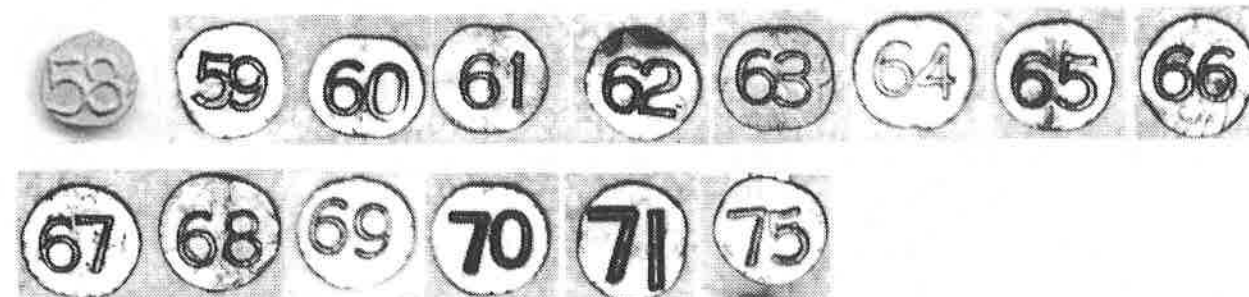
Columbia-Geneva Steel Division
of U.S. Steel.(?)



2 1/2 x 1/4 rnd I stl (12)



2 1/2 x 1/4 rnd R stl (12)

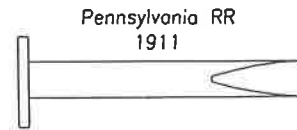


2 1/2 x 1/4 sqr R stl (12)



Type (13)

John Milliken & Co., Belfast, Ireland.



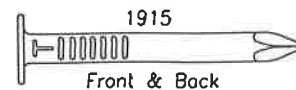
This company made the cast nails found in England, Belgium, and New Zealand. Wiswell and Evans classified the thick Pennsylvania 11 as type (13). I think that they were wrong, but I have no suggestions as to who really made the nail.

2 1/2 × 5/16 rnd I cp mi (13)



Type (14)

Jones & Laughlin Steel Co.



This mark was used on Jones & Laughlin's 1915 round date nails, and on many code (letter) nails used by the Buffalo, Rochester & Pittsburgh. These code nails seem to have been manufactured in two lots: one in 1915 and another in 1926. The 15 is also pictured with the type (05) nails.

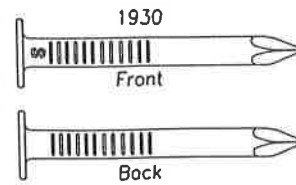
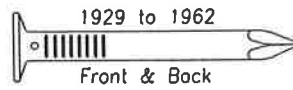
2 1/2 × 1/4 rnd I stl (14)



Type (17)

Sheffield Steel Corp.

Note that the heads are slightly cup-shaped, which helps in identifying nails of this type.



1 3/4 x 11/40 rnd I stl (17)



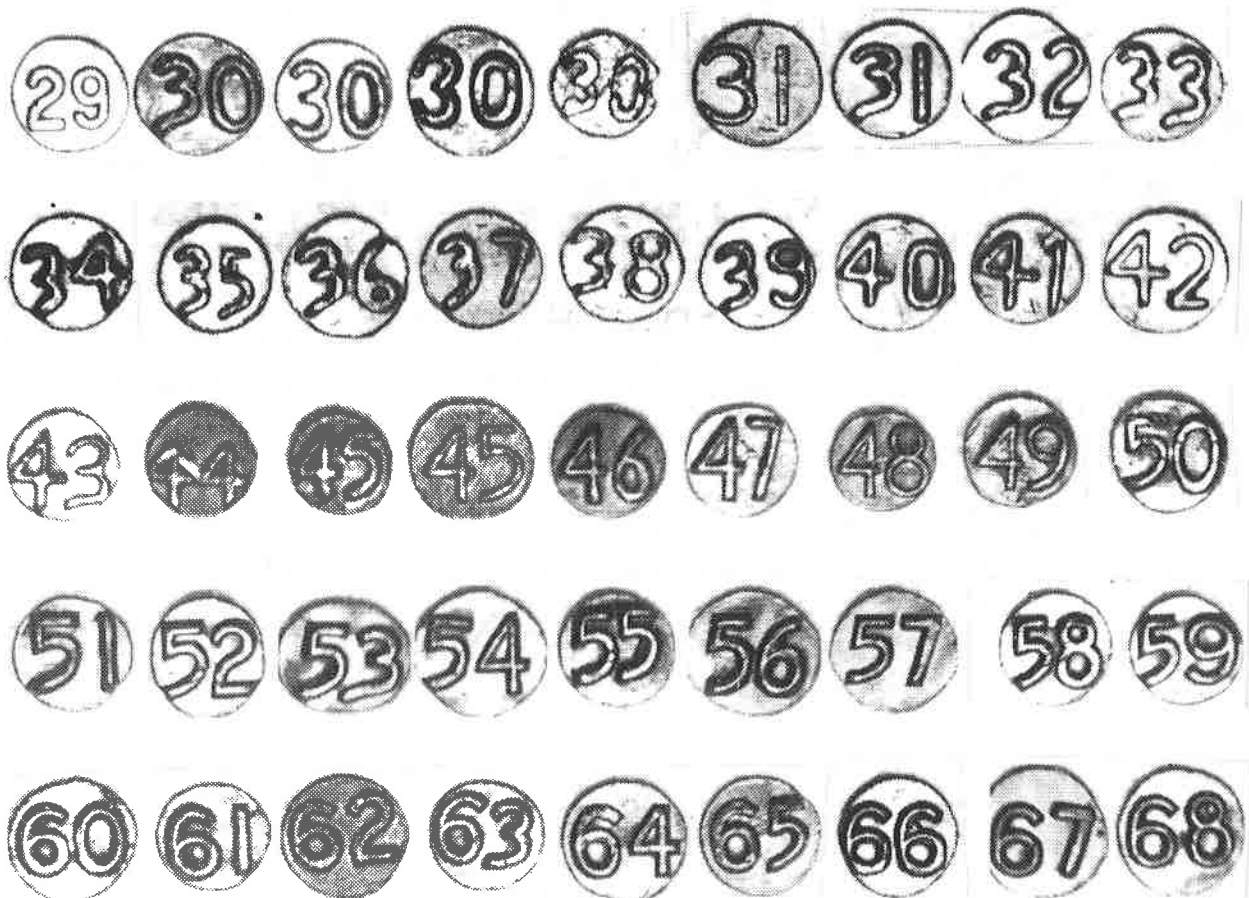
1 3/4 x 1/4 rnd I stl (17)



1 1/2 x 1/4 rnd I stl (17)



2 1/2 x 1/4 rnd R stl (17)



(continued)

2 1/2 × 1/4 rnd R stl (17) (continued)

77 through 83 also exist



2 × 1/4 rnd R stl (17)



1 3/4 × 1/4 rnd R stl (17)



30

1 × 1/4 rnd R stl (17)



add: 31:b

2 1/2 × 1/4 sqr R stl (17)



41

2 1/2 × 1/4 sqr R rs stl (17)



2 1/2 × 1/4 pnt R rs stl (17)



Type (18)

Colorado Fuel & Iron Corp., Pueblo, CO.

See also types (18A), (18B), and (18C). This is the only company whose WESIS numbers were broken up, based on different shank markings, into A, B, etc. by Wiswell and Evans. Square nails are not normally easy to place as (18A), (18B), or (18C), so I just label them (18).

$1 \times 1/8+$ rnd I hs gm stl (18)



These probably represent 1958 and 1959.

$2 \frac{1}{2} \times 1/4$ dia I stl (18)



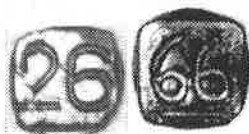
$2 \frac{1}{2} \times 1/4$ sqr I stl (18)

16, 17, 18, 20, 22, and 39 exist



14

15



$2 \frac{1}{2} \times 1/8+$ rnd R gm stl (18)



These nails can be identified as (18A), (18B), or, for the 36, (18C). Those which have been identified are also shown in (18A) and (18B). Some have gm, some don't.

$2 \times 1/8 + \text{rnd R gm stl (18)}$

24

$2 \frac{1}{2} \times 1/4 \text{ sqr R stl (18)}$



Type (18A)

Colorado Fuel & Iron Corp., Pueblo, CO.
This mark was used to 1934.



2 1/2 x 1/4 rnd I stl (18A)

A 2 also exists, probably a date



2 x 1/4 rnd I stl (18A)



1 3/4 x 11/40 rnd R stl (18A)

18

2 1/2 x 1/4 rnd R stl (18A)

22

24

25

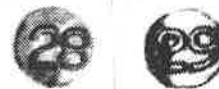


2 x 1/4 rnd R stl (18A)



28

2 1/2 x 1/8+ rnd R gm stl (18A)



Type (18B)

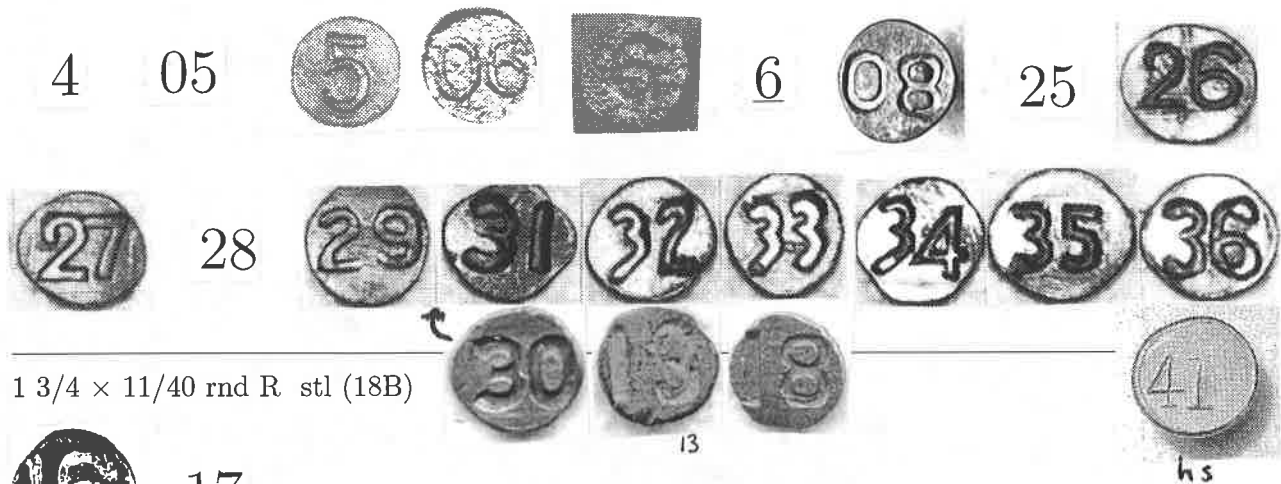
Colorado Fuel & Iron Corp., Pueblo, CO.



This mark was used mainly to 1936 (there is a 39), probably at different works from the type (18A) nails.

2 1/2 × 1/4 rnd I stl (18B)

1, 2, 04, 16, and 17 also exist



1 3/4 × 11/40 rnd R stl (18B)



17

2 1/2 × 1/4 rnd R stl (18B)



2 1/2 × 1/4 pnt R rs stl (18B) 36

The 21:a and 22 were not made by Colorado Fuel & Iron. They still need to placed properly.

2 × 1/4 rnd R stl (18B)



$2\frac{1}{2} \times \frac{1}{5}$ rnd R gm stl (18B)



$2\frac{1}{2} \times \frac{3}{16}$ rnd R gm stl (18B)



30



$2\frac{1}{2} \times \frac{1}{8+}$ rnd R stl (18B)

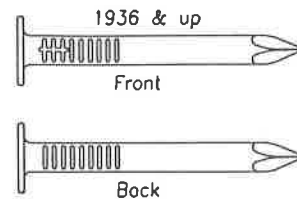


$2\frac{1}{2} \times \frac{1}{8+}$ rnd R gm stl (18B)

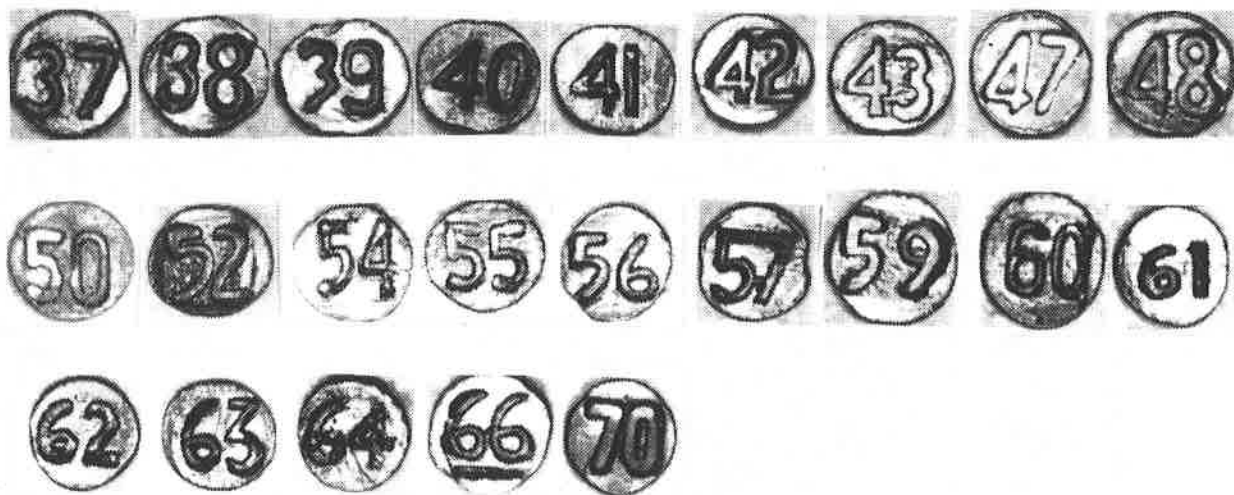


Type (18C)

Colorado Fuel & Iron Corp., Pueblo, CO.
This mark was used beginning 1936.



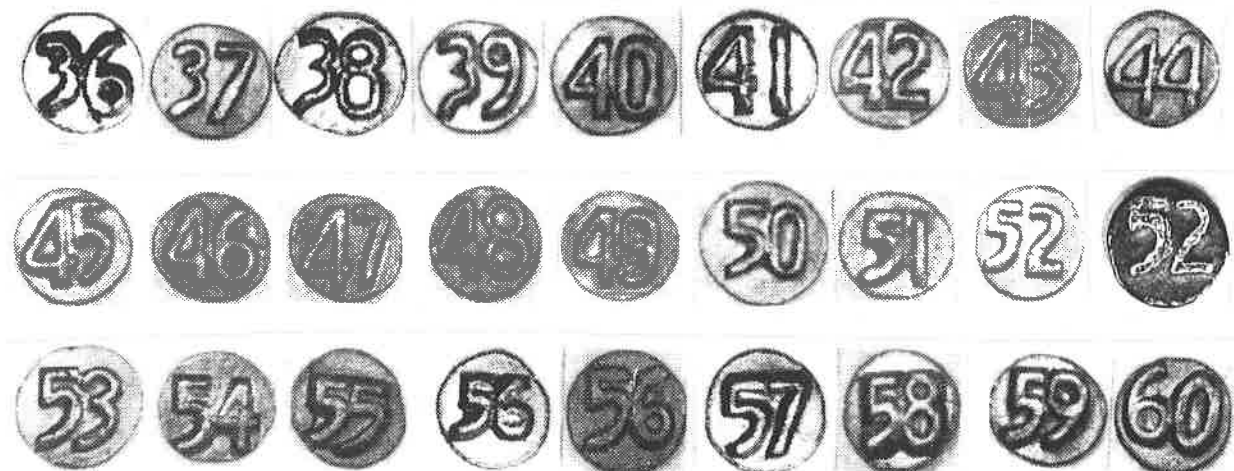
2 1/2 × 1/4 rnd I stl (18C)



2 × 1/4 rnd I stl (18C)



2 1/2 × 1/4 rnd R stl (18C)



(continued)

$2\frac{1}{2} \times \frac{1}{4}$ rnd R stl (18C)



$2 \times \frac{1}{4}$ rnd R stl (18C)



$1\frac{3}{4} \times \frac{1}{4}$ rnd R stl (18C)

51 53 54 55

$2\frac{1}{2} \times \frac{1}{5}$ rnd R stl (18C)



$2\frac{1}{2} \times \frac{3}{16}$ rnd R stl (18C)



$2\frac{1}{2} \times \frac{3}{16}$ rnd R gm stl (18C)



$1\frac{1}{2} \times \frac{3}{16}$ rnd R stl (18C)



$2\frac{1}{2} \times \frac{1}{8+}$ rnd R stl (18C)

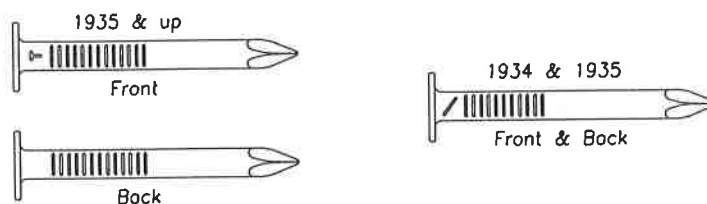


2 1/2 × 1/4 pnt R rs stl (18C)



Type (19)

Tennessee Coal Iron & Railroad Co., later the Tennessee Coal & Iron Division of U.S. Steel Co.,
Fairfield, AL.



The "T" on the shank is short in comparison with type (14).

This company had a dual identity. They ran a tie treating plant built in 1909 in Birmingham, AL, and operated track in that vicinity. They also had the steel mill where they manufactured date nails.

2 1/2 × 1/4+ rnd R stl (19)



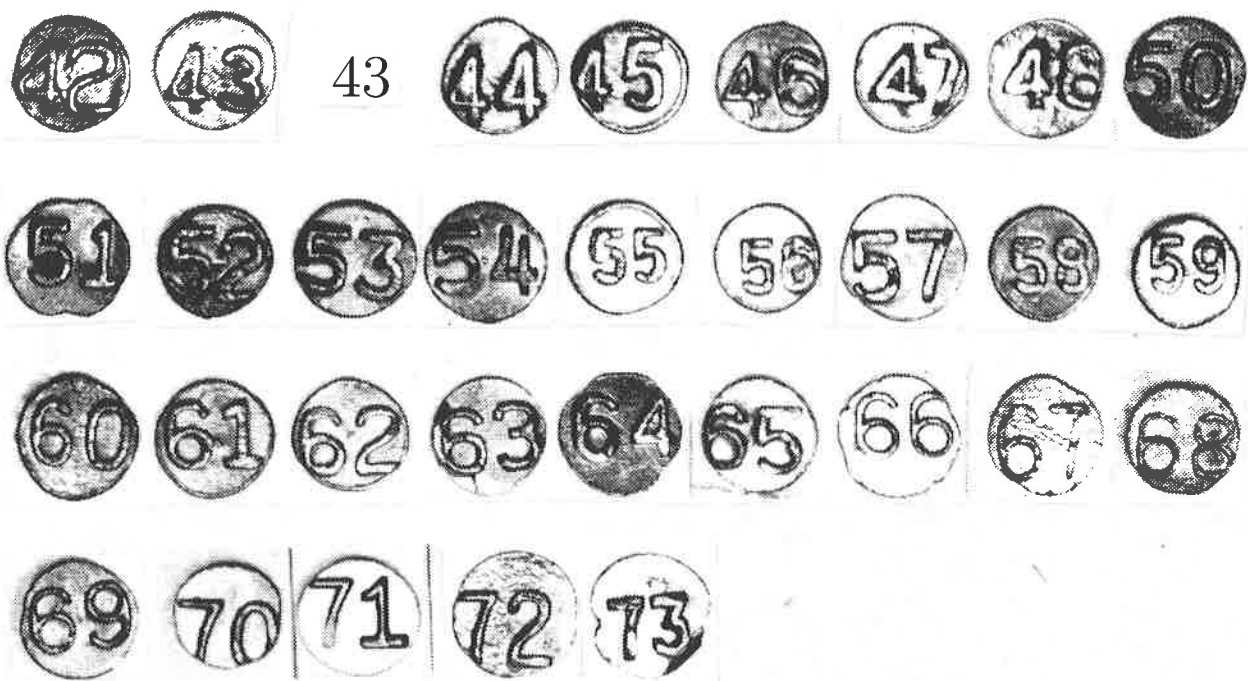
This nail measures .262" in diameter. It is made from no. 2 gauge wire.

2 1/2 × 1/4 rnd R stl (19)



(continued)

2 1/2 × 1/4 rnd R stl (19) (continued)



2 × 1/4 rnd R stl (19)



52 53

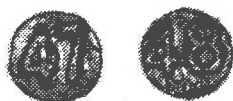
1 3/4 × 1/4 rnd R stl (19)



1 1/2 × 1/4 rnd R stl (19)

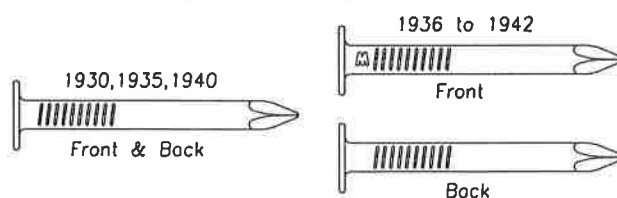


2 1/2 × 1/5 rnd R gm stl (19)



Type (21)

Wheeling Steel Corp.



Wheeling definitely made the nails with the sideways "W" on the shanks, but other nails are more connected with type (10). These two types need to be reorganized.

2 1/2 × 1/4 rnd I stl (21)



2 1/2 × 1/4 rnd R stl (21)



2 × 1/4 rnd R stl (21)



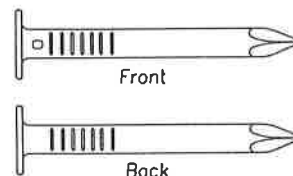
1 1/2 × 1/4 rnd R stl (21)



Type (22)

Unknown company, but certainly a works of the American Steel & Wire Co.

The small square is sometimes faint.



2 1/2 × 1/4 rnd R stl (22)



2 1/2 × 1/4 rnd I stl (22)



This nail has been attributed to type (18B) before.

Type (23)

Unknown company.



1 1/2 × 1/4 rnd I stl (23)



2 1/2 × 1/4 rnd R stl (23)



2 × 1/4 rnd R stl (23)



42

1 1/2 × 1/4 rnd R stl (23)



34

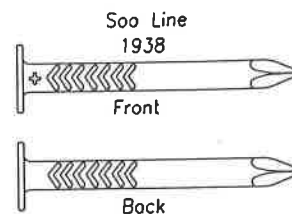
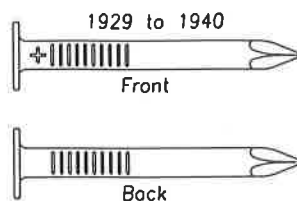
35



43

Type (24)

Bethlehem Steel Co.



There is a connection between this company and type (01)'s Townsend Co. Type (01) date nails end roughly the same time type (24) nails begin (1931), and the number styles are similar. Then there is the Soo Line 38, which has the marks of both companies on its shank.

2 1/2 x 1/4 rnd R stl (24)

29



34



37



The 38 comes with both shank styles.

2 1/2 x 1/4 rnd R ss stl (24)



2 x 1/4 rnd R stl (24)

36

1 1/2 x 1/4 rnd R stl (24)



35



1 1/2 x 1/4 rnd R cp stl (24)



2 1/2 x 1/5 rnd R gm stl (24)

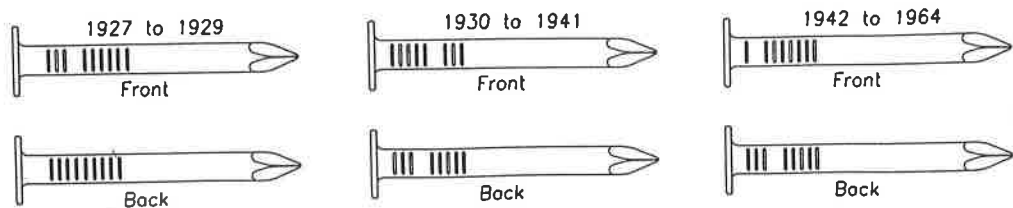


2 1/2 x 1/4 sqr R stl (24)

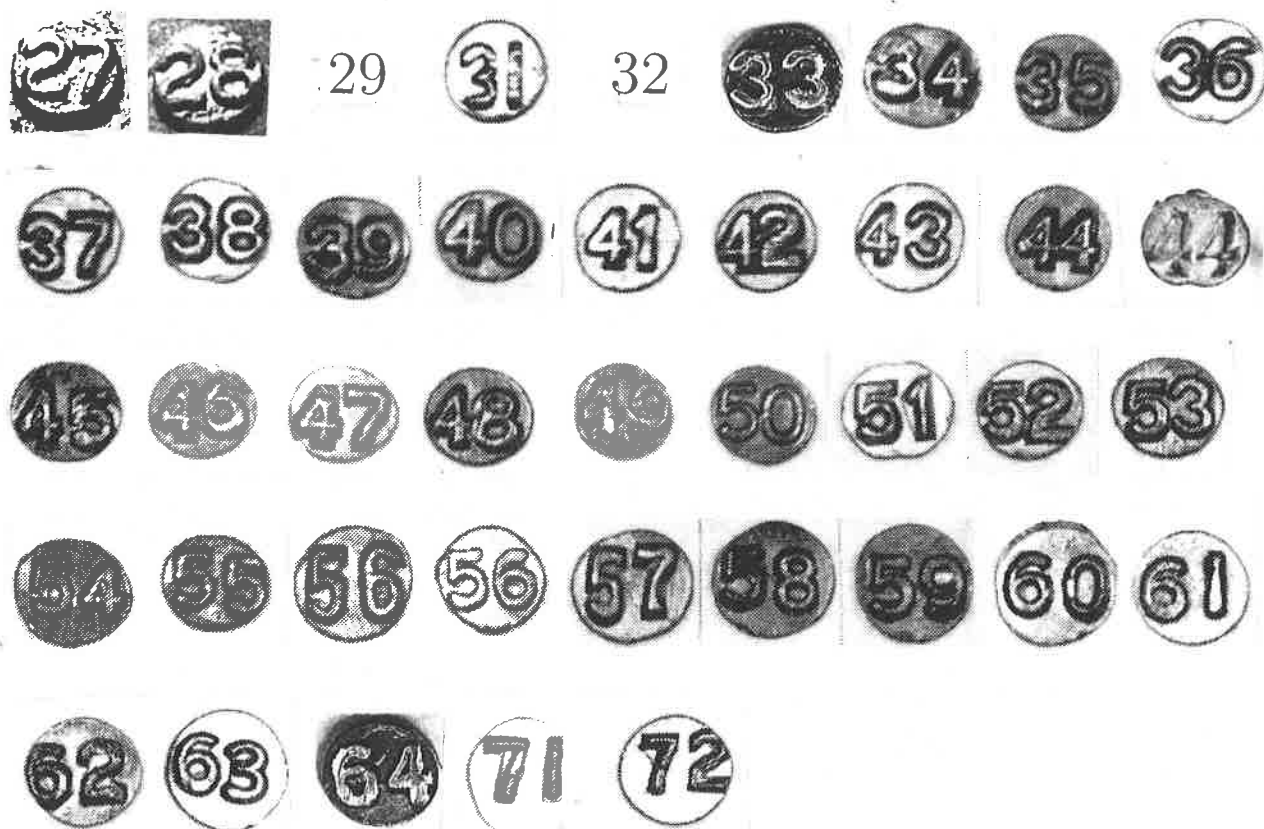


Type (25)

Continental Steel Corp.



2 1/2 x 1/4 rnd R stl (25)



1 1/2 x 1/4 rnd R stl (25)



1 1/2 × 1/4 rnd R cp stl (25)



1 3/4 × 3/16 rnd R gm stl (25)



1 1/4 × 3/16 rnd R stl (25)



41

2 1/2 × 1/4 irr R ss stl (25)



Type (31)

Unknown Mexican company.



2 1/2 × 1/4 rnd R stl (31)



73

Type (32)

Unknown Mexican company.

The nails with hash marks were used by National Railways of Mexico.



2 1/2 × 1/4 rnd I stl (32)



2 1/2 × 1/4 rnd R stl (32)

27
"



66



69



72



1 1/2 × 1/4 rnd R stl (32)

27
"

28
I

28
"



29
"

29
IV

30
I



34
"

35
I

Type (37)

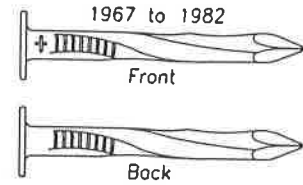
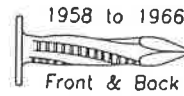
The Steel Company of Canada, Ltd.

A box of these nails was labeled

"Stelco nails / Ardox, spiral".

Twisted square shank.

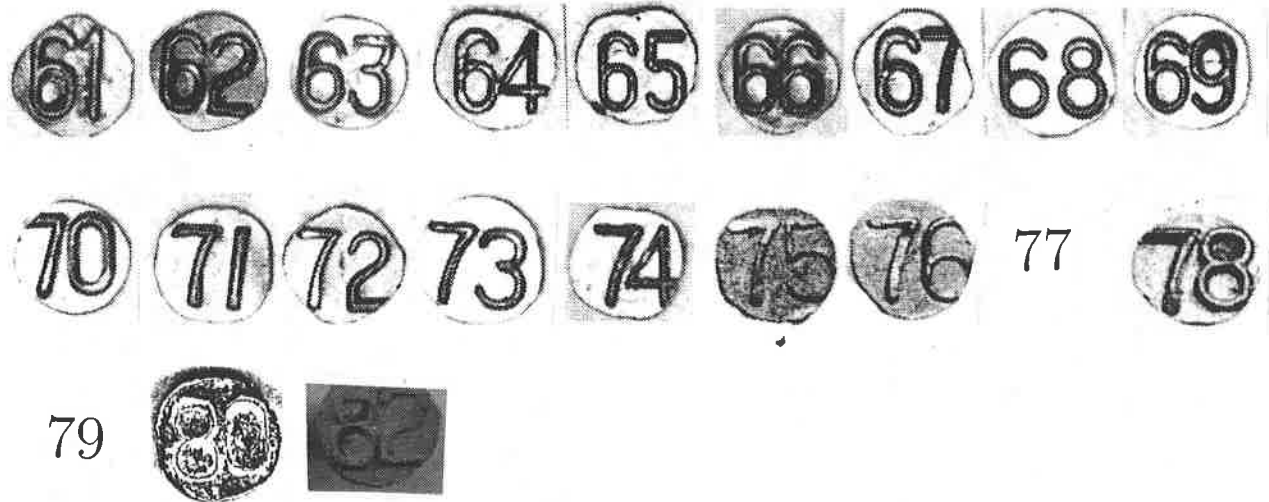
Some nails after 67 do not have the "÷" on the shank.



2 1/2 × 1/4 rnd R ts stl (37)



1 1/2 × 1/4 rnd R ts stl (37)



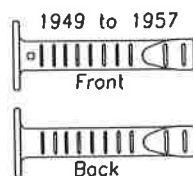
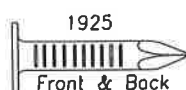
1 1/2 × 1/5 rnd R ts stl (37)



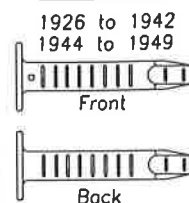
Type (38)

Probably made by
The Steel Company of Canada, Ltd.

Round Shanks



Oval Shanks



2 1/2 x 1/4 rnd R os cp stl (38)



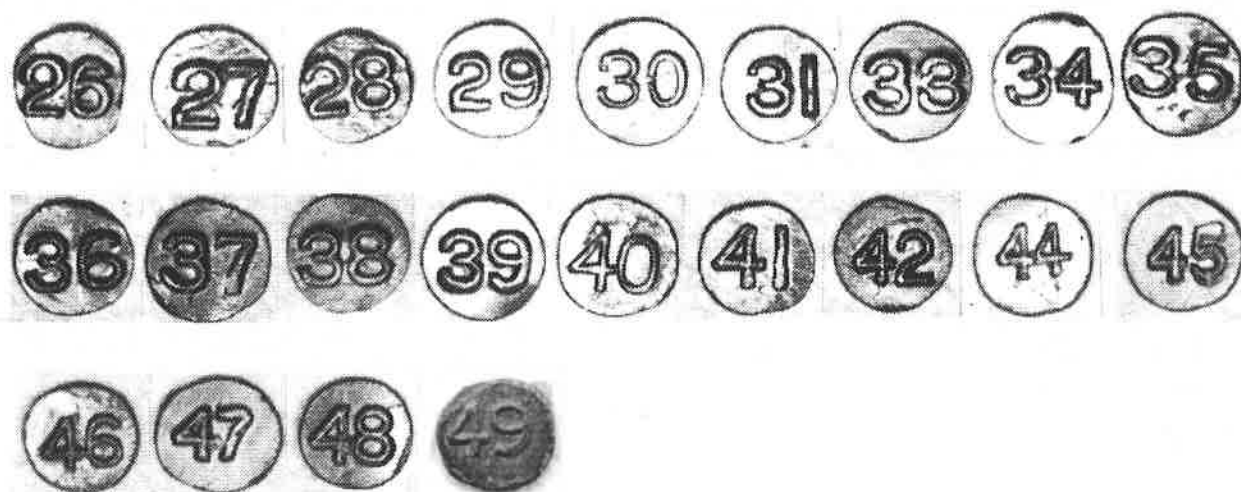
1 1/2 x 1/4 rnd R stl (38)



1 1/2 x 1/4 rnd R cp stl (38)



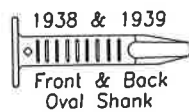
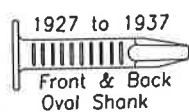
1 1/2 x 1/4 rnd R os cp stl (38)



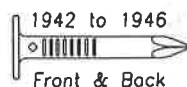
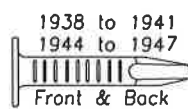
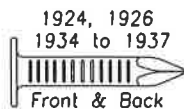
Type (39)

Unknown Canadian company.

Oval Shanks

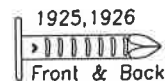
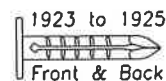


Round Shanks



Copper

TH&B RR



2 1/2 x 1/4 rnd I stl (39)

22 23

2 x 1/4 rnd I stl (39)



1 1/2 x 1/4 rnd R stl (39)



1 1/2 x 1/4 rnd R cp stl (39)



1 1/2 x 1/4 rnd R os cp stl (39)



43

1 1/2 × 1/5 rnd R stl (39)



1 1/4 × 1/4 rnd I cop (39)

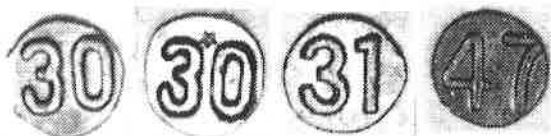


1 1/4 × 3/16 rnd I cop (39)



Set #2, used by Hydro Electric Power Co. in poles.

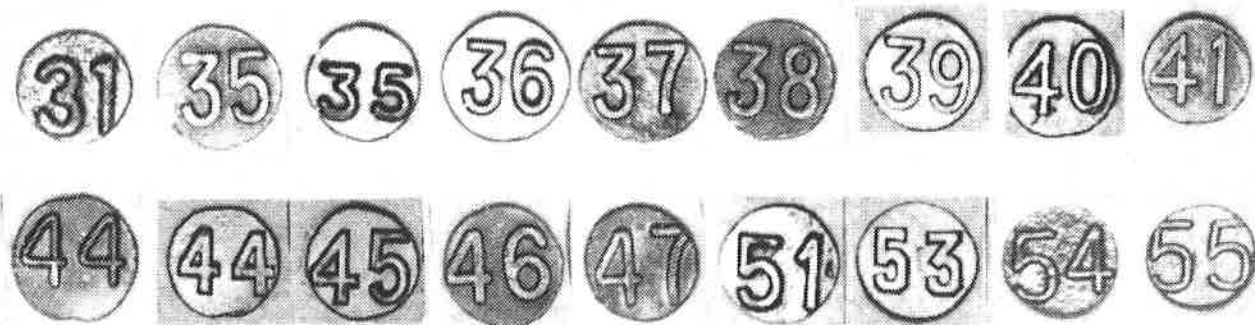
2 1/2 × 1/4 rnd R os cp stl (39)



1 1/2 × 1/4 rnd R cp stl (39)



1 1/2 × 1/4 rnd R os cp stl (39)

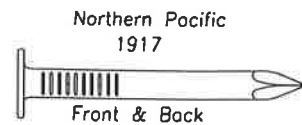


1 1/2 × 1/4 rnd R os cp stl (39) Overstrike: 42/1.

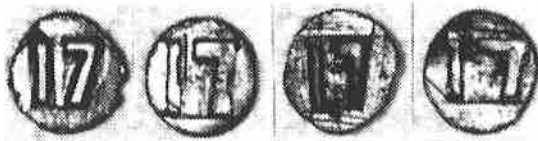


Type (40)

Unknown company.

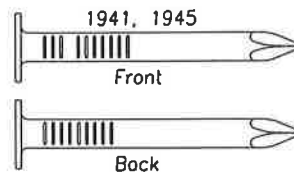


2 1/2 × 1/4 rnd I stl (40)

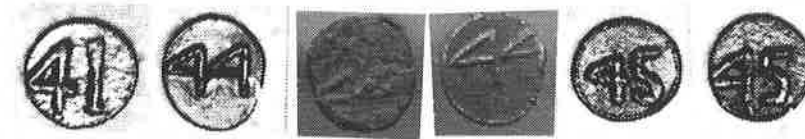


Type (47)

American Steel & Wire Co.,
Duluth Works.

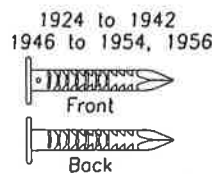
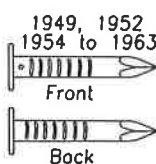


2 1/2 × 1/4 rnd R stl (47)

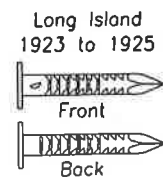
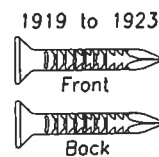


Type (60)

C. G. Hussey & Co., Pittsburgh,
PA. Note: The 1 1/4 × 3/20
rnd I cop 49, and the 1 1/4 ×
3/20 rnd I alm 47, 48 were made
by Clendenin Bros. of Balti-
more.



Cupped Head



gm (Barbed)

gm (Barbed)

2 1/2 × 1/4 rnd I cop (60)



1 3/4 × 3/16 rnd I cop (60)

52

1 3/4 x 3/16 rnd I gm cop (60) The 58-64 might not have gm.



56/4
Overstrike

1 1/4 x 3/16 rnd I cop (60)



1 1/4 x 3/16 rnd I gm cop (60)



(continued)

1 1/4 × 3/16 rnd I gm cop (60) (continued)



1 1/4 × 3/20 rnd I cop (60)



1 1/4 × 3/16 sqr I cop (60)

30

1 1/4 × 3/16 sqr I rs gm cop (60)



1 1/4 × 1/5 rnd R gm cop (60)

34

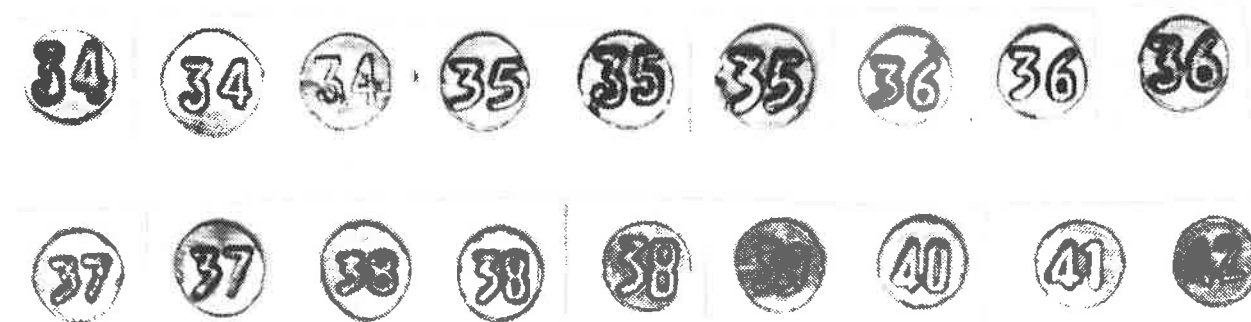
1 3/4 × 3/16 rnd R gm cop (60)



1 1/2 × 3/16 rnd R gm cop (60)



1 1/4 × 3/16 rnd R gm cop (60)



(continued)

1 1/4 x 3/16 rnd R gm cop (60) (Continued)



There exist further variations for 36 through 39 and 46.

1 1/4 x 3/16 rnd R C-rim cop (60)



Some variations



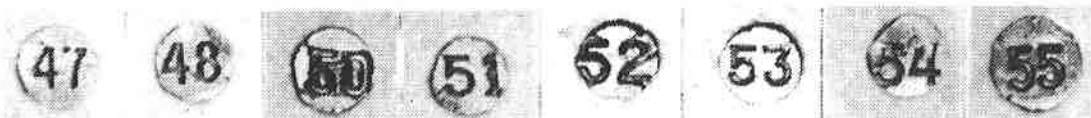
1 3/4 x 3/16 rnd I alm (60)



1 1/4 x 3/16 rnd I alm (60)

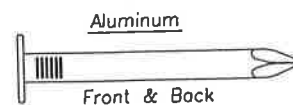
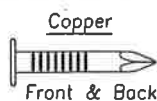


1 1/4 x 3/20 rnd I alm (60)



Type (61)

John Hassall, Inc., Westbury, NY.
This company still makes date nails.



2 1/2 x 3/16 rnd R stl (61)



Factory sample.

1 3/4 x 3/16 rnd I cop (61)



1 1/4 × 3/16 rnd I cop (61)



Overstrike: 2 over 0.

1 1/4 × 3/16 rnd R cop (61)



2 1/4 × 1/4 rnd I alm (61)



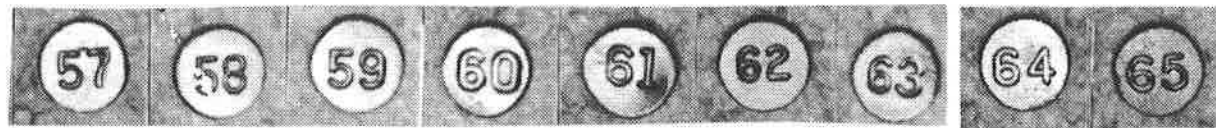
2 × 1/4 rnd I alm (61)

65

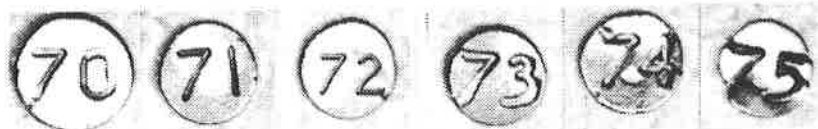
1 1/2 × 1/4 rnd I alm (61)

70

$2 \times 3/16$ rnd I alm (61) Set #1.



$2 \times 3/16$ rnd I alm (61) Set #2.

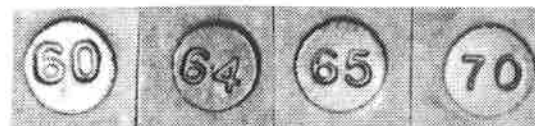


These may be of a different manufacturer.

$1 \frac{3}{4} \times 3/16$ rnd I alm (61)

79

$1 \frac{1}{4} \times 3/16$ rnd I alm (61)



$3/4 \times 3/16$ rnd I alm (61)

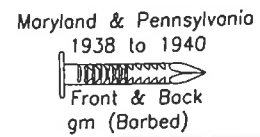
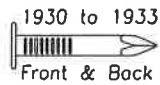


$2 \frac{1}{2} \times 1/4$ rnd R alm (61)



Type (63)

Unknown company



1 1/2 × 3/16 rnd I cop (63)

30

1 1/4 × 3/16 rnd I cop (63)

31

1 1/4 × 3/16 rnd I cp cop (63)

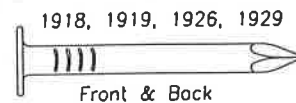


1 1/4 × 3/16 rnd I gm cop (63)



Type (64)

Unknown company



2 1/2 × 1/4 rnd I stl (64)

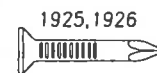
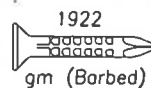


1 1/4 × 1/4 rnd I cop (64)



Type (66)

Unknown company



1 1/4 × 3/16 rnd I cop (66)

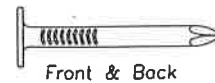


1 1/4 × 3/16 rnd I gm cop (66)



Type (69)

Unknown company



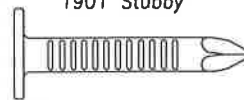
1 3/4 x 3/16 rnd I alm (69)



Type ()

Unknown companies, unclassified anchor markings.

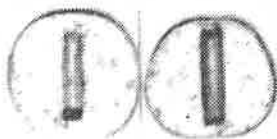
Santa Fe
1901 Stubby



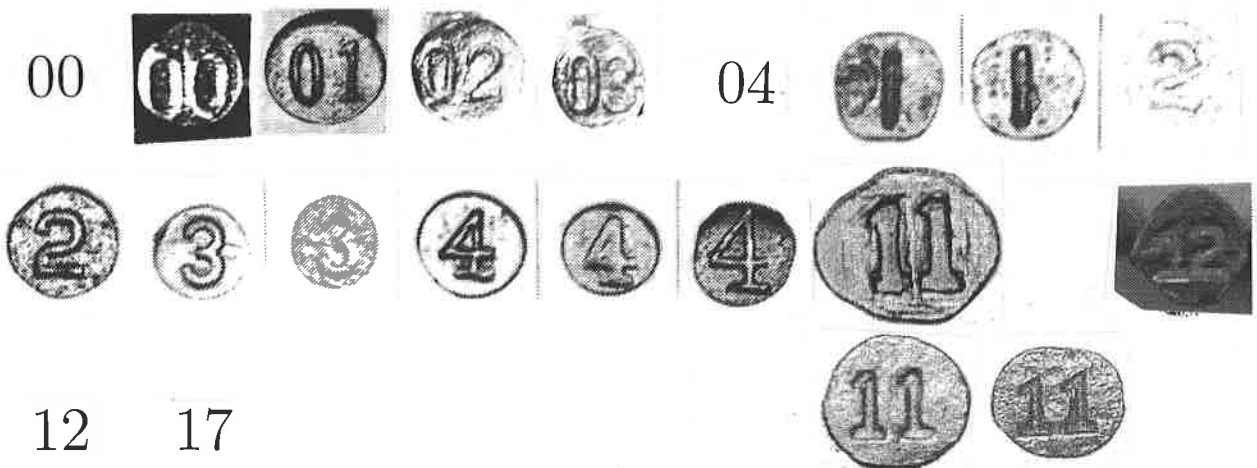
Baltimore & Ohio
1911



2 x 5/16 rnd I stl ()



2 1/2 x 1/4 rnd I stl ()



2 1/2 × 1/4 sqr I rs stl ()



2 1/2 × 1/4 rnd R stl ()

21

22

24

25

27



The 29 and 30 are similar to type (05) and (39), but there is a chance they are (24).

2 1/2 × 1/4 rnd R ss stl ()



2 × 1/4 rnd R stl ()

38

2 1/2 × 1/4 rnd I hs? stl ()



1 1/2 × 1/4 rnd I hs? stl ()



2 1/2 × 1/4- rnd R stl ()

28

30

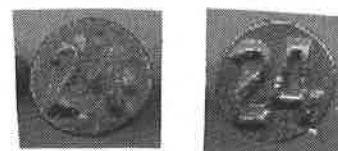
31

32



33

2 1/2 × 1/4 rnd R stl ()



2 × 1/4- rnd R stl ()

34

35

36

1 1/4 × 1/5 rnd I cop ()

53

The shank measures .210".

$1\frac{1}{4} \times \frac{3}{16}$ rnd I gm cop ()

07

$1\frac{1}{2} \times \frac{3}{16}$ rnd I gm cop ()

13 14

$2 \times \frac{3}{16}$ rnd I alm ()



$2\frac{1}{2} \times \frac{1}{4}$ rnd R os cp alm ()



$1\frac{1}{2} \times \frac{1}{4}$ rnd R os cp alm ()



$1\frac{1}{2} \times \frac{1}{4}$ rnd R hs alm ()



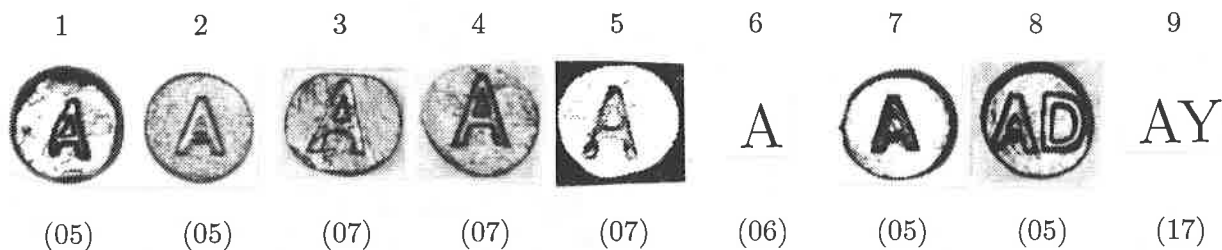
3 × 1/4 rnd I gm brs ()

Manufactured by Premax Co., Niagara Falls, NY (www.premaxlp.com). They also make 1 1/2" aluminum nails. Most are shown with representative washers. Several have been found in ties without washers.

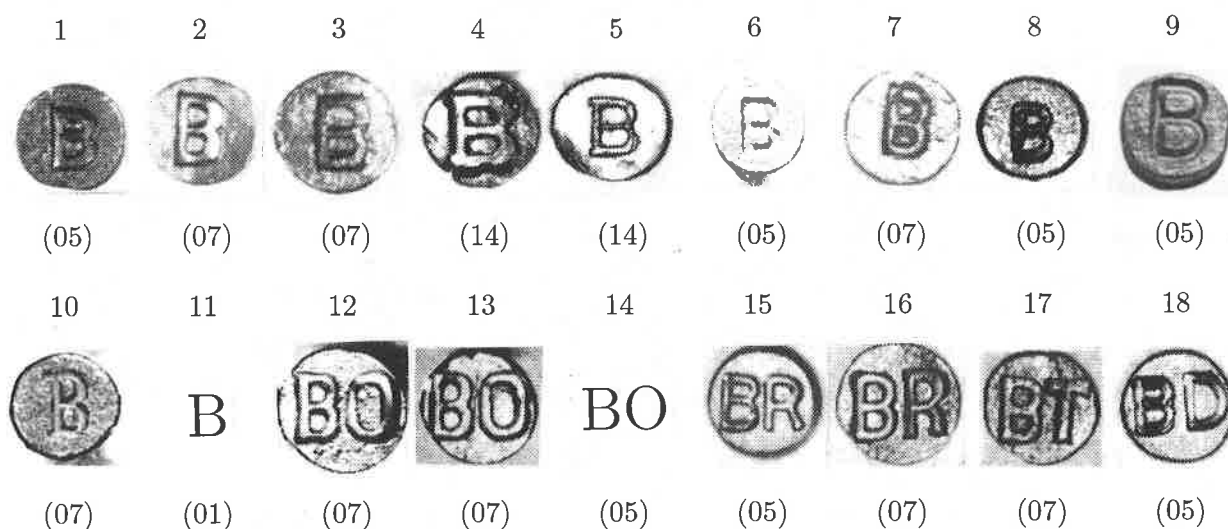


Nails showing only letters

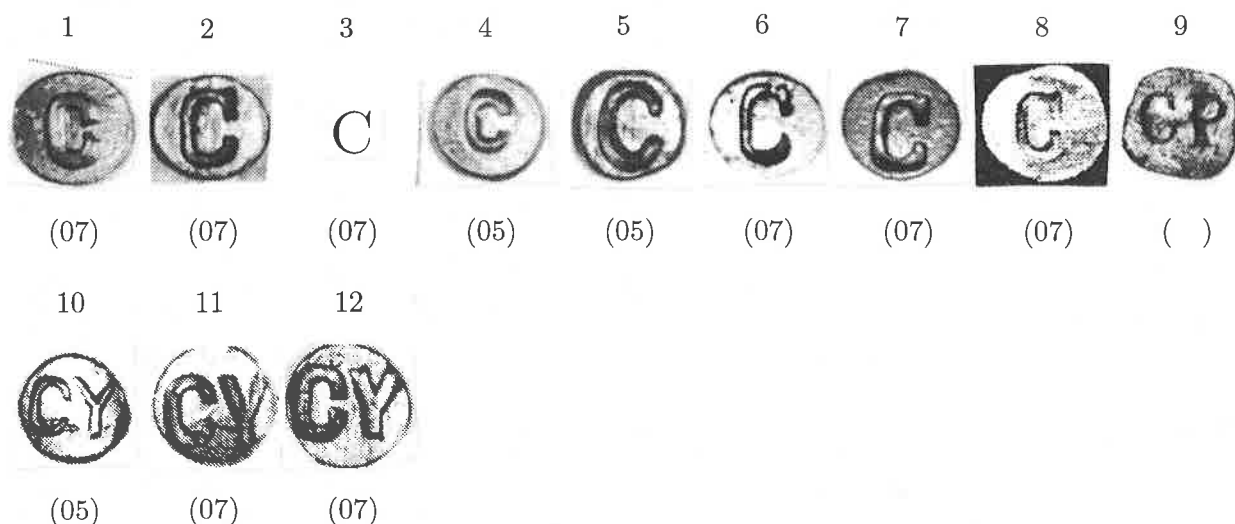
Steel, round indent. All are $2\frac{1}{2} \times \frac{1}{4}$ except where noted.



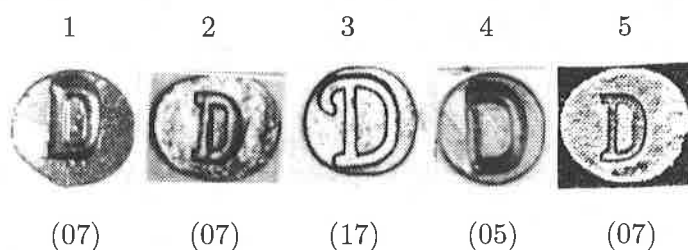
- A 1-3 Ash. Buffalo, Rochester & Pittsburgh.
 4 Southern Pacific.
 5 Ash. Chicago, Burlington & Quincy.
 6,7 2". Pennsylvania RR.
 8 AD. 2". Pennsylvania RR.
 9 AY. $1\frac{1}{2}$ ". Des Moines & Central Iowa.



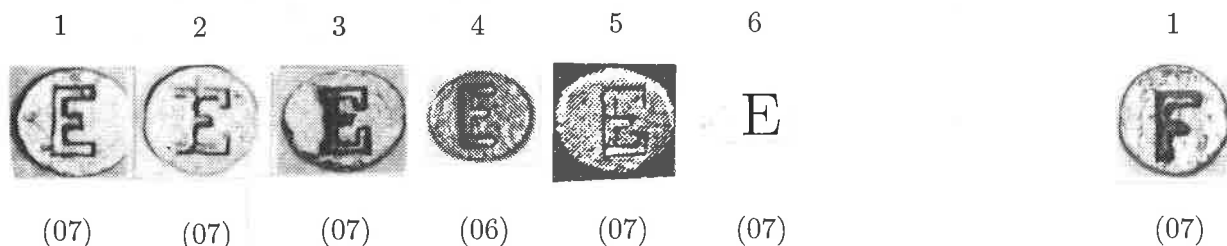
- B 1-6 Beech. Buffalo, Rochester & Pittsburgh.
 7 Southern Pacific.
 8,9 2". Pennsylvania RR.
 10 Red birch. Chicago, Burlington & Quincy.
 11 Mississippi River & Bonne Terre.
 12-14 BO. Black oak. Buffalo, Rochester & Pittsburgh.
 15,16 BR. Birch. Buffalo, Rochester & Pittsburgh.
 17 BT. Pole nail from the St. Louis, MO area.
 18 BD. 2". Pennsylvania RR.



- C 1 Unknown.
 2 Southern Pacific RR and Buffalo, Rochester & Pittsburgh RR. On the BR&P it stands for Chestnut.
 3 Chestnut. Buffalo, Rochester & Pittsburgh.
 4,5 2". Pennsylvania RR. C #4 has also been found with a 2 1/2" shank, source unknown.
 6,7 Indiana-Michigan Electric.
 8 Cypress. Chicago, Burlington & Quincy.
 9 CP. 1 1/2 x 3/32. Missouri Pacific. (The diameter measurement is probably not accurate.)
 10-12 CY. Cherry. Buffalo, Rochester & Pittsburgh.

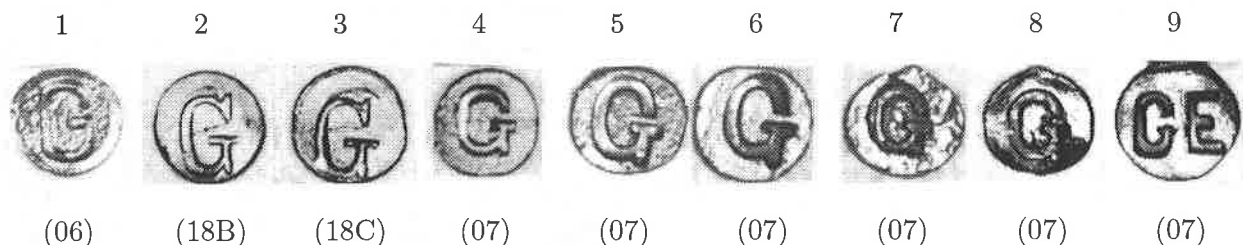


- D 1 Unknown.
 2 Southern Pacific.
 3 1 1/4". Dierks.
 4 2". Pennsylvania RR.
 5 Cottonwood. Chicago, Burlington & Quincy.

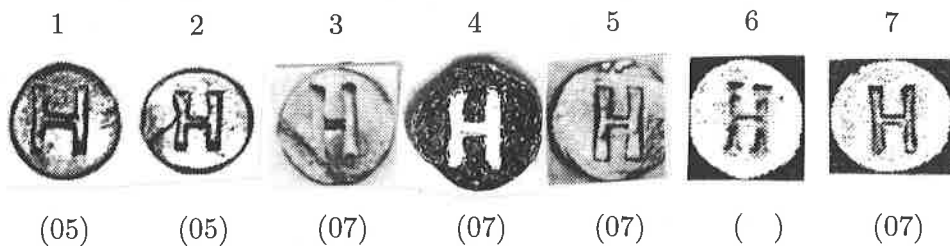


- E 1,2 Southern Pacific.
 3 Elm. Buffalo, Rochester & Pittsburgh.
 4 Chicago & Northwestern.
 5 White elm. Chicago, Burlington & Quincy.
 6 Pennsylvania RR. Similar to E #1.

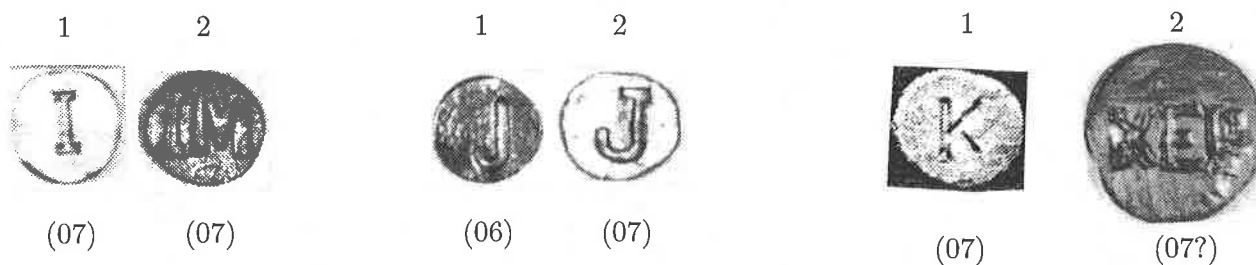
- F 1 Southern Pacific.



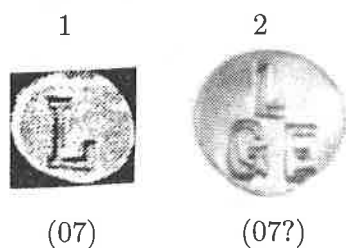
- G 1-3 California. Indicates a buried gas line near the pole into which the nail was driven.
 4,5 Used as the "G" in "IGS" by Indiana General Service.
 6,7 Southern Pacific.
 8 Gum. Buffalo, Rochester & Pittsburgh.
 9,10 GE. Unknown Electric.



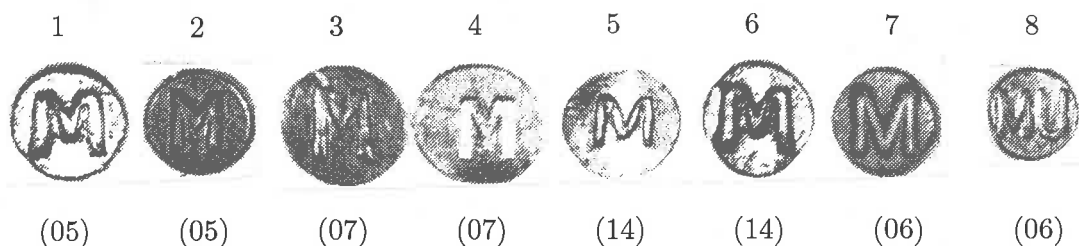
- H 1-4 Hickory. Buffalo, Rochester & Pittsburgh.
 5 Southern Pacific.
 6 Hasselmann treatment. Chicago, Burlington & Quincy.
 7 Hemlock. Chicago, Burlington & Quincy.



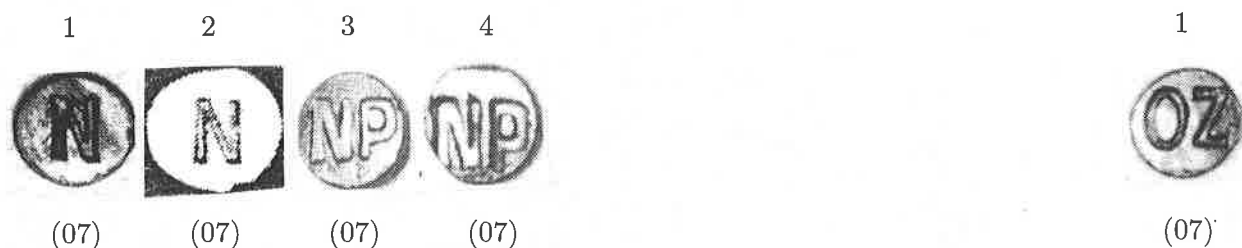
- I 1 Beech. Chicago, Burlington & Quincy.
 2 IM. Indiana & Michigan Electric Co.
 J 1 California. Joint ownership of pole.
 2 Southern Pacific.
 K 1 Pignut hickory. Chicago, Burlington & Quincy.
 2 KEP. 2" and 2 1/2". Kansas Electric Power.



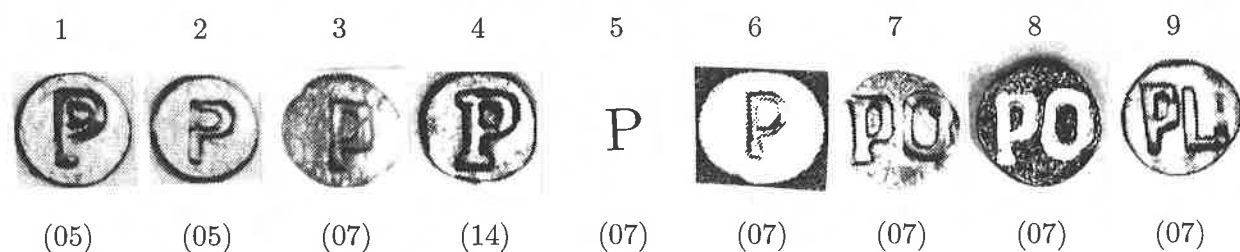
- L 1 Poplar. Chicago, Burlington & Quincy.
 2 L/GE. Nebraska.



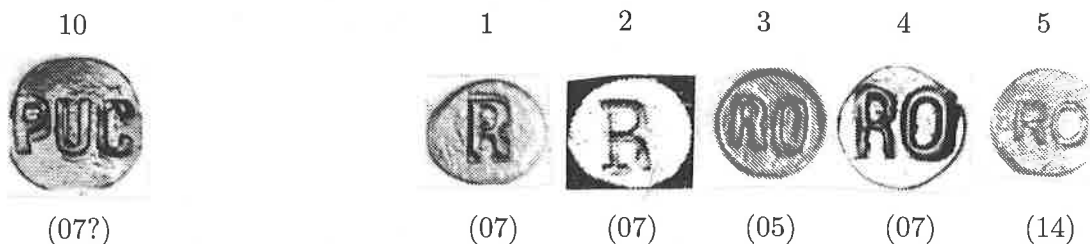
M 1-6 Maple. Buffalo, Rochester & Pittsburgh.
 7 California.
 8 MU. Unknown.



N 1 Northwestern Electric Co. Portland, OR and Vancouver, WA.
 2 Pin oak. Chicago, Burlington & Quincy.
 3,4 NP. Nebraska Power Co. Omaha.
 O 1 OZ. Oil-Zinc treated. Santa Fe.



P 1-4 Pine. Buffalo, Rochester & Pittsburgh.
 5 Chicago & Northwestern.
 6 Loblolly pine. Chicago, Burlington & Quincy.
 7,8 PO. Pin oak. Buffalo, Rochester & Pittsburgh.
 9 PL. People's Light Co., Davenport, IA.

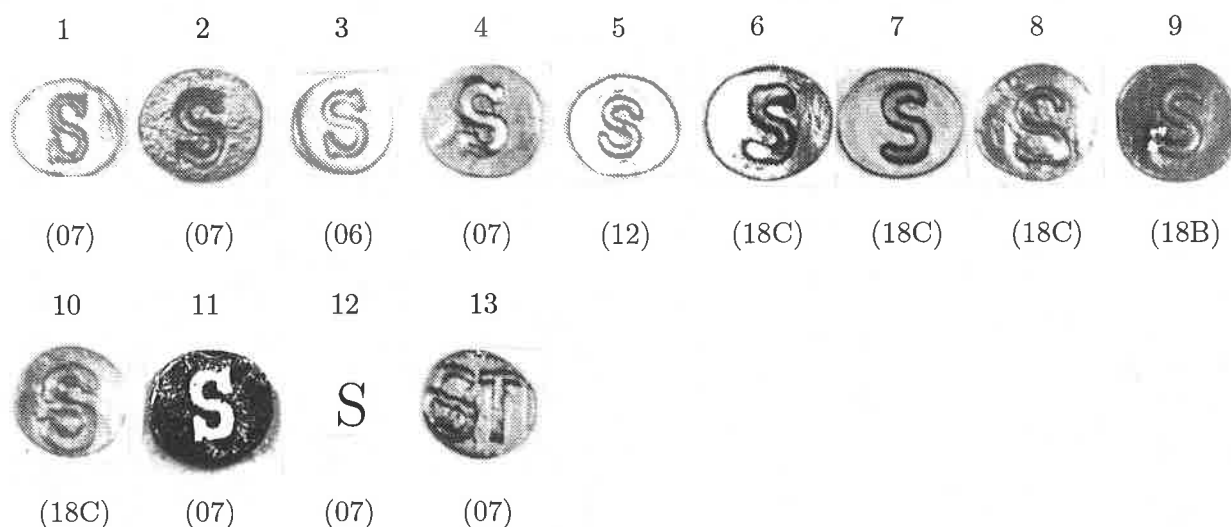


P 10 PUC. 4". Public Utilities Commission. North St. Paul, MN.

R 1 California.

2 Red oak. Chicago, Burlington & Quincy.

3-5 RO. Red oak. Buffalo, Rochester & Pittsburgh.



S 1,2 Used as the "S" in "Indiana General Service."

3-10 Salvaged pole. Southern California Edison Co.

11 Sycamore. Buffalo, Rochester & Pittsburgh.

12 Sycamore. Chicago, Burlington & Quincy.

13 ST. Steam Treatment or Special Treatment. Santa Fe.

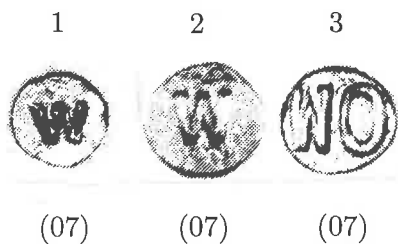


T 1,2 Possibly a treatment company. Minnesota.

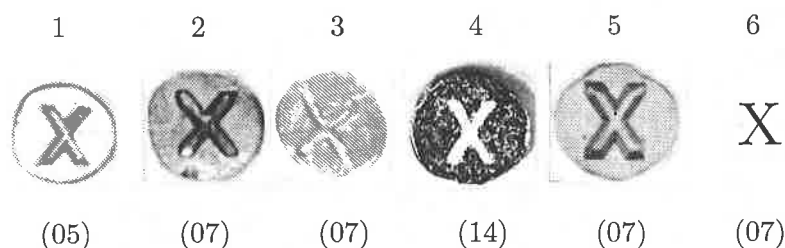
3 2". Pennsylvania RR.

4 Tamarack. Chicago, Burlington & Quincy.

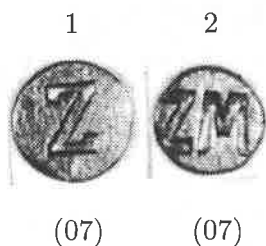
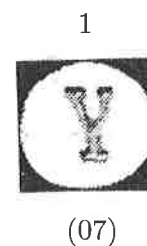
U 1 Utah Power & Light.



W1 1 1/2 x 3/16. Unknown.
 2 California.
 3 WO. White oak. Buffalo, Rochester & Pittsburgh.

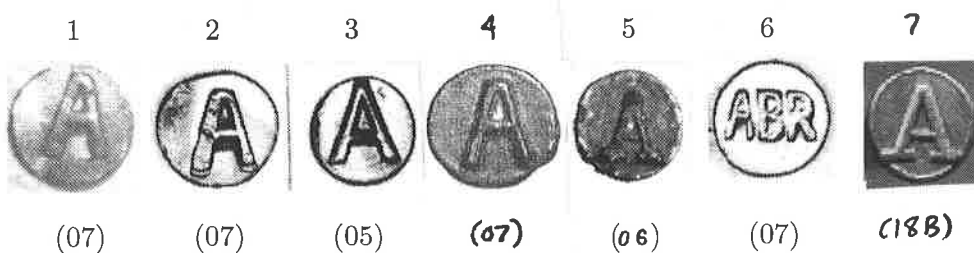


X 1-4 Substandard tie. Buffalo, Rochester & Pittsburgh.
 5 Pennsylvania RR.
 6 Untreated. Chicago, Burlington & Quincy.
 Y 1 Straight creosote treatment. Chicago, Burlington & Quincy.

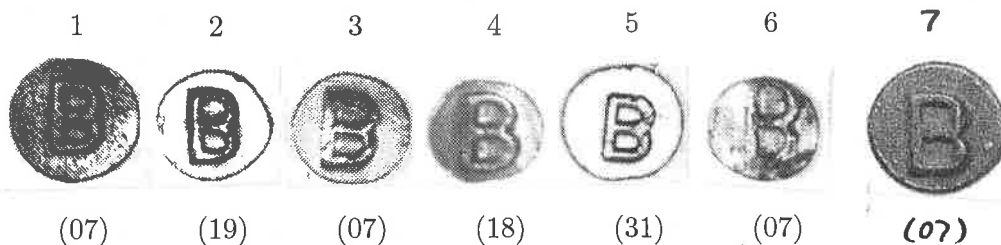


Z 1 Zinc chloride treatment. Chicago, Burlington & Quincy.
 2 Santa Fe. Zinc chloride + Mixture treatment.

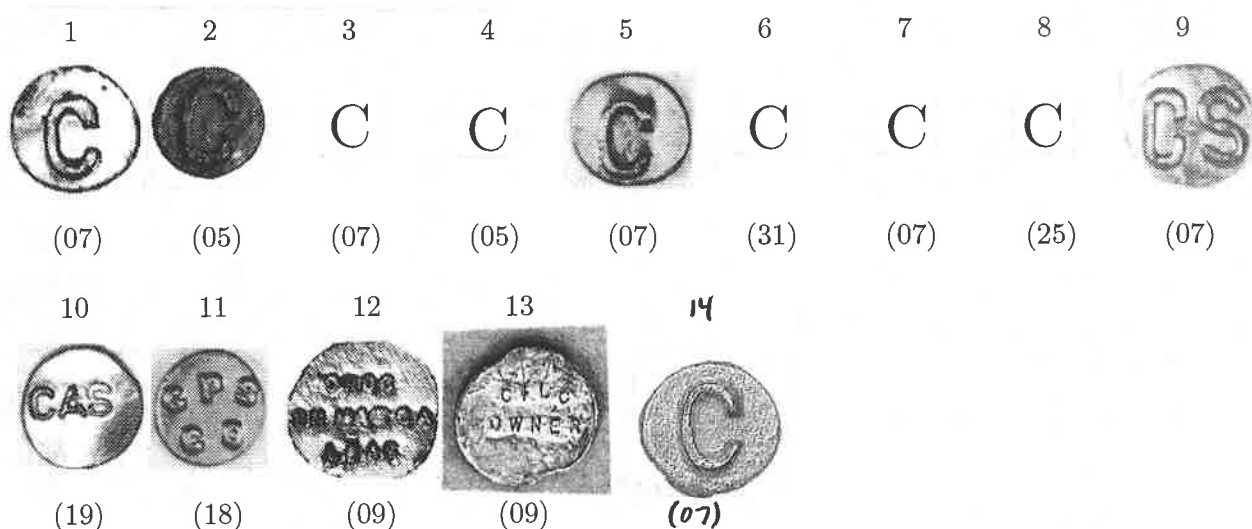
Steel, round raised. All are 2 1/2 x 1/4 except where noted.



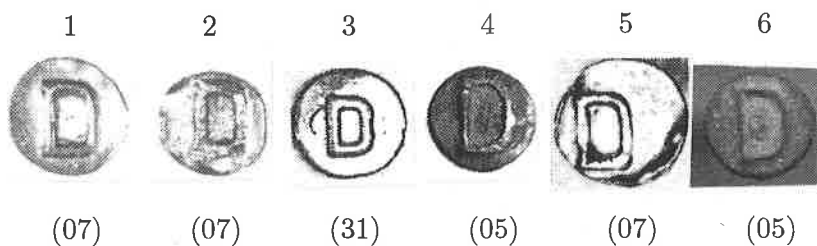
A 1-3, 5 Louisville & Nashville. #5 is 2".
 4 2"GM. Union Pacific.
 6 ABR. Soo Line.
 7 Montana Power.



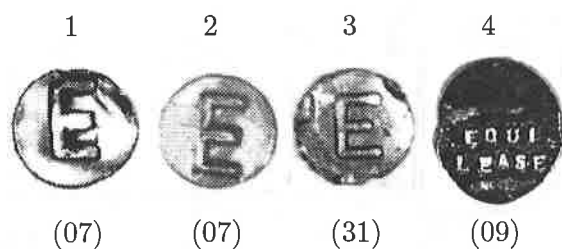
- B 1,2 Louisville & Nashville.
 3 Soo Line, Missouri Pacific, and Wisconsin Public Service.
 4 1 1/2". Probably (18C). Unknown company.
 5 Mexican Pacific.
 6 Detroit Edison.
 7 2"GM. Union Pacific.



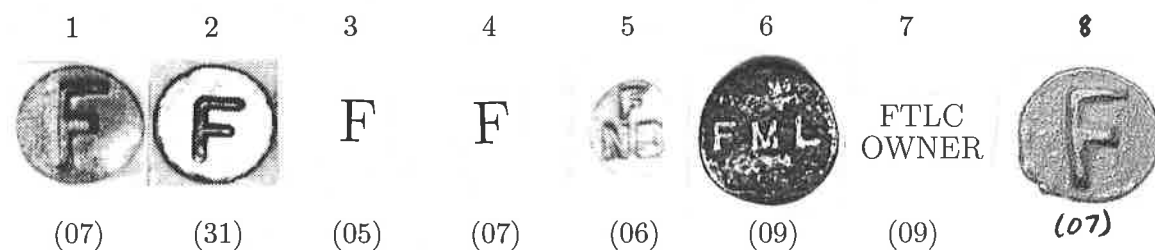
- C 1,2 Louisville & Nashville.
 3,4 2". Louisville & Nashville.
 5 Moshassuck Valley RR (second hand) and Wisconsin Public Service.
 6 Mexico.
 7 Missouri Pacific.
 8 Pennsylvania RR.
 9 CS. Curve to Spiral. Baltimore & Ohio.
 10 CAS. 2". Louisville & Nashville.
 11 CPS CO. Unknown.
 12 CROC / SN MAT CA / LEAS. Illinois Central Gulf.
 13 CILC / OWNER. Illinois Central Gulf.
 14 2"GM. Union Pacific.



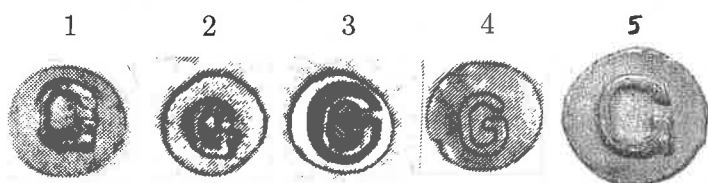
- D 1 Wisconsin Public Service.
 2 Detroit Edison.
 3 National Railways of Mexico.
 4,5 Louisville & Nashville.
 6 2". Louisville & Nashville.



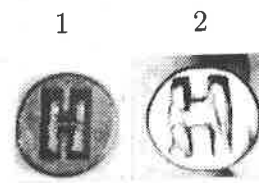
- E 1 Louisville & Nashville.
 2 Soo Line, Detroit Edison, and Tri-States Telephone & Telegraph "East" (see "W" for "West").
 3 Mexico.
 4 EQUI / LEASE. Illinois Central Gulf.



- F 1 Detroit Edison.
 2 Mexico.
 3 2". Louisville & Nashville.
 4 Louisville & Nashville.
 5 F/NB. 1 3/4 x 3/16. Chicago & Northwestern.
 6 FML. Illinois Central Gulf.
 7 FTLC / OWNER. Illinois Central Gulf.
 8 2"GM. Union Pacific.



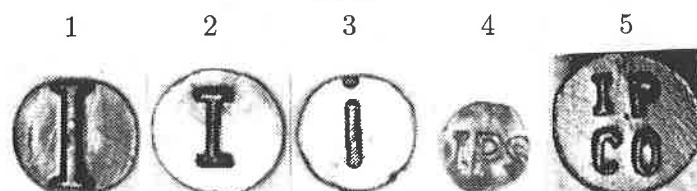
(07) (25) (25) (31) (07)



(25) (07)

- G 1 Detroit Edison, and the "G" in Indiana General Service.
 2,3 Detroit Edison.
 4 Mexico.
 5 2"GM. Union Pacific.

- H 1 Detroit Edison.
 2 Soo Line.



(06) (07) (31) (07) (07)



(31)

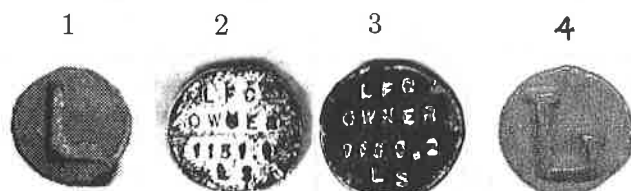


(25)

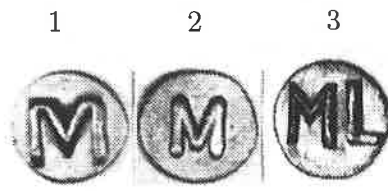
- I 1 Inspected. 1 1/4". Wisconsin Telephone Co.
 2 Inspected. 1 1/4". Wisconsin Electric Power Co.
 3 Mexican Pacific.
 4 IPS. 2 1/2 x 3/16. Iowa Public Service.
 5 IP/CO. 2". Interstate Power Co. From Minnesota, Iowa & Illinois.

- J 1 Mexican Pacific.

- K 1 Detroit Edison.







(19) (09) (09) (07)







(07) (31) (07)

- L 1 2". Louisville & Nashville. Used as a "7".
 2 LFC / OWNER / 1151.1 / LS. Illinois Central Gulf.
 3 LFC / OWNER / 1151.2 / LS. Illinois Central Gulf.
 4 2"GM. Union Pacific.







- M 1 Missouri Pacific, Soo Line.
 2 National Railways of Mexico.
 3 ML. Municipal Light. Lincoln, NE.

1		1	2	3	4	5	6
N					P		PROP OF EQUIPCO
(31)		(07)	(06)	(31)	(06)	(25)	(09)

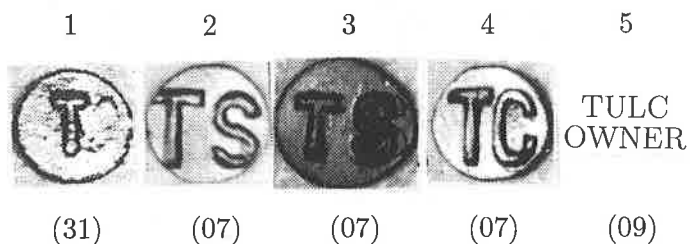
- N 1 Mexican Pacific.
- P 1 Duluth, Missabe & Iron Range.
2 Chesapeake & Ohio.
3 National Railways of Mexico, Mexican Pacific.
4 Union RR. Possibly the same as P #2.
5 PW. Public Works Administration. Illinois Central. Used in 1934.
6 PROP OF / EQUIPCO. Illinois Central Gulf.

1	2	3	4	5
				R
(07)	(12)	(19)	(31)	(18C)

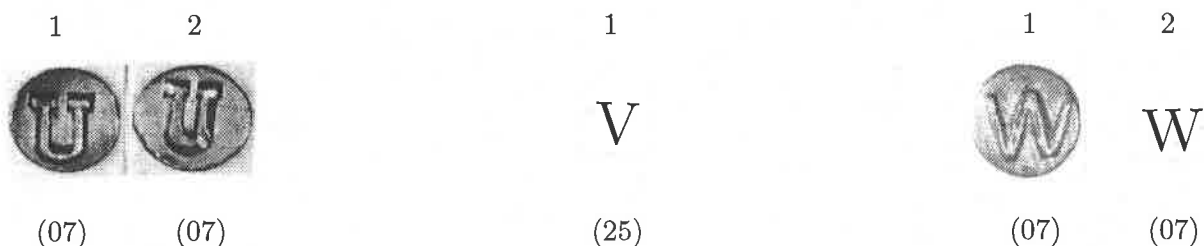
- R 1 Missouri Pacific, Soo Line.
2 "Reclaimed" pole in California and Arizona.
3 1 1/2". Unknown.
4 Mexican Pacific.
5 Chicago Transit Authority and Rock Island.

1	2	3	4	5	6
					
()	(17)	(18C)	(07)	(07)	(31)

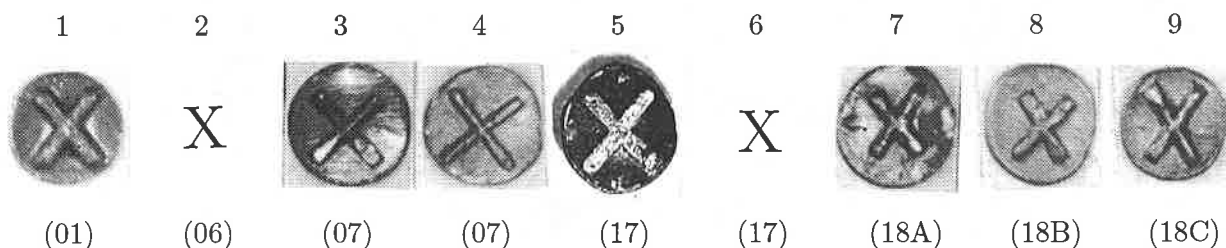
- S 1 Unknown.
2 Southwest Creosoting Co. Found with 2" 39 date nail.
3 ST. Steam Treatment or Special Treatment. Santa Fe.
4 SC. Spiral to Curve. Baltimore & Ohio.
5 ST. Spiral to Tangent. Baltimore & Ohio.
6 Mexican Pacific.



- T 1 National Railways of Mexico.
 2 TS. Tangent to Spiral. Baltimore & Ohio. Some nails have letters closer together.
 3 TS. Tri-States Telephone & Telegraph Co.
 4 TC. Taylor-Colquitt Co., Used in poles with a 28 or 29 date nail.
 5 TULC / OWNER. Illinois Central Gulf.



- U 1,2 Utah Power & Light.
 V 1 Pennsylvania RR.
 W1 West. Tri-States Telephone & Telegraph Co. See "E" for 'East.'
 2 Missouri Pacific.



- X 1-9 Substandard tie. Santa Fe.

1



(07)

1



(18B)

2



(07)

3




(07)

Y 1 Missouri Pacific, Soo Line.

Z 1 ZM. Zinc + Mixture treatment. Santa Fe.

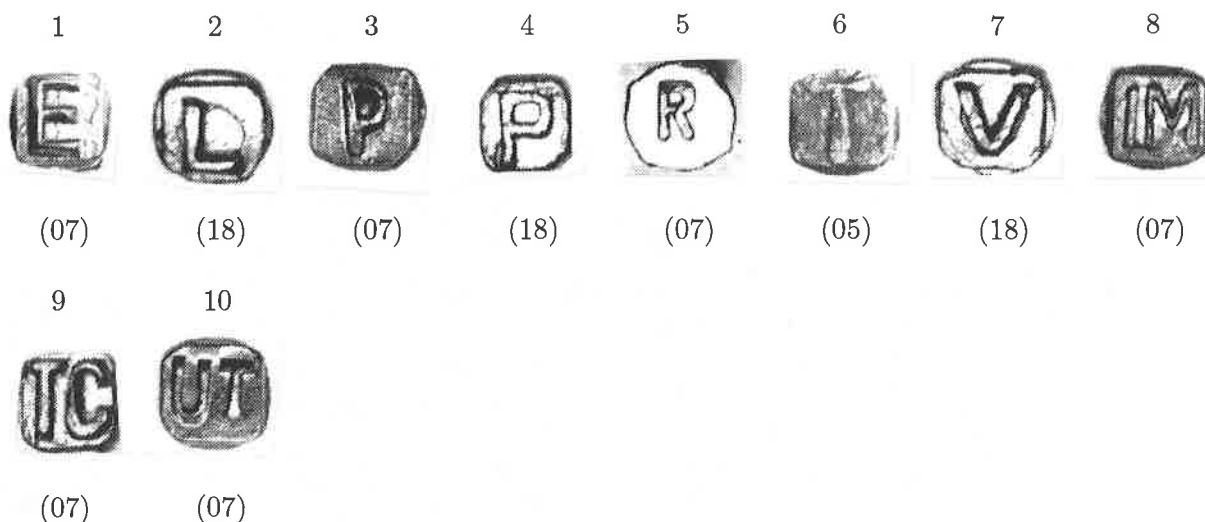
2,3 ZA. Zinc-meta-Arsinite. Chicago, Burlington & Quincy. From a 1929 test section.

Steel, square indent. All are $2\frac{1}{2} \times \frac{1}{4}$.

1	2	3	4	5	6	7	8	9
								
(05)	(05)	(07)	(07)	(07)	(05)	(07)	(05)	(05)
10	11	12	13	14	15	16	17	18
								
(05)	(07)	(07)	(05)	(05)	(07)	(07)	(05)	(07)
19	20	21	22					
								
(05)	(05)	(07)	()					

- 1 Found in Teaneck, NJ, probably in a pole.
- 2,6 Found in Benton Harbor, MI, probably in poles.
- 3,4 G = General, I = Indiana. Indiana General Service. Served Muncie, Marion, and Elwood, IN. Used in 1929.
- 5 Joint ownership of pole. Danvers, MA.
- 7,12 "Power" and "Telephone." Pennsylvania Power & Light Co.
- 8 Found in Arizona, probably in poles.
- 9 Public Service Power & Light Co., NJ. Re-claimed or Re-used pole.
- 10 Unknown.
- 11 Unknown.
- 13-15 Indiana-Michigan Electric.
- 16,17 Ohio Power Co.
- 18 Santa Fe. "Steam Treated" or "Special Treatment."
- 19 Reported to be found in Grand Junction, CO. area.
- 20 Union Electric. St. Louis, MO area.
- 21 U. S. Forest Service. "United States." The shank is turned 45° with respect to the shank. See U. S. Forest Service in letter-number nail section.
- 22 SL/CO. Salt Lake County, UT.

Steel, square raised. All are $2\frac{1}{2} \times 1\frac{1}{4}$.



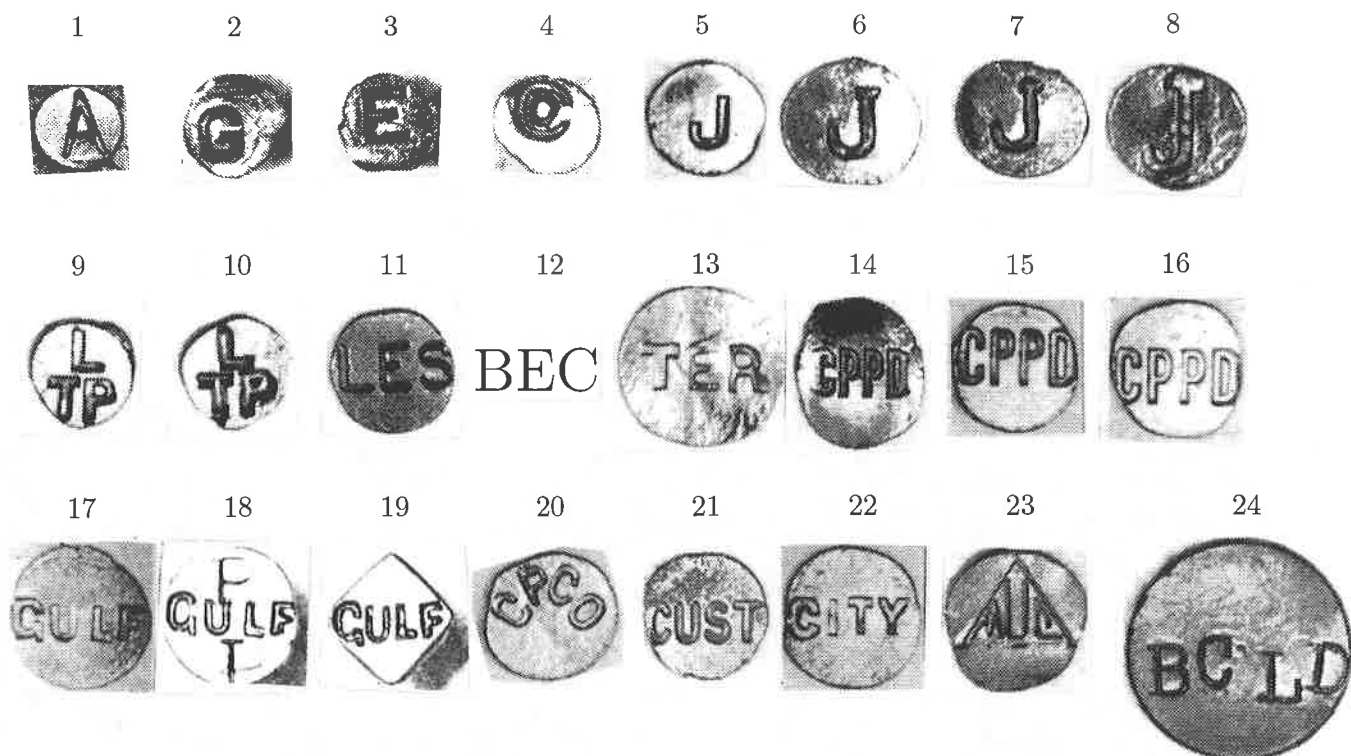
- 1 Unknown.
- 2,7 Union Pacific RR. From 1964 tie test sections.
- 3,4 Utah Power & Light.
- 5 Reclaimed pole. Virginia.
- 6 Pennsylvania RR.
- 8 Indiana-Michigan Electric Co.
- 9 Taylor-Colquit Co. Found with a rnd R 28 in a pole.
- 10 Union Telephone. Smackover, AR.

Malleable iron. All are $2\frac{1}{2} \times 1\frac{1}{4}$ rnd R mi (11) except the "A", which is $2 \times 3/16$ rnd I mi (11).



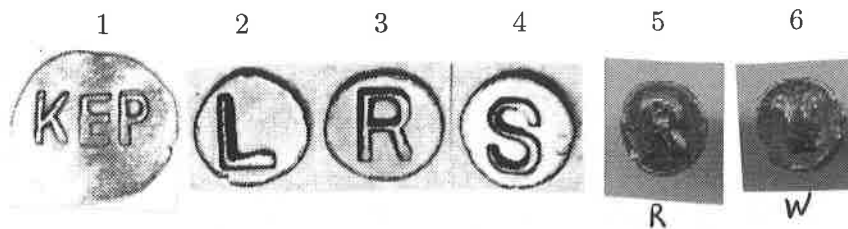
- 1 Chicago & Eastern Illinois.
- 2-8 Reading RR. The "O" is identical to the "0" (zero) used by the B&M.
- 9 Baltimore & Ohio.

Copper indent.



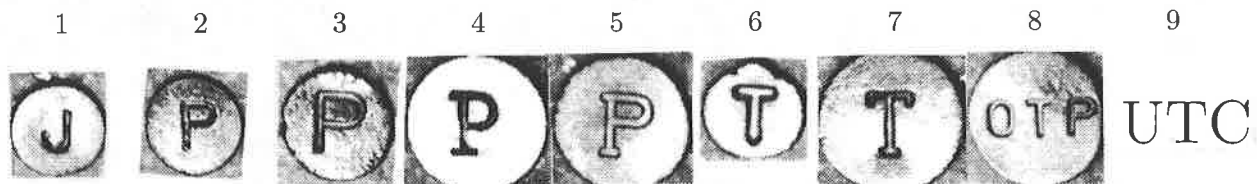
- 1 1 1/4 x 3/16. Central Hudson Gas & Electric Co. (New York).
- 2-4 1 1/4 x 3/16, type (60). Galveston Electric Co.
- 5-8 Joint ownership of pole. 2 1/2 x 1/4. The J #5 is type (60) and also comes in a 2" shank. Delaware Valley Telephone Co. Port Jervis, NY. The 2 1/2" J #5 was also used by Upstate NY Telephone Co.
- 9,10 1 1/4 x 3/16. #9 is type (07), #10 is (39). Unknown company.
- 11 Unknown.
- 12 Unknown.
- 13 Texas Electric Railway. Probably from poles.
- 14-16 Consumers Public Power District (Nebraska).
- 17-19 Gulf Oil Co., used to mark power lines when on Gulf property. #18 has hand struck "P" and "L."
- 20 Consumers Power Co.
- 21 Customer owned pole.
- 22 Unknown.
- 23 Missouri Utility Co.
- 24 Bay City (MI) Light Dept. Hand stamped.

Copper raised.



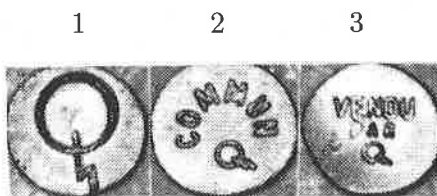
- 1 $2 \frac{1}{2} \times \frac{1}{4}$. Kansas Electric Power.
- 2 Left twist. $1 \frac{1}{2} \times \frac{1}{4}$. Southern California Edison.
- 3 Right twist. $1 \frac{1}{2} \times \frac{1}{4}$. Southern California Edison.
- 4 Splice. $1 \frac{1}{2} \times \frac{1}{4}$. Southern California Edison.
- 5,6 $1 \frac{1}{4} \times \frac{3}{16}$ rnd R gm cop (60). From Milwaukee Road ties.

Aluminum indent.



- 1 Joint ownership of pole. $2 \times \frac{3}{16}$. Delaware Valley Telephone Co., Port Jervis, NY.
- 2 Power. $2 \times \frac{3}{16}$. West Pennsylvania Power Co. The "P" and "T" used by this company indicate ownership of the pole.
- 3-5 Power. $2 \times \frac{1}{4}$. West Pennsylvania Power Co.
- 6 Telephone. $2 \times \frac{3}{16}$. West Pennsylvania Power Co.
- 7 Telephone. $2 \times \frac{1}{4}$. West Pennsylvania Power Co.
- 8 $2 \frac{1}{2} \times \frac{1}{4}$. Otter Tail Power. Jamestown, ND.
- 9 Unknown.

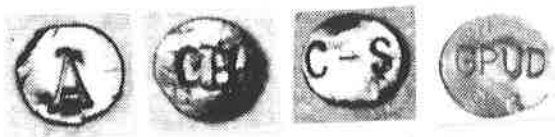
Aluminum raised.



- 1-3 $1 \frac{1}{2} \times \frac{1}{4}$ rnd R os. Quebec Hydro.

Brass $3 \times 1/4$ rnd I.

1 2 3 4



- 1 Alma, NE.
- 2 CB.
- 3 City of Shelby, NC.
- 4 Greater Pasco Utility Department. Washington state.

Company nails, letters only.

Minnesota Power & Light Co.

$2 \times 1/4$ steel raised.



Northwest Bell Telephone Co.

Steel indent.



$2 \frac{1}{2} \times 1/4$ $2 \frac{1}{2} \times 1/4$ $2 \frac{1}{2} \times 1/4$ $2 \frac{1}{2} \times 1/4$ $2 \frac{1}{2} \times 1/4$



$2 \times 5/16$

$2 \times 5/16$

Steel raised.



$2\frac{1}{2} \times \frac{1}{4}$



$2 \times \frac{1}{4}$



$2\frac{1}{2} \times \frac{1}{4}$



$2\frac{1}{2} \times \frac{1}{4}$



$2 \times \frac{1}{4}$



$2 \times \frac{1}{4}$



$2 \times \frac{1}{4}$



$2 \times \frac{1}{4}$



$2 \times \frac{1}{4}$



$2 \times \frac{1}{4}$

There is a large variety in the arrangement of the letters. Only a representative few are shown.

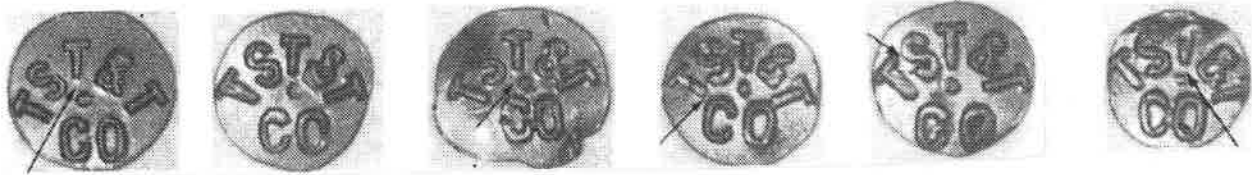
Southwest Light & Power Co.

$1\frac{3}{4} \times \frac{1}{4}$ steel raised.



Tri-States Telephone & Telegraph Co.

1 3/4 x 1/4 steel raised.



Other variations exist.

Miscellaneous steel, round raised.



- | | |
|-----|--|
| 1 | 2 x 1/4 (07). Sidney (NE) Municipal Service. |
| 2,3 | 2 x 3/8 (07). Municipal Water, Light & Power Dept. Nebraska. |
| 4 | 1 x 5/16 (07). Found in Cotesville, NE. |
| 5 | 2 x 5/16 (07). Dakota Power, Rapid City, SD. |

Railroad tie nails with extra characters

With one exception, these nails show letters and numbers.

Central RR of New Jersey. 1 × 1/4 rnd I stl (07).



The number indicates the class (size) of the tie. The "T" stands for "Species to be used Treated," and the second letter indicates the species group. See CRR of NJ for a full explanation.

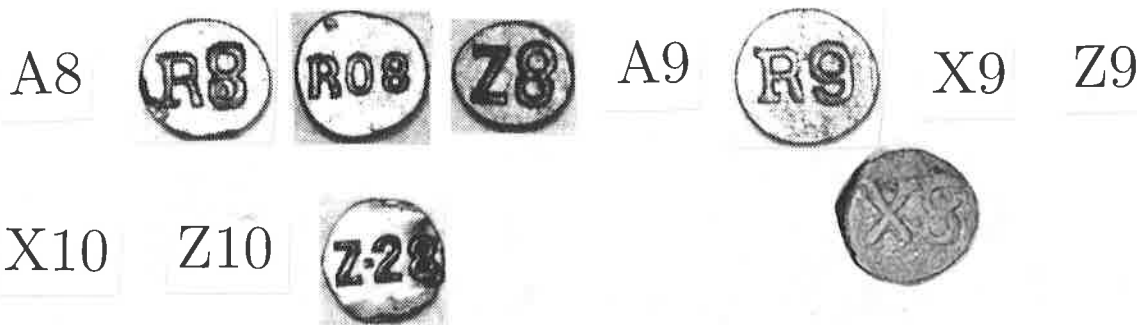
Great Northern. 2 1/2 × 1/4 rnd I stl (07).



The letter indicates the species. "F" = Fir, "P" = Pine, "S" = Spruce, and "T" = Tamarack. The number indicates the year of treatment. These were driven into the ends of ties before treatment. The "L" might stand for Lowry treatment.

The T10 also comes with gripper marks. It is a hybrid, and has been found on both the Great Northern and the Santa Fe. The F6 has also been found on the St. Louis, Rocky Mountain & Pacific.

Milwaukee Road. All are $2 \times 9/40$ rnd I stl (07) with two exceptions: The R08 is $2 \frac{1}{4} \times 5/16$, and the Z-28 is $2 \frac{1}{2} \times 1/4$ rnd R.



The letter indicates treatment while the number is the date. The "R" stands for Rueping treatment. The "Z" stands for Zinc chloride. The meanings of "A" and "X" are unknown.

A Z10 was found on the NYNH&H by John Iacovino. It is probably the result of a nail keg mix-up, and was intended for the Milwaukee Road.

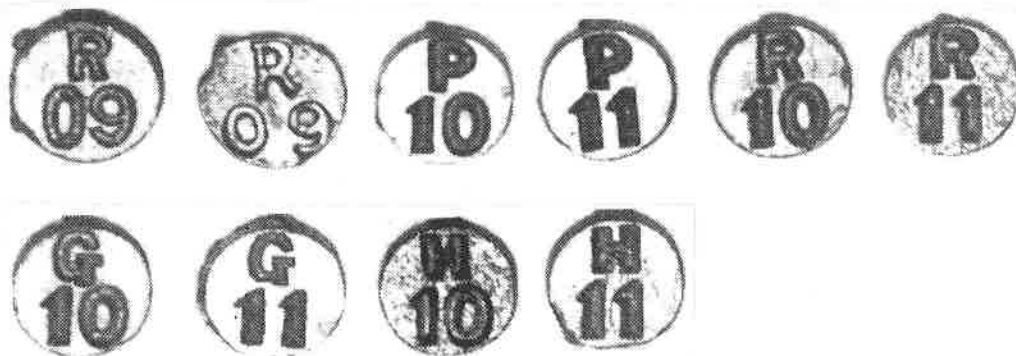
Pacific RR (Mexico). $2 \frac{1}{2} \times 1/4$ rnd R stl (32).



The meanings of these code nails is unknown. The numbers do not represent dates.

Other variations exist. Some of these have been attributed to the Mexican Pacific, but they are probably all from the Pacific RR.

Pennsylvania RR. All are $2 \times 3/16$ rnd I mi (13) except the second R09, which is $1 \frac{3}{4} \times 5/16$ rnd I stl (07).



The letter indicates wood. "R" = Red oak, "G" = Gum, "H" = Hickory, and "P" = Pine. The number is the year of treatment.

Southern Wood Piedmont. $3/4 \times 1/8$ rnd I stl ().

S
76

S
77

S
78



SWP is a treatment company, and these nails can be found in ties, usually switch ties, in the Southeast. See Treatment Company Sets in the appendix.

The number is the year of treatment, and the letter might stand for the company. The shank diameter is about .131".

"K" nails. All are $2\ 1/2 \times 1/4$ rnd R stl except where noted.

1



(07)

2



(07)

3



(07)

4



(07)

5



(07)

6



(06)

7



(06)

8



(07)

9



(07)

10



(07)

1,2,5 Pole nail found in KY, IL and OH.

3,6,7,9,10 Prescott & Northwestern. #3 is 2" long.

4 Two shank lengths: 2", found on the Prescott & Northwestern, and a $2\ 1/2$ " nail found in poles in KY, IL and OH. One 2" K/41 was found in a Maine Central tie.

8 Found on the Prescott & Northwestern and the Fonda, Johnstown & Gloversville.

The number represents the date.

On the FJ&G the 44's are found in ties originally used in the early teens. The railroad bought the ties second hand and drove the nails themselves. On the P&NW often two or three nails of the same date are found in a single tie, perhaps to indicate a later date. We do not know what the "K" stands for.

Miscellaneous nails. 2 1/2 × 1/4 rnd stl.

1

2

3



797
1947

(07)

(07)

()

- 1 Bullseye 4R. Santa Fe RR. The "4" represents 1904, and the "R" probably stands for "Rueping" treatment.
- 2 St. Louis, Rocky Mountain & Pacific. The 6 stands for 1906.
- 3 797 / 1947. American Car & Foundry. 1947 is probably the date.

Nails bearing company initials or monograms

These nails are almost universally found in poles. A few have been found in ties, and they are noted.

Two types are included here. (1) nails showing the treatment company, and (2) nails showing the company which used the nails. The latter are usually utility companies.

American Forest Products?

1 1/2 × 1/4 rnd R cop



Found in Washington, DC and in West Virginia.

Miscellaneous nails. 2 1/2 × 1/4 rnd stl.

1

2

3



797
1947

(07)

(07)

()

- 1 Bullseye 4R. Santa Fe RR. The "4" represents 1904, and the "R" probably stands for "Rueping" treatment.
- 2 St. Louis, Rocky Mountain & Pacific. The 6 stands for 1906.
- 3 797 / 1947. American Car & Foundry. 1947 is probably the date.

Nails bearing company initials or monograms

These nails are almost universally found in poles. A few have been found in ties, and they are noted.

Two types are included here. (1) nails showing the treatment company, and (2) nails showing the company which used the nails. The latter are usually utility companies.

American Forest Products?

1 1/2 × 1/4 rnd R cop



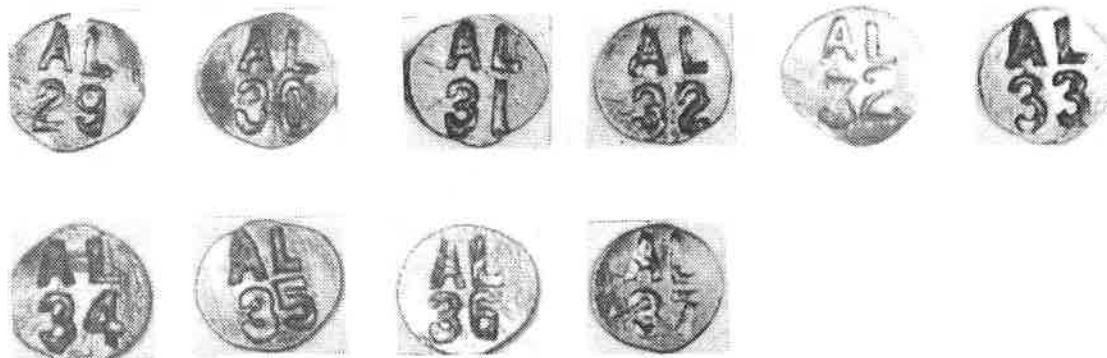
Found in Washington, DC and in West Virginia.

Ayer & Lord

2 1/2 × 1/4 rnd R stl (07)



2 1/2 × 1/4 rnd I stl (07)



The 39 comes also with a 1 1/2" shank. The indent 34 has been found in ties in test sections on the Illinois Central.

A&L owned three treating plants as of 1930: Carbondale, IL (built 1902), Grenada, MS (built 1904), and North Little Rock, AR (built 1925, expanded 1929). The first two were constructed for treating ties. Perhaps the monogram nails were used at the North Little Rock plant.

W. P. Brown & Sons Lumber Co.?

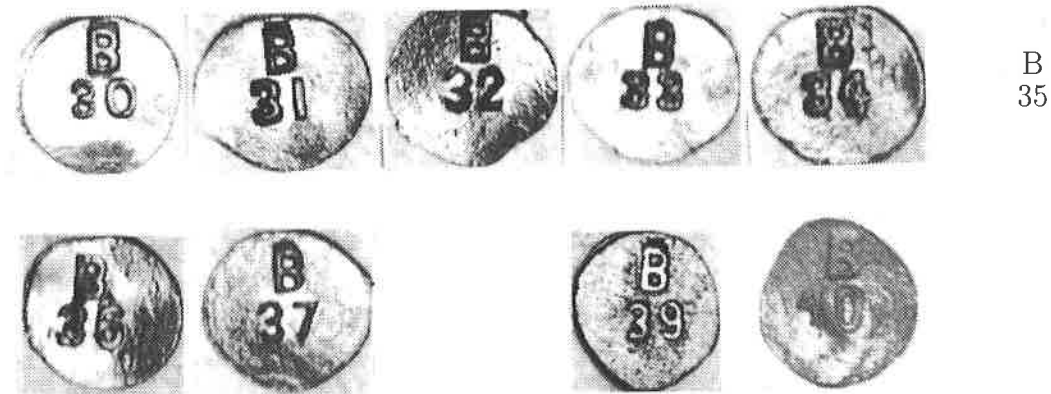
Copper indent



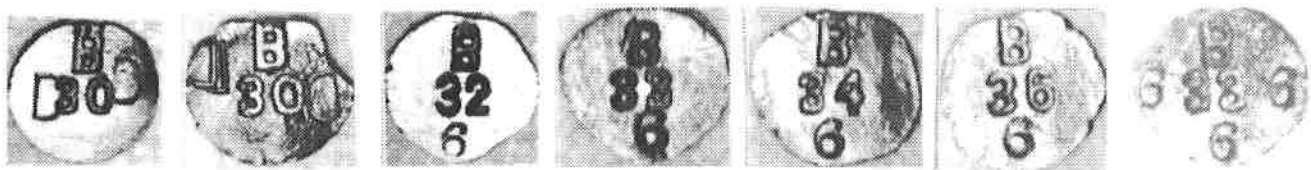
Found in Kansas.

BAXCO (J. H. Baxter & Co.)

Copper indent



Extra information stamped on head



Overstrikes



Aluminum plate.



Found in California. There are many variations of nails with extra characters and overstrikes. This company operated a treating plant at Long Beach, CA, built 1929.

Colman Co.?

Copper washer



Copper indent



[DNC, 141] attributed these nails to the Cascade Creosoting Co. The Cascade Pole Company did not operate a plant until 1941, so the attribution is wrong. Dave Parmalee, in [J-F '78], corrected the attribution to Colman, but he is not so sure now. Colman operated a plant in W. Seattle, WA, built 1884, and they were out of business by 1930.

Colman Co.?

Copper indent

CC
7 25
28

CC
8 25
28

CC
8 35
28



BF
8 CC 45
29

BF
8 CC 55
29

The numbers indicate:

Left: probably the depth of the pole.

Right: height of the pole.

Bottom: Date.

Other combinations exist.

Canada.

Aluminum raised

1

2

3

4



- 1 58 / BTC. BTC probably stands for Bell Telephone Canada.
- 2 66 / BCT. BCT = British Columbia Telephone. The series might run from 58 to 68.
- 3 71 / BCH. BCH = British Columbia Hydro. From [DNC, 142]: "The BCH set is believed to go from 44 to 75 (the 44 and 47 are steel without letters.)"
- 4 73 / BCH. The bottom of the "7" in the nail pictured was smashed down.

Century Wood Preserving Co.

Copper raised



Found in Washington, DC and in New Jersey. This company did not exist in 1930, but by 1934 they owned six treating plants, may of them older tie treating facilities. Their headquarters were in Pittsburgh.

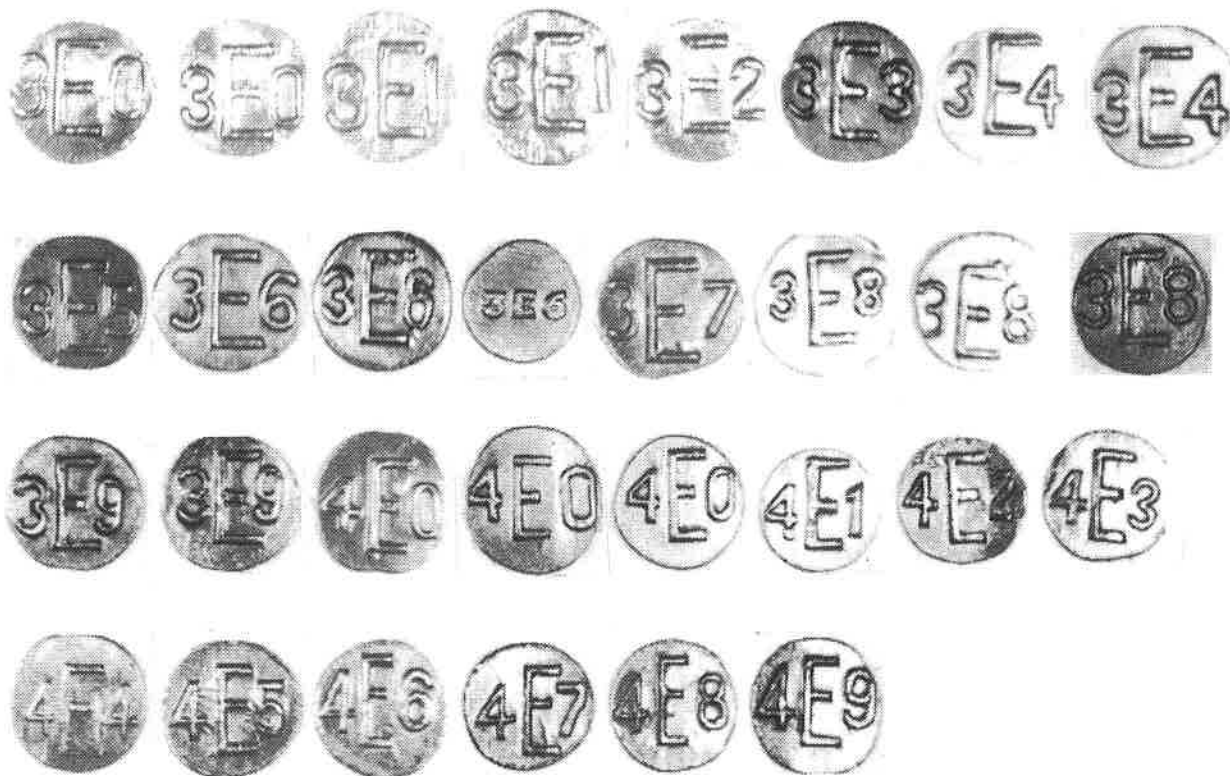
Frost Lumber

1 1/2 × 3/8 rnd R stl



Southern California Edison Co.

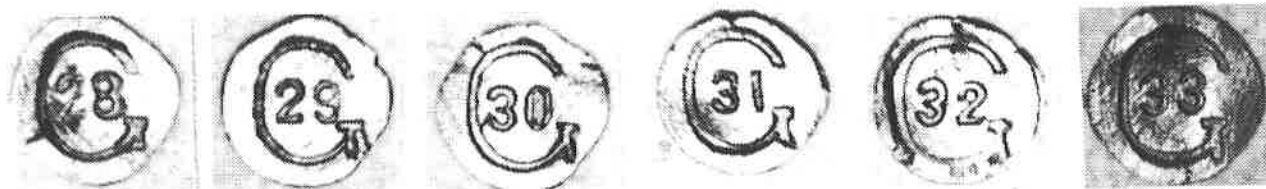
2 × 1/4 rnd R stl. The small 36 is 2 1/2 × 1/4, and the 47 comes with both a 1/4" and a 5/16" shank. All are type (07) with these exceptions: the 36, 36:c, and 37 are (18C), and the 44-49 are type (06).



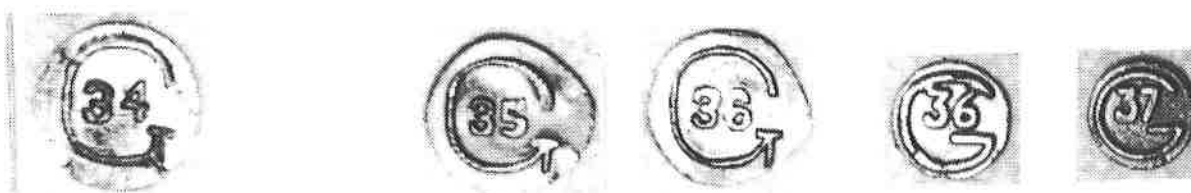
SCE had its own treating plant which mostly refurbished poles.
Minor variations exist for several dates.

Gulf States Creosoting Co.

Copper rnd I



Copper rnd R



2"

2" & 2 1/2"

2 1/2 × 1/4

2 & 2 1/2 × 1/4

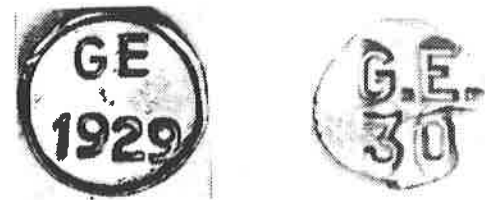
Overstrikes



Found in North Carolina. This firm operated six treating plants as of 1930, including the old Slidell, LA plant. Their headquarters were in Hattiesburg, MS.

Galveston Electric Co.?

Copper



The 1929 nail is a Hubbard with raised figures. The second nail has indented figures. This company also used four small copper nails G, E, Co, 27.

Greenfield [MA] Electric Light & Power Co.

Copper. Letters are raised, numbers are indented



Goodland [KS] Service.

Copper rnd I. Factory stamped "28", hand struck letters



Houston Wood Preserving Co.

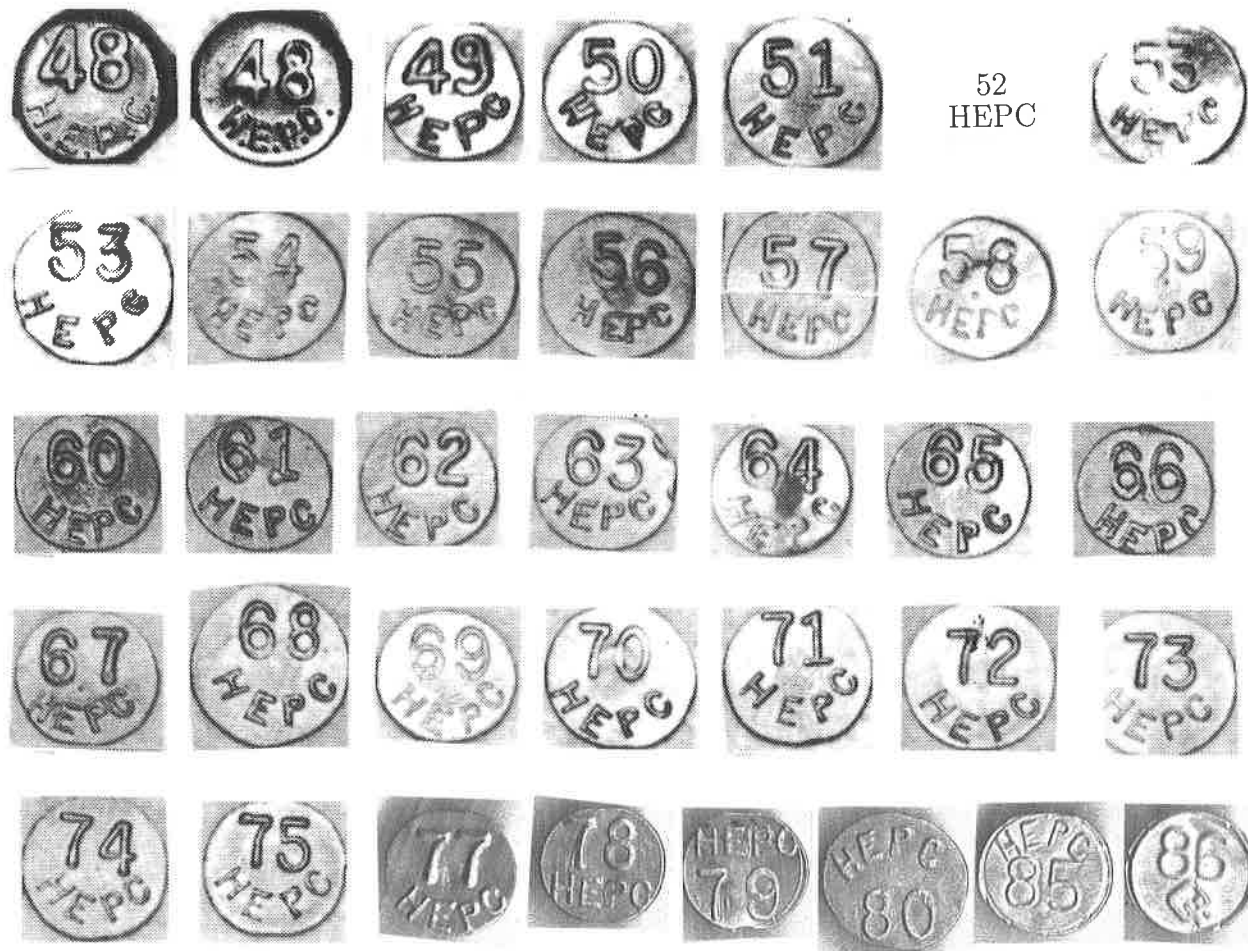
Copper indent



In 1927 they used a brand in poles with a steel rnd R (05) 27 date nail. The firm ran a treating plant in Houston, built 1923.

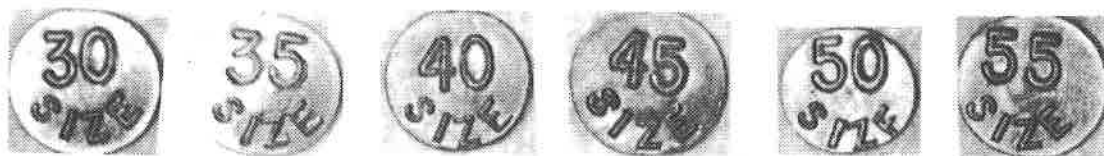
Hydro Electric Power Co.

1 1/2 x 1/4 rnd R alm. Exceptions: the 48's are chair-leg type (stamped in sheet metal), and the 49 and 50 have an oval shank



Only select dates 1976-2000 are shown, showing style changes.

SIZE nails. These show the height of the pole in feet.



Chair-leg dates



CLASS nails. These show the class (diameter) of the pole. The diameter decreases as the class increases.

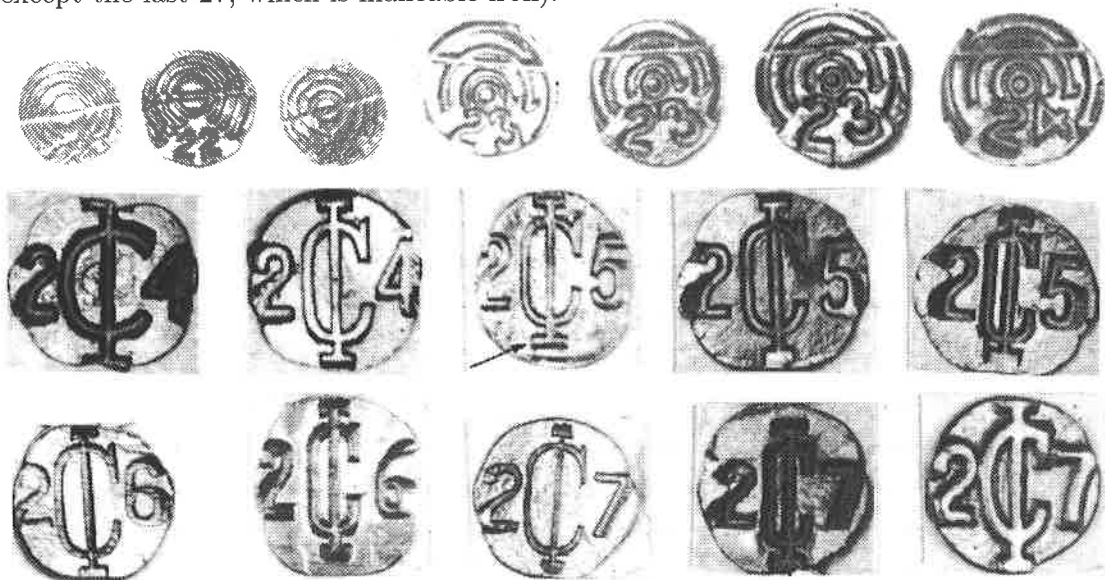


Sizes 25, 60, 65, 70, 75, 95, and 100, and Classes 1 and 7 have also been found.

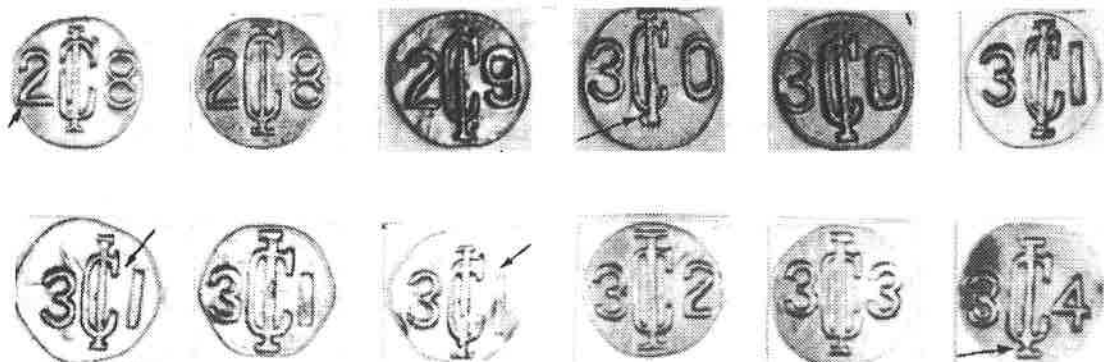
International Creosoting & Construction Co.

22-27:b are copper indent. At least the 24-27 are $1\frac{1}{4} \times \frac{1}{4}$ rnd R cop (07). 27:c is cast raised, and 28-42 are $1\frac{3}{4} \times \frac{1}{4}$ rnd R stl (07). A factory sample cast raised 26 also exists.

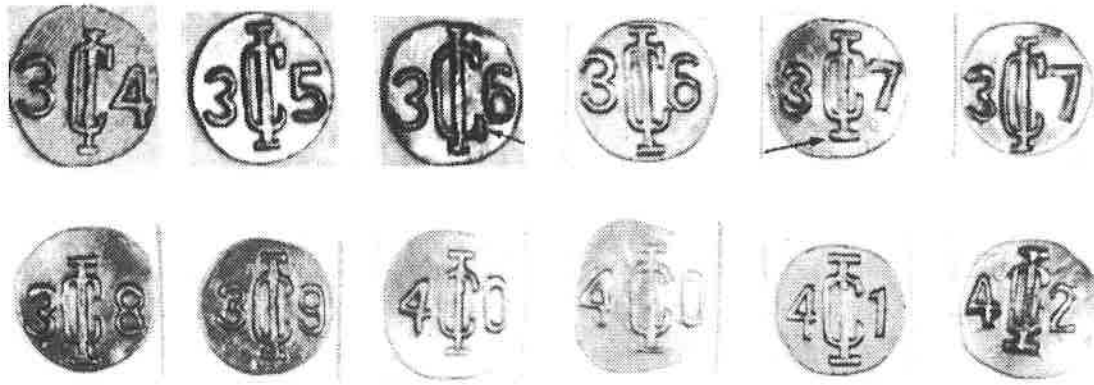
Copper (except the last 27, which is malleable iron).



Steel.



(continued)



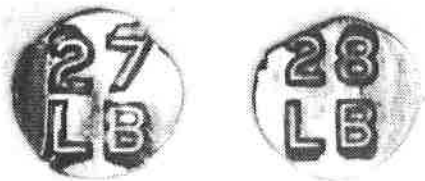
22's and 23's have been found in Nickel Plate ties, and 42's in Southern Pacific ties. Otherwise these are pole nails.

IC&C owned two plants as of 1930: that at Beaumont, TX (built 1897), and that at Texarkana, TX (built 1902, improved 1927).

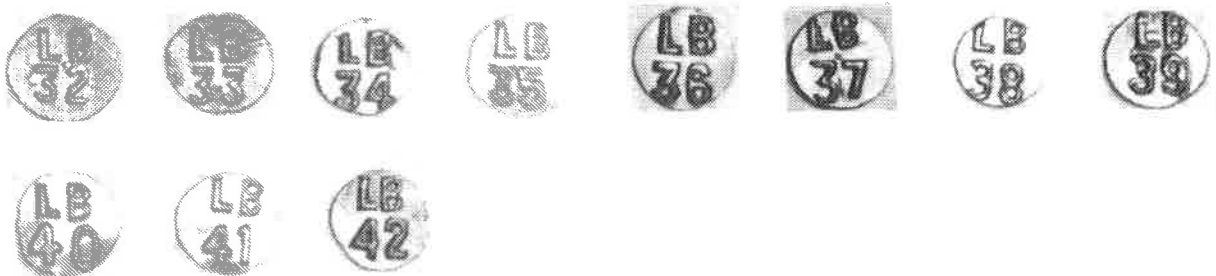
Long Bell Lumber Co.

Copper indent.

Copper Hubbard.



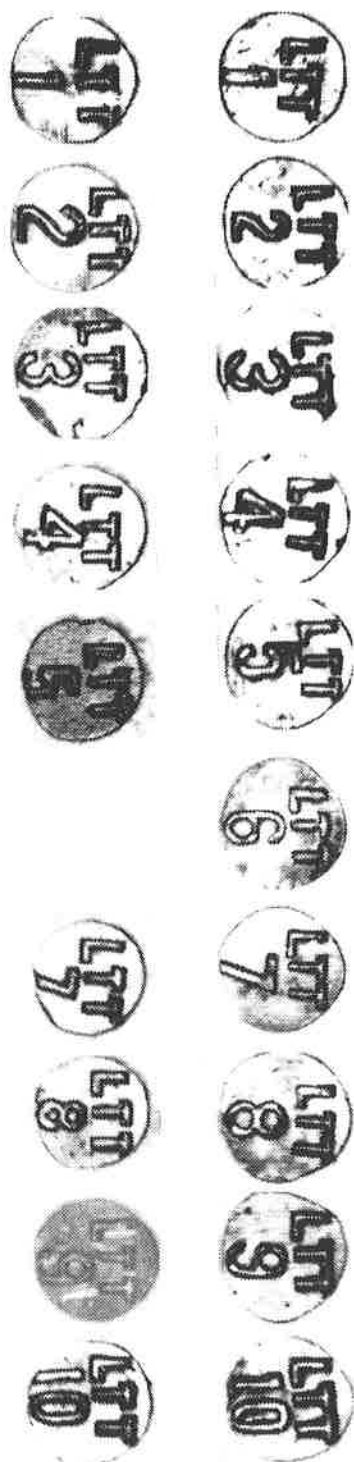
1 1/2 x 3/8 rnd R stl. The 37 also comes in a 2" shank. The diameter is probably wrong.



Found in KS, NE, OK, and TX.

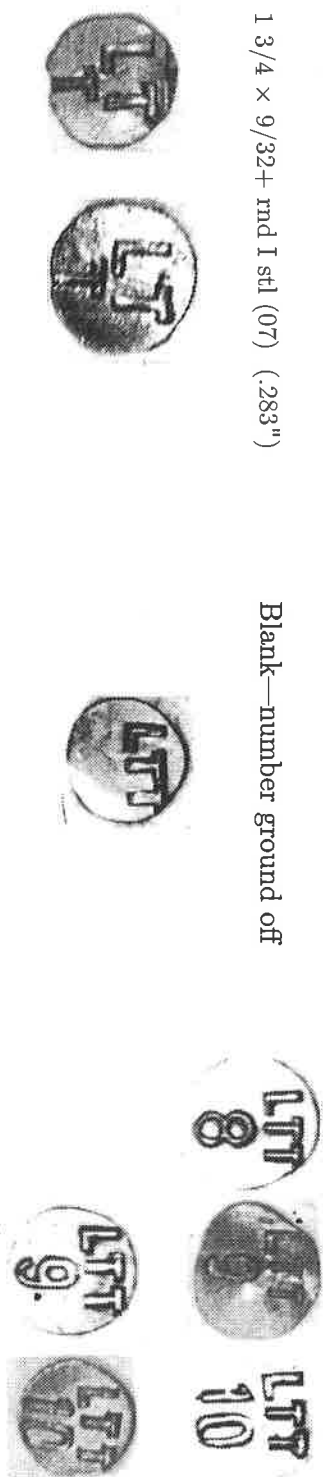
Lincoln Telephone & Telegraph Co. (Nebraska).

1 $1\frac{1}{2} \times 3\frac{1}{16}$ rnd R stl (07)



1 $3\frac{3}{4} \times 9\frac{9}{32} +$ rnd I stl (07) (.283")

Blank—number ground off



2 $1\frac{1}{2} \times 1\frac{1}{4}$ rnd I stl (07)



2 × 1/4 rnd I cop Big numbers



2 × 1/4 rnd I cop Small numbers



2 × 1/4 rnd I cop Other variations



rnd R cop



The number indicates the class (diameter) of the pole.

From Jerry Penry's article in [S-O '90, 2-4]: "It is my belief that LT&T first used the large $\frac{LT}{T}$ nails between 1912 and 1920. These nails have been found in Hastings, which became part of the operating area in the 1912 purchase [of Nebraska Telephone Co.]. My theory is that the numbering system started in the 1920's due to the fact that I have found the small steel number nails in poles along with International Creosoting Co. nails dating in the 1920's and 1930's. The copper nails probably came about 1950. All nails were discontinued in 1966 in favor of the pole branding system. As poles were stored in the pole yards, the nails were driven into the bottom of the poles to make for easier identification because poles were piled on top of each other. The nail was to stick out 1/4" so it could be easily removed from the bottom and placed in the body of the pole when it was set."

McFarland Co.?

Aluminum plate



Copper indent



Copper indent. Factory stamped "M", hand struck numbers



Found in California.

Nebraska Telephone Co.

NT
05

NT
06



These are the earliest known pole nails.

NTCo. was bought in 1912 by Lincoln Telephone & Telegraph Co. [S-O '90, 2]

National Lumber & Creosoting Co.

Copper indent



Steel rnd I (07)



1 3/4" 2 1/2" 2 1/2" 2" & 2 1/2" 2" & 2 1/2" 2"

2 1/2 x 1/4 rnd R stl (07). The 36 also comes with a 2" shank.



As of 1930 NL&C operated eight treating plants. A 2 1/2" rnd R ^N/₃₆ was found in a second hand tie on the Akron, Canton & Youngstown.

Pacific Creosoting Co.

Copper plate



Copper indent, factory stamped date



Copper indent, hand stamped date



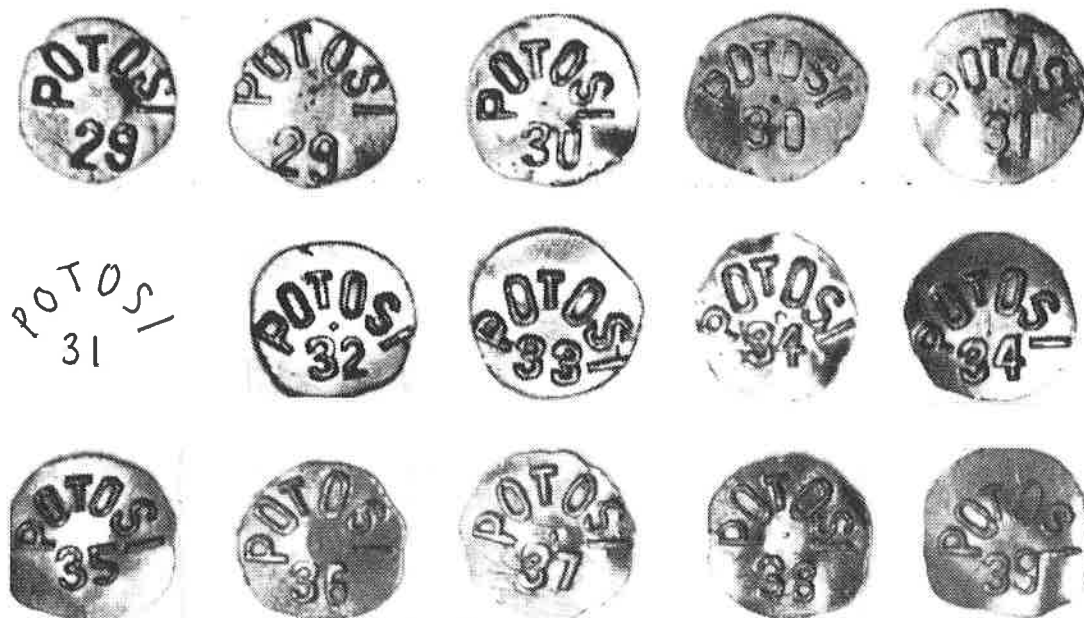
Copper indent. Hand struck additional information. Many variations exist.



This company had a treating plant at Eagle Harbor, WA, built 1906. Pacific Creosoting was taken over by West Coast Wood Preserving before 1930. The PC dates after the takeover were hand stamped leftover nails. [M-J '82, 3] PC nails are found in California.

Potosi Tie & Lumber Co.

Copper raised



Several overstrikes exist. The 33 is rare.

J. F. Prettyman & Sons.

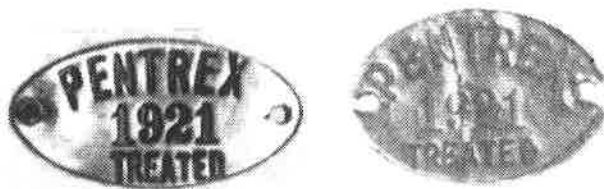
Copper raised



Found in Connecticut and Washington, DC. This company had a treating plant at Charleston, SC, built 1927.

Pentrex

Plates—the first brass, the second copper (shown smaller than actual size)



1 1/2 × 3/16 rnd R stl



A 29 also exists. After 1929 Pentrex used ordinary date nails. They are

1 1/4 × 3/16	rnd R	stl (25)	30-42
1 1/4 × 1/5	rnd R	stl (07)	33,37
1 1/2 × 1/5	rnd R	stl (06)	36,38,39,40

[M-A '91, 8-9]

Piedmont Wood Preserving Co.?

1 3/4 × 1/4 rnd R stl (07). The second 37 has a chisel point



1 3/4 × 1/4 rnd R stl (07). All but the first and last nails shown have chisel points



Found in WV, PA, and CT. This company had a plant in Augusta, GA, built 1927.

Quebec Hydroelectric.

1 1/2 × 1/4 rnd R os cp alm



Republic Creosoting Co.?

1 1/2 × 3/8 rnd R stl

1 1/4" rnd I cop



The steel nail was found in Kansas. Republic had four plants as of 1930.

Southern Wood Preserving Co.

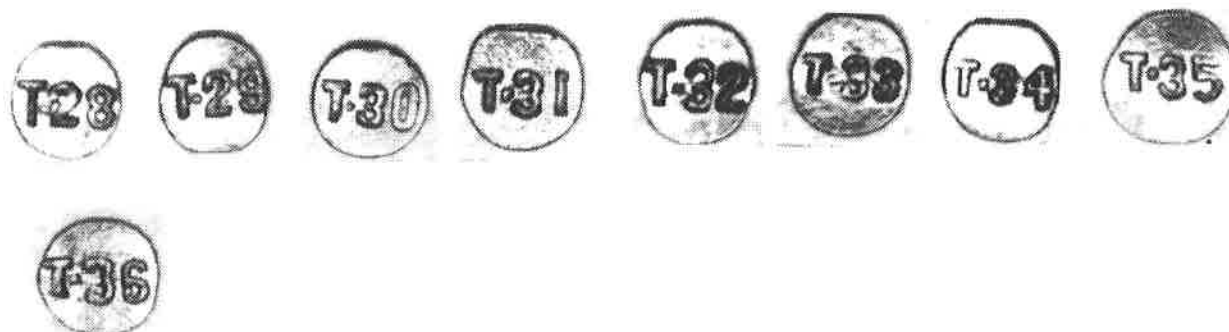
rnd R copper



Found in Washington, DC, New Jersey, and southern states. They had two plants as of 1930: one at Atlanta, GA (built 1908, improved 1921), and at Chattanooga, TN (built 1925, improved 1926).

T (Unknown company)

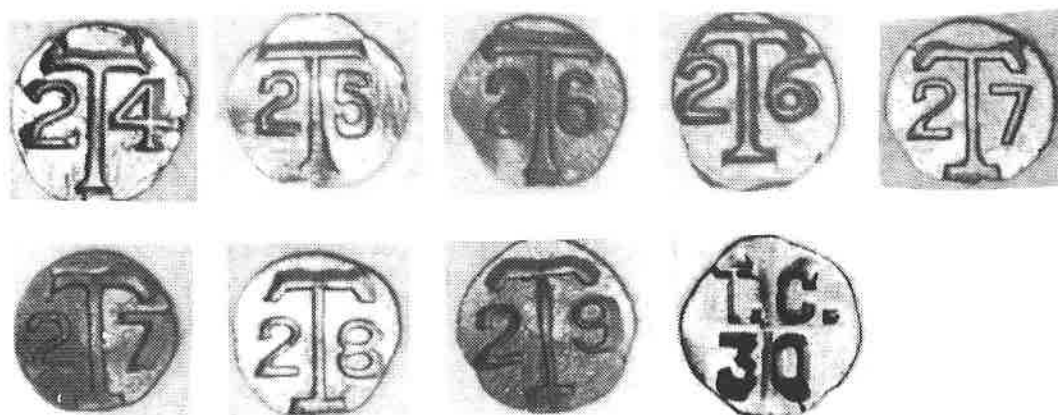
2 1/2 × 1/4 rnd R stl



"Found in scattered areas in New Jersey, New York, Pennsylvania, Connecticut and Massachusetts. The complete set has not been found in any one area." [DNC, 159]

Texas Creosoting Co.

rnd I cop



Copper Hubbard



This company ran two plants: one at Houston, TX (built 1923), and one at Orange, TX (built 1924).

Taylor-Colquitt Co.

2 1/2 × 1/4 sqr R stl (07)



2 1/2 × 1/4 rnd R stl (07)



1 1/4 × 1/4 rnd R stl (07)



The square TC was found with a rnd R 27 and 28 date nails. The rnd R TC was found with a rnd R 29. Locations: New York, New Jersey, Pennsylvania and Connecticut. T-C ran a treating plant at Sigsbee, SC, built 1926.

United States Forest Service.

2 1/2 × 1/4 sqr I ds stl (07)



2 × 1/4 dia I stl (07)



“ds” = diamond shank. The shank is turned 45° with respect to the head on the “US”.
“A Forest Service employee would drive the nail into a tree that had been approved to be cut. The lumber company, after cutting the tree, would remove the nail from the trunk and drive it in the stump. The Forest Service inspector could then look at the stump to verify that permission had been given to cut the tree.” [DNC, 160]

Wood Preserving Corp.

2 1/2 × 1/4 rnd R stl (07)



As of 1940 this company owned sixteen treating plants. They later became Koppers Co.

West Coast Wood Preserving Co.

rnd I cop



WC
38



WC
40



Many errors and minor variations exist. [DNC, 161] lists WC CC35, WC C335, WC 399, WC 39C, WC 41P, WC 4P, WC C 0,

"P" probably stands for Pine, while "C" means Cedar. Found in California, Washington, and Montana. Some have been found in Milwaukee Road bridge timbers. See [M-J '82, 3-4]. WCWP ran two plants: one at Eagle Harbor, WA (built 1906, run by Pacific Creosoting Co., improved 1927), and one at Seattle, WA (built 1912, improved 1927).

Miscellaneous letter-number nails.

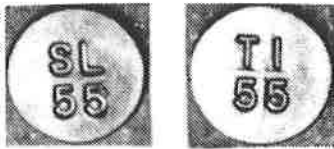
2 1/2 × 1/4 sqr R stl (07) G29



A 30 also exists. Some people have thought that these nails are Gulf States. But the square 29 and 30 have only been pulled in the Atlanta area where no Gulf States nails are found.

The G might stand for Gulfport Creosoting Co. They built a plant in Gulfport, MS in 1906, which was expanded in 1926 and 1949. A second plant was constructed in Mobile, AL in 1938, with additions in 1939 and 1943.

2 × 1/4 rnd I alm



These are factory samples, and were possibly never used.

1 1/2 × 1/4 rnd R os cp alm



Found in Ontario, Canada. 63, 64, and 65 are also known.

2 1/2 × 1/4 rnd I stl (07)



Pole nail. Some have turned up in Colorado. This is not a Great Northern nail, as some people have thought.

Single digit code nails

Sets #1, #2, #3, and #4 were used by the Louisville & Nashville RR to number switches. See also set #16.

Set #1. 2 x 1/4 rnd R stl (05)



Set #2. 2 x 1/4 rnd R stl (06)



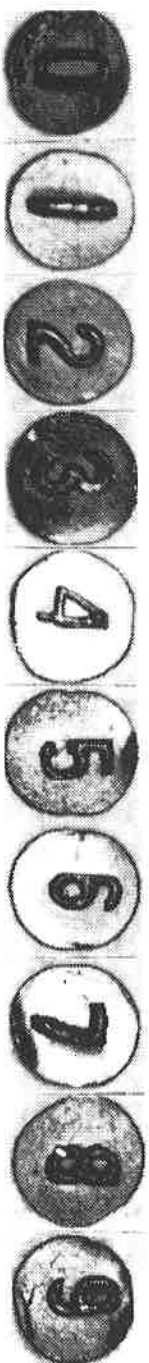
Set #3. 2 x 1/4 rnd R stl (07)



Set #4. 2 x 1/4 rnd R stl (19)



Set #5. $2 \times 1/4$ rnd R stl (06)
Eastern Illinois Telephone Co. Used to number poles.



Set #6. $2 \times 1/4$ rnd R GM stl (07)
Union Pacific RR. An old set.

There are two shank variations for this set. The difference lies with the spacing of the gripper marks. [Fall 2003, 4-5]



Sets #7, #8, and #9 were used by the Southern Pacific RR in bridge timbers. Quoting [DNC, 177]: "It is believed that the bridge was precut and assembled at the creosoting plant. Each piece was marked with code nails. The bridge was disassembled, creosoted and then sent to the site. It was reassembled in accordance with a diagram using the numbers marked on each piece. By using this procedure, all ends of timbers received the proper treatment and no cutting had to be done after the treatment which would expose the raw wood."

Set #7. $2 \times 1/2 \times 1/4$ rnd R stl (03)



Set #8. 2 1/2 x 1/4 rnd R stl (04)



Set #9. 2 1/2 x 9/40 rnd R stl (07)



Set #10. 2 1/2 x 1/4 rnd R stl (07)
Oklahoma Gas & Electric and Detroit Edison Co. Used to number poles. Georgia RR, used to number switches. Boston & Maine RR, to number ties in a test section in North Conroy, NH. See also Set #18.



Set #11. 2 1/2 x 1/4 rnd R stl (07)
Oklahoma Gas & Electric Co. Used to number poles.



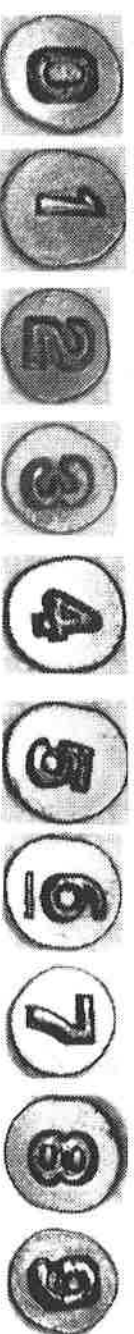
Set #12. 2 1/2 × 1/4 rnd R. stl (18B)
West Texas. From poles?



Set #13. 2 1/2 × 1/4 rnd R. stl (18C)
West Texas. Pole nails?



Set #14. 2 1/2 × 1/4 rnd R. stl (25)
Detroit Edison. Used to number poles. Usually found with a letter nail.



Set #15. 2 1/2 × 1/4 rnd R. GM stl (07)
Union Pacific RR.



Set #16. $2\frac{1}{2} \times 1\frac{1}{4}$ rnd R stl (07)
Louisville & Nashville RR. Used to number switches. Found with Sets #1-#4. "Very flat head similar to the Georgia RR set #10, with heads almost identical to the 2 inch long L&N Set #3." [DNC, 179]



Set #17. $2\frac{1}{2} \times 1\frac{1}{4}$ rnd R stl (31)
Mexico. Used to number poles.



Set #18. $2\frac{1}{2} \times 1\frac{1}{4}$ rnd R mi (11), and $2 \times 3/16$ rnd R mi (11)
"This set comes in both thick and thin shanks with identical heads. The thin shanks are about twice as scarce as the thick ones. Both were used to number ties in a test section on the Boston & Maine RR in North Conroy, NH. The thick shank was also used by the Baltimore & Ohio RR in test sections." [DNC, 179] See also Set #10.



Set #19. $2\frac{1}{2} \times \frac{1}{4}$ cut R stl (07)
Baltimore & Ohio R.R. Used with Set # 18 in a test section near Washington, DC to number ties from 1 to about 2,500. Probably used in the 1920's.



Set #20. $2\frac{1}{2} \times \frac{1}{4}$ rnd I stl (07)
Milwaukee Road and Chicago, Burlington & Quincy. An old set.



Set #21. $2\frac{1}{2} \times \frac{1}{4}$ rnd I stl (07)
Southern California Edison.



Set #22. $2\frac{1}{2} \times \frac{1}{4}$ rnd I stl (06)
Southern California Edison, and Chicago, Burlington & Quincy.



Sets #23 and #24 were used by the Los Angeles Gas & Electric Co.

Set #23. $2\frac{1}{2} \times 1\frac{1}{4}$ rnd I stl (18B,C)
The 3 and 7 are (18B). The others are (18C).

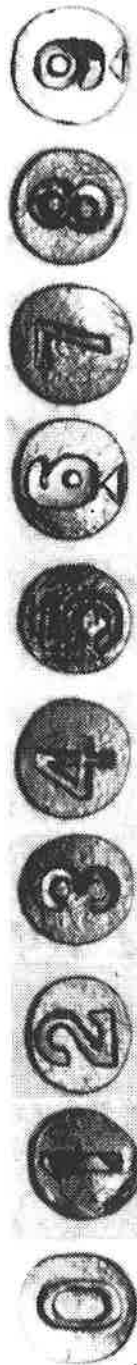


Set #24. $2\frac{1}{2} \times 1\frac{1}{4}$ rnd I stl (18C)



Sets #25 and #26 were used by Indiana & Michigan Electric Co. The 1 of both sets was used as the "T" of "IGS" by Indiana General Service. The 0 and 1 of Set #26 were used by the Southern Pacific RR.

Set #25. $2\frac{1}{2} \times 1\frac{1}{4}$ rnd I stl (07)



Set #26. $2\frac{1}{2} \times 1\frac{1}{4}$ rnd I stl (07)



Set #27. 2 1/2 x 1/4 rnd I stl (01) Found on the Warrenton RR in second hand ties. Two were used in each tie to date the tie. For example, a "2" and a "7" were used for 1927.



Sets #28 and #29 belong to the Short Line Code Set (see Treatment Company sets). They were used about 1934 in ties.

Set #28. 1 1/2 x 1/4 rnd I stl (07)



Set #29. 1 1/2 x 1/4 rnd I, stl (07)



Set #30. 2 x 3/16 rnd R stl (18C)
Atlantic Coast Line RR.



Sets #31 and #32 were used by the Union Pacific RR. The Set #31 9 has a square head.

Set #31. $2\frac{1}{2} \times 7/40$ rnd R gm stl (07)



Set #32. $2\frac{1}{2} \times 7/40$ rnd R gm stl (07)



Sets #33, #34, and #35 were used by Utah Power & Light to show the year in pairs. Minor shank variations exist for Set #33.

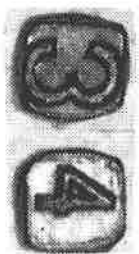
Set #33. $2\frac{1}{2} \times 1/4$ sq R stl (18)



Set #34. $2\frac{1}{2} \times 1/4$ sq R stl (07)



Set #35. $2\frac{1}{2} \times 1\frac{1}{4}$ sq R stl (18)



Set #36. $2\frac{1}{2} \times 1\frac{1}{4}$ sq I stl (05)

Telluride Power & Light Co., and Portsmouth, Ohio Street Railway (from poles). The complete set exists with anchor marks on all sides. Another set, with identical heads, has anchors on only two sides. The 0, 6, and 8 have not yet been found in this set.



Set #37. $1\frac{1}{4} \times 3/16$ rnd I cop (07)
Potomac Edison.



Set #38. $1\frac{1}{4} \times 3/16$ rnd I cop (60)
The 0, 1, 2, 4, and 5 were found on the Pennsylvania R.R. The others are Potomac Edison. The 6 might have been used as both a 6 and a 9.



Set #39. 1 1/2 x 1/4 rnd R cop (12)
 Southern California Edison. The copper L, R, and S are considered to be part of this set. The 1 and 3 are found with two shanks: one the standard type (12), the other with straight anchors and no mark.



Sets #40 and #41, and sometimes #42, were used by Bell Telephone in Canada. Nails were used in pairs to show the date. The nails from the 1970's are the Set #41 with the B and T close together.

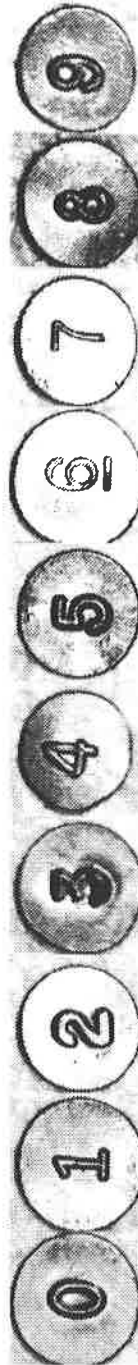
Set #40. 1 1/2 x 1/4 rnd R os cp alm ()



Set #41. 1 1/2 x 1/4 rnd R os cp alm ()



Set #42. 1 1/2 x 1/4 rnd R os cp alm ()
 Quebec Hydro-Electric. Used to number poles from a junction.



Set #43. $2 \times 3/16$ rnd I alm (61), and $1 1/2 \times 3/16$ rnd I alm (61)
 The Louisiana Power & Light Co. used the $1 1/2$ " set to number poles from a junction. Northern States Power Co. used the 2" set. The 2" 0, 8, and 9 have not been found. The Chicago, Burlington & Quincy used the 2" 2 in bridges with a steel 8 to indicate the span length of a bridge.



Set #44. $2 1/2 \times 1/4$ rnd R. stl (07)
 Baltimore & Ohio. Found in ties.



Set #45. $2 1/2 \times 3/16$ sq R. stl (07)
 Baltimore & Ohio. Found in bridge timbers.



Set #46. $7/8 \times 1/8 +$ rnd I stl ()
 [DNC, 186] says the 5, 8, and 9 are (18). The 2 and 4 were used by the Canadian National in ties. The company which used the 5 is unknown. The 8 and 9 were used by the Trona RR, supposedly to date ties 1958 and 1959.



Set #47. $2 \times 1/4$ rnd I stl (18C)
 Phelps Dodge. Use unknown.



Miscellaneous nails.

2 1/2 x 1/4 rnd I stl (—) — x 1/4 rnd I stl (07)
 Baltimore & Ohio. The second 2 and the 3 are Southern Pacific. From bridge timbers. The 0
 (01). The first 2 is of unknown type. Found in ties measures 2", the 1 is 1 1/2", and the 5 and 6 are
 in test sections dating from 1908-1911. 1 1/2".



2 2 0 1 5 6

2 1/2 x 1/4 rnd I stl (06) 2 1/2 x 1/4 rnd I stl (—)
 San Diego Gas & Electric, and San Diego Gas & Electric.
 Southern California Edison. 4 and 5 are (12), 10 is (07).
 Variation of Set #21.



1 3/4 x 5/16 rnd I gm stl (07) 1 1/2 x 3/16 sqr I stl (07)
 Michigan Central RR. "Used to date poles in the
 From ties. Allentown, PA area toward the
 end of 1943 when the 43 date
 nails became hard to get be-
 cause of the war." [DNC, 186]

0

8



1 1/2 × 1/4 rnd R. cp stl (39)
Canada.

2 1/2 × 1/4 rnd R. stl (07)
Washington.

2 1/2 × 1/4 rnd R. stl (07)
California.



2 1/2 × 1/4 rnd R. stl (06)
Pacific Telephone.

2 1/2 × 1/4 rnd R. stl (25)
Detroit Edison.

1 1/4 × 3/16 rnd R. gm cop (60)
Pennsylvania R.R. From ties.
The 9 might be a 6.



6



1 3



Switch nails

Ties used at switches are longer than normal, and come in lengths which increase as the rails fork away from each other. To ensure that the trackmen place the different length ties in the appropriate order, switch nails were driven into the ends of ties at the saw mill. They tell the length of the tie, in six-inch increments. Many collectors call them foot nails.

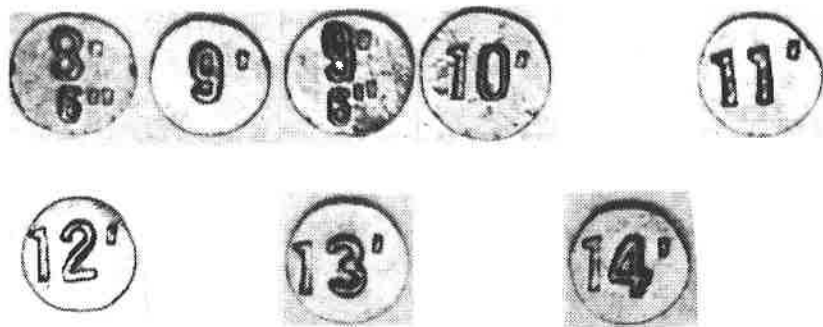
Only the Union Pacific and Southern Wood Piedmont (a treating company) used these nails. SWP is still driving switch nails into their overlength ties. See the Treatment Company Nails section in volume II for a complete description of SWP nails.

The standard tie on the UP was 8 feet long, so their overlength ties begin with 8 feet 6 inches. The standard SWP tie is 8 feet 6 inches, so overlength ties begin at 9 feet.

Union Pacific RR.

All nails are 2 × 1/4 rnd R stl (07). Sets with gripper marks (GM) are noted.

Set #1. No GM. 7th anchor broken, numerals smaller than Set #2.



Set #2. No GM. Heavy anchor markings.



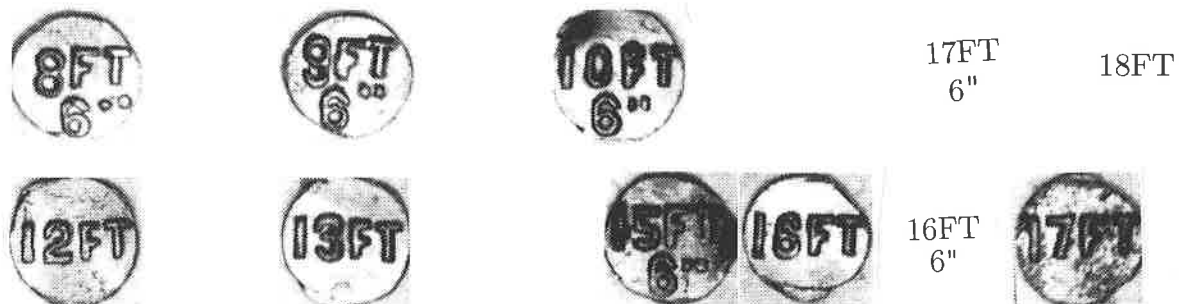
Set #3. No GM. Usually 4 or 5 fine anchor marks.



Set #4. No GM. Very small numerals.



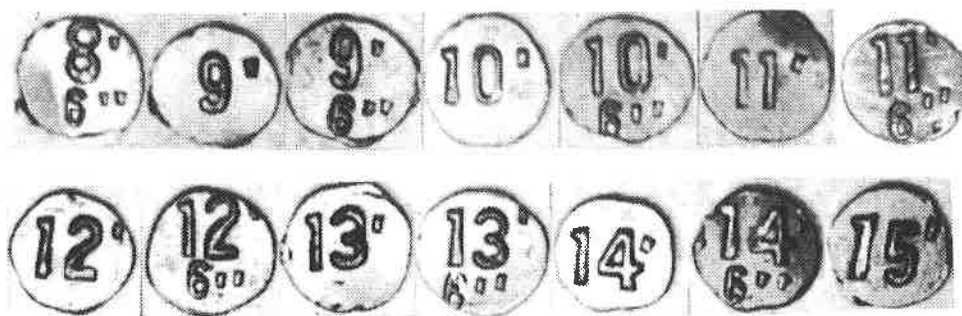
Set #5. GM. "FT".



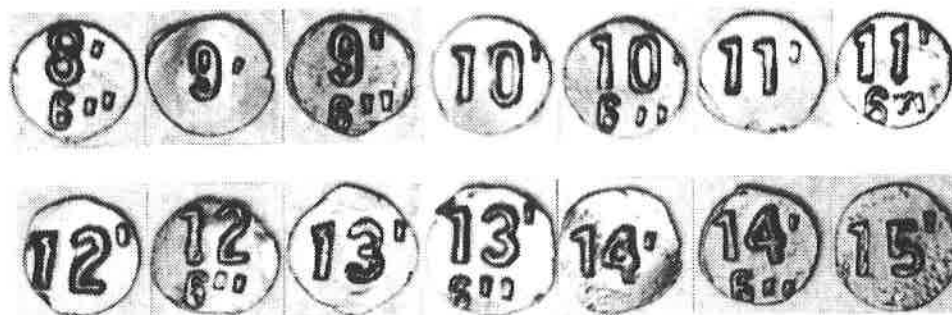
Set #6. GM. Very triangular foot and inch marks – no diamond on the shanks.



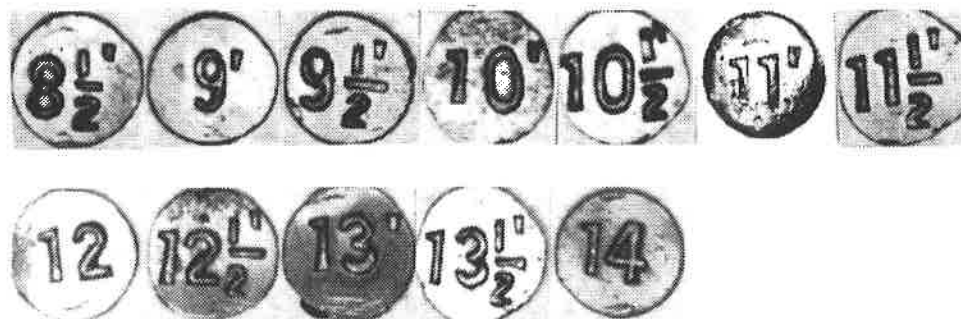
Set #7. GM. Large numerals.



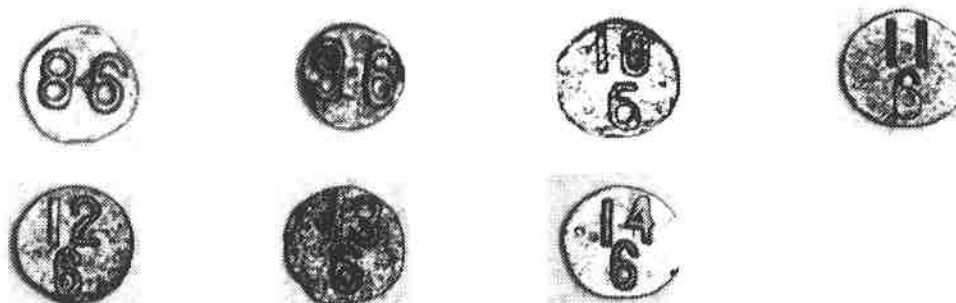
Set #8. GM. Small numerals.



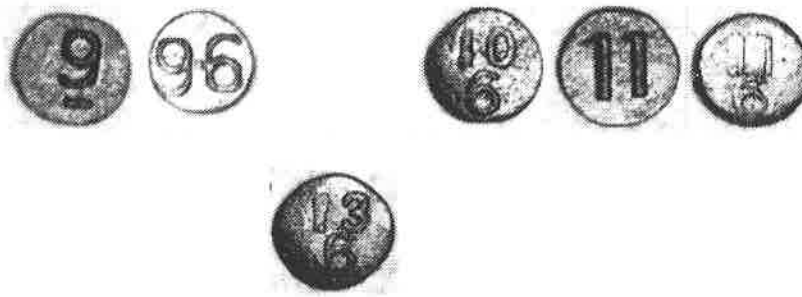
Set #9. GM. Includes the $\frac{1}{2}$ with foot mark.



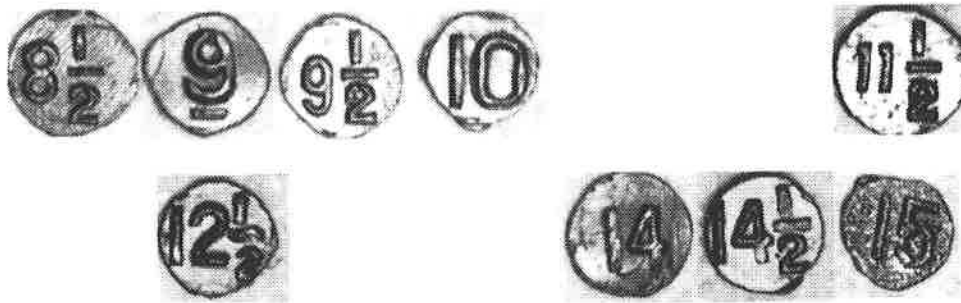
Set #10. GM. Narrow 6.



Set #11. GM. Wide 6. Found in Utah.



Set #12. GM.



Set #13. GM.



Set #14. GM. Miscellaneous.



Like Set #6. Like Set #8. Like Set #9. Like Set #13. Like Set #8.

Southern Wood Piedmont.

All nails are 1/4" rnd R stl (19). Lengths are noted for each set.

Following the classification devised by Steve Worboys, the nails are divided here into five sets. Except for Set #2, the shank lengths vary considerably within each set, so I list the average length along with the range of lengths to be found.

Basically Sets #1 and #2 are the "large numbers" sets, while sets #3, #4, and #5 are the "small numbers" sets. Generally the numbers on Sets #1 and #2 nails are identical while numbers on sets #3, #4, and #5 nails are the same. The exceptions are as follows:

For whole footage, Set #2 13, 15, and 16 have smaller numbers than the corresponding Set #1 nails. The Set #2 13 is identical to the 13 of Sets #3, #4, and #5. The 15 of Set #2 is larger than the small numbers 15's, and the Set #2 16 is of a different style, though the same size, as the "small numbers" group.

The half-footage nails have identical numbers for all five sets, with one exception. The 1's are closer together on the $\frac{11}{6}$ of set #4 than they are on the sets #1 and #2 nails (I have not seen the Set #5 $\frac{11}{6}$). To differentiate between sets I consider the shank markings, the location of the numbers on the head (most are off center), and the size and shape of the head. These are consistent within each set. Also, shank length, though not very reliable, is another indicator. The position of the numbers on the heads follow the listing. Most nails are easily classified; however, Some nails in Sets #3 and #4 seem like they would fit in the other set.

I present the sets in what I hope is their chronological order. Set #3, without half footage, is listed third because of Parmalee's reference in [N-D '79, 1]. Presumably Sets #4 and #5 were yet to be made.

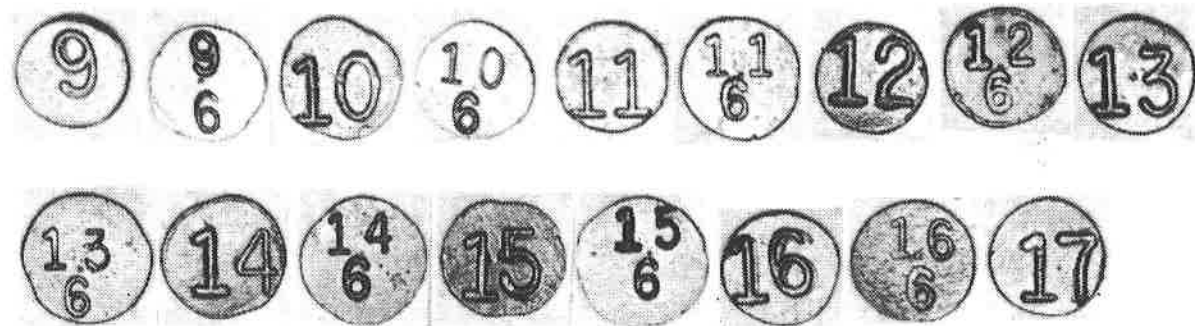
Set #1. 1 1/8"-.

The lengths range from 1" to 1 3/16". Heads are relatively large, and are consistently round. Anchor markings are average. See [Lewis, 137] for a photo of two shanks.

The 11:b has numerals which do not line up at the feet.

The digits of the 13:b are closer together than 13:a's, and the curve at the base of the '3' actually runs above the foot on the '1'.

The 13:b and $\frac{13}{6}$ have been found with $\frac{S}{79}$ date tacks.



For photos of the following new finds, see [Winter 2001, 9]:

Set #1 11:b (2nd 1 is higher), 13:b (#'s closer together)

Set #2 9 (lower left) 14/6 (lower right)

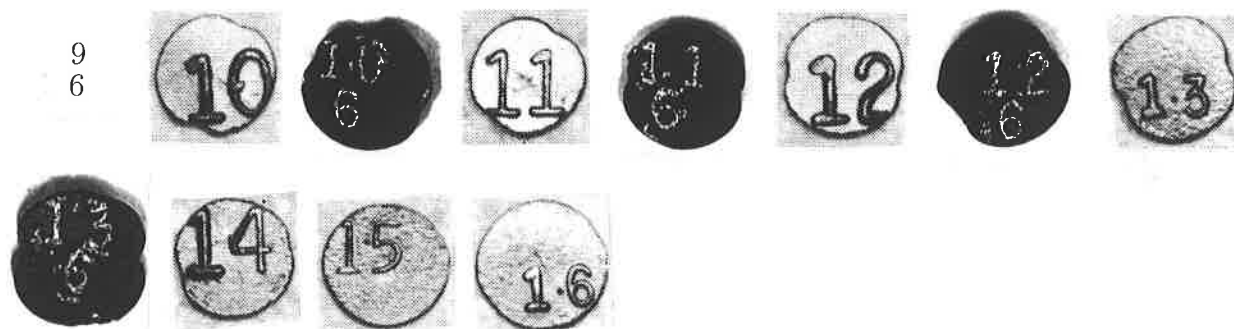
Set #5 12 (high), 15 (slightly left)

Tom Meyer has found a few 1 1/4 × 1/4 rnd I alm () 10 in switch ties in Dland, FL on CSX track. [Winter 2000, 18]

Set #2. $1\frac{3}{4}$ ".

The $\frac{15}{6}$ probably exists.

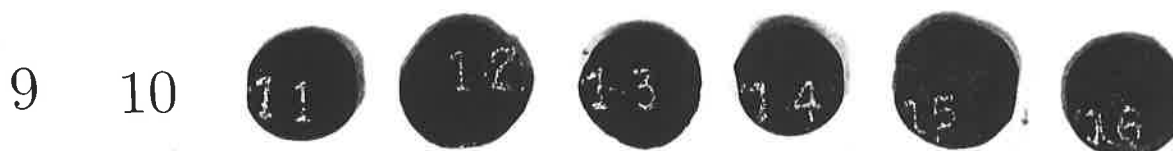
These nails are consistently $1\frac{3}{4}$ ". The shape of the head for most numbers is indented on opposite sides, like a fat hourglass. Steve Worboys calls these "cell division" heads, comparing them with a live cell about to divide. The 15 and 16 appear round.



Set #3. $1\frac{5}{16}+$ ".

This set is mentioned by Dave Parmalee in [N-D '77, 1]. Dave mentions the 9, which Steve and I have not found. It may be that the 9 belongs to Set #4 or #5.

The shank length ranges from $1\frac{3}{16}$ " to $1\frac{1}{2}$ ". The 10, 11, and 14 are usually a bit longer than the other nails. Anchors are evenly spaced, and are more pronounced than on Set #5, and less pronounced than on Set #4. Heads are fairly round.



Set #4. $1\frac{1}{4}$ ".

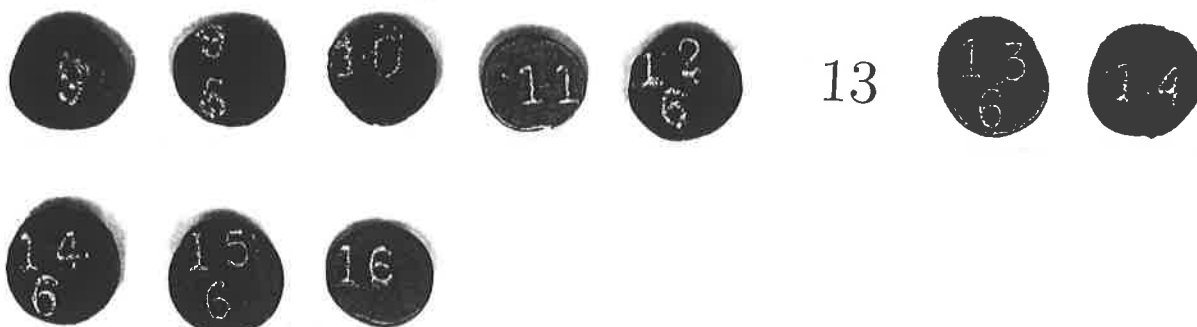
The other lengths, at least to 16, probably exist.

The anchors are sharp, deep, and unevenly spaced. The second anchor under the "T" is often broken. The points are sharp. The heads are ill-shaped and are mostly thin.



Set #5. 1 3/8".

Lengths range from 1 1/8" to 1 1/2". Heads are small, round, and thick. The anchors are not pronounced, and are evenly spaced.



• **Position of the numbers on the head.**

This is the quickest indicator of an SWP nail's identity. I restrict this list to the last three sets.

	<u>Set #3</u>	<u>Set #4</u>	<u>Set #5</u>
9		high	slightly low & right
9/6		centered	slightly to one side
10	low	high	upper left
10/6		right	
11	low, to the left	slightly low & right	right
11/6		slightly right	
12	upper right		high
12/6			left
13	left		centered
13/6		centered	centered
14	low, slightly left	slightly low	slightly right
14/6			slightly left
15	low, to the left		
15/6			slightly left
16	low, to the left		left, slightly high

Height and depth nails

"Height nails, which are used largely in the West, can be found throughout the United States. They are driven into a utility pole to show its height and are used in multiples of 5 feet. For poles up to 75 feet they are often confused with date nails [DNC was written in 1976]. Poles of 100 feet and over normally have two nails—for example, a 60 and 50 would designate a pole 110 feet tall." [DNC, 169]

Some height nails are shown in the Letter-Number Nails section.

"Depth nails are used to show how deep the pole is set in the ground. To date, these have been reported only in the western part of the United States." [DNC, 169]

Pole height nails

2 × 1/4 rnd R stl (05)

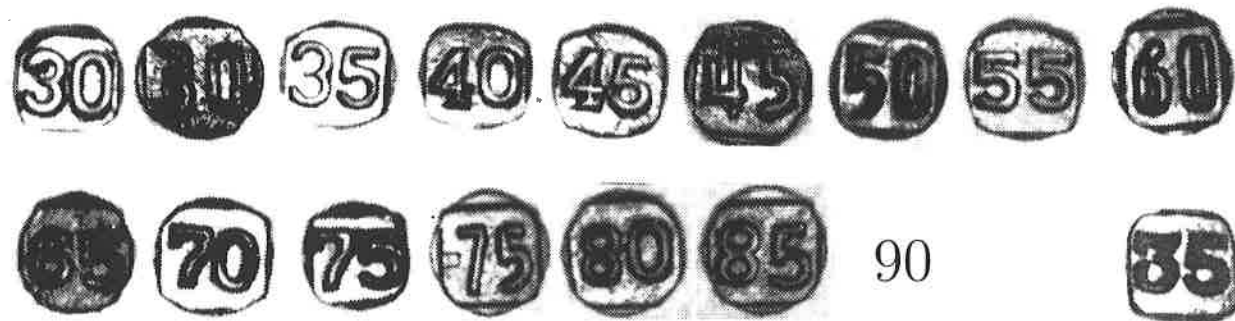
Set #1



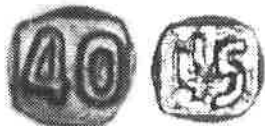
Set #2



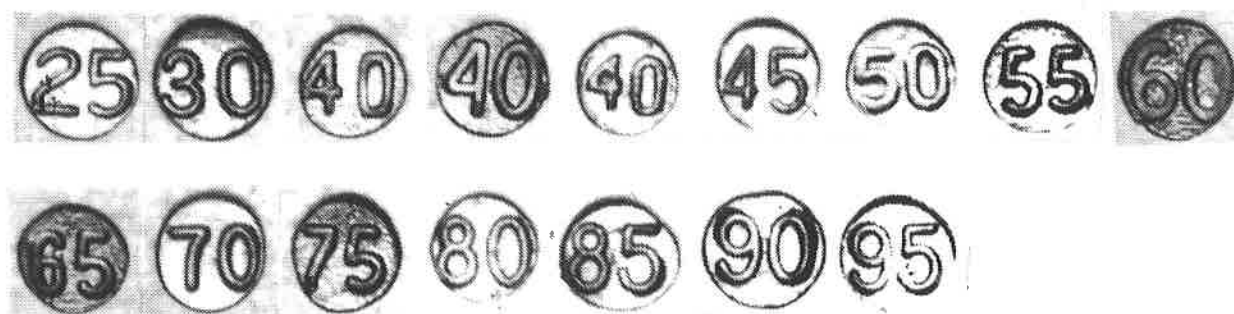
2 1/2 × 1/4 sqr I stl (05)



2 1/2 × 1/4 sqr R stl (05)



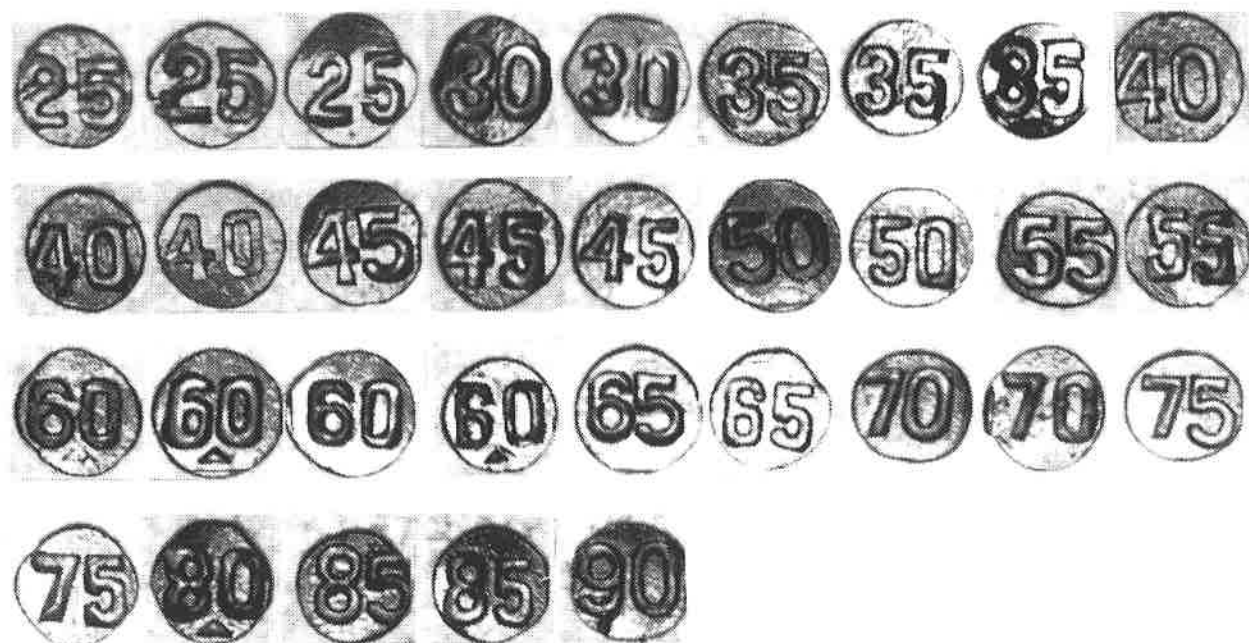
2 1/2 × 1/4 rnd I stl (06)



2 1/2 × 1/4 rnd R stl (06)



2 1/2 × 1/4 rnd I stl (07)



2 1/2 × 1/4 rnd R stl (07)



2 1/2 × 1/4 rnd R stl (07)



2 × 1/4 rnd R stl (07)



2 1/2 × 1/4 sqr I stl (07)



2 × 1/4 sqr I stl (07)



2 1/2 × 1/4 sqr R stl (07)



1 1/2 × 1/4 sqr R stl (07)



2 1/2 × 1/4 dia I stl (08)



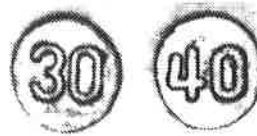
Duquesne Light Co. (PA)

2 1/2 × 1/4 rnd I stl (12)

Set #1



Set #2



2 1/2 × 1/4 rnd I stl (12)

Set #3



2 1/2 × 1/4 rnd I stl (18B)



2 1/2 × 1/4 rnd I stl (18C)



2 1/2 × 1/4 rnd R stl (22)



2 × 3/16 rnd I alm ()



Apparently ordered by the Lyntegar Electric Co. but never used. [DNC, 173]

Pole depth nails (or possibly high codes)

2 × 1/4 sqr I rs stl (05)



2 1/2 × 1/4 rnd I stl (07)



2 1/2 × 1/4 sqr R stl (07)



Descriptions of some nails not shown

1 3/4 × 5/16	rnd I	stl (01) 6:b	
The top of the 6 is slightly pointed. The underline is thinner and longer than 6:a.			
2 1/2 × 1/4	rnd I	stl (01) 12:b	The 2 is different.
2 × 1/5	rnd R	stl (04) 35:b	Has tall numbers like the 2 1/2" 35.
2 1/2 × 1/4	rnd I	stl (05) 12	Same style as the (05) 13.
2 1/2 × 1/4	rnd I	stl (05) 13:b	
Large date. Shown in [N-D '86, 8].			
2 1/2 × 1/4	rnd R	stl (05) 23	The 2 is identical to the 24's 2.
2 1/2 × 1/4	rnd R	stl (05) 25:b	
Similar to 25:a. 25:v is the 2nd 25 pictured in [M-A '97, 5].			
2 1/2 × 1/4	rnd R	stl (05) 44:b	Smaller numbers than 44:a.
2 1/2 × 1/4	rnd R	stl (05) 46:b	
Cross on the 4, and the top of the 6 curves around more.			
1 1/2 × 1/4	rnd R	stl (05) 42:b	Wide 4, slightly different 2.
2 × 1/4	rnd I	stl (06) 53	Same style numbers as the rnd R 56:b.
2 1/2 × 1/4	rnd R	stl (06) 38:b	Small numbers.
2 1/2 × 1/4	rnd R	stl (06) 40:b	Small date.
2 1/2 × 1/4	rnd R	cop (06) 33,34,37	Same style as the steel nails.
2 1/2 × 1/4	rnd I	stl (07) 5:b	
5:b is found in bridge timbers, the 5:a in ties.			
2 1/2 × 1/4	rnd I	stl (07) 6:b	
Same as the 6, but with no bar underneath			
2 1/2 × 1/4	rnd I	stl (07) 08:d	
Has an 0 shaped like that on like 08:b and an 8 shaped like 08:a.			
2 1/2 × 1/4	rnd I	stl (07) 10:e	
Numbers are the same size as 10:b, but the 1 has a flag.			
2 1/2 × 1/4	rnd I	stl (07) 10:f	
Heavy numbers. This is a variation on the flag & foot 10:a. Shown in [N-D '86, 8].			
2 1/2 × 1/4	rnd I	stl (07) 10	Same numbers as the GM nail.
2 1/2 × 1/4	rnd I	stl (07) 11:d	Large flag & foot.
2 1/2 × 1/4	rnd I	stl (07) 17:c	Diamond-shaped head.
2 1/2 × 1/4	rnd I	stl (07) 18:c	No flag on the 1.
2 1/2 × 1/4	rnd I	stl (07) 25:d	The 5 is very wide.
2 1/2 × 1/4	rnd I	stl (07) 34:b	
Has smaller numbers than 34:a. I forgot to include space for a picture.			
2 1/2 × 1/4	rnd I GM	stl (07) 09	
The numbers are similar to those on rnd I (07) 09:b without gripper marks.			
2 1/2 × 1/4	rnd I GM	stl (07) 10:b,10:c	
These have the same heads respectively as the 10:b and 10:d without GM.			
1 1/2 × 1/4	rnd I	stl (07) 10-13,15,18,25	
For 11-15 and 18, the numbers are identical to the standard 2 1/2" (07) nails. The 15 has the same numbers as the 2 1/2" 15:b. The dates 14-25 are pictured in [Lewis, 70], but he shows an 18 like the 2 1/2" 18:b. I forgot to include space for the 18 and 25 in the photo section.			
1 1/2 × 1/4	dia I	stl (07) 08,9.	Same style as the 2 1/2" nails.
1 1/2 × 1/4	dia I	stl (07) 9:b	Smaller number than 9:a.
1 1/2 × 1/4	dia I	stl (07) 10	Same style as the 2 1/2" 10:a.
1 1/2 × 1/4	dia I	stl (07) 10:b	Small, no flag on the 1.
2 1/2 × 1/4	rnd R	stl (07) 10	Has numbers like rnd I 10:b.
2 1/2 × 1/4	rnd R	stl (07) 16:b	Taller 1 than 16:a.

$2\frac{1}{2} \times \frac{1}{4}$ rnd R stl (07) 26:e
 Same size numbers as the N&W 9/32" sqr R (07) 26.
 $2\frac{1}{2} \times \frac{1}{4}$ rnd R stl (07) 26:f Numbers are like those on the 2" 26:a.
 $2\frac{1}{2} \times \frac{1}{4}$ rnd R stl (07) 30:b
 The 0 is like that on the rnd R 50. I forgot to include this in the photo section.
 $2\frac{1}{2} \times \frac{1}{4}$ rnd R stl (07) 37:b Has larger numbers than 37:a.
 $2\frac{1}{2} \times \frac{1}{4}$ rnd R GM stl (07) 15 Has numbers like the non-GM 15.
 $2\frac{1}{2} \times \frac{3}{16}$ rnd R gm stl (07) 28:b Large numbers.
 $2\frac{1}{2} \times \frac{3}{16}$ rnd R gm stl (07) 40:b Large 0.
 $1\frac{3}{4} \times \frac{3}{16}$ rnd R gm stl (07) 30:b Large date.
 $1\frac{3}{4} \times \frac{3}{16}$ rnd R gm stl (07) 31:b
 Numbers are closer together, like the $2\frac{1}{2} \times \frac{3}{16}$ 31.
 $2\frac{1}{2} \times \frac{7}{40}$ rnd R gm stl (07) 15:b
 The 1 is longer and extends below the level of the 5. The 1 also has no flag.
 $2\frac{1}{4} \times \frac{9}{32}$ sqr R stl (07) 26:b
 Large date. The "2" is of the same style as the "2" on the (07) 27.
 $2\frac{1}{2} \times \frac{1}{4}$ sqr R stl (07) 25:b The 2 is like that on the sqr R (07) 26.
 $2\frac{1}{2} \times \frac{1}{4}$ hex R rs stl (07) 26:b
 Small numbers. Found in Southern Illinois by Parmalee.
 $2\frac{1}{2} \times \frac{1}{4}$ rnd R cop (07) 32 Same style as the steel 32.
 $2\frac{1}{2} \times \frac{1}{4}$ rnd R stl (09) 38:b,38:c
 38:b has a small 8, while 38:c has a large 8.
 $2\frac{1}{2} \times \frac{1}{4}$ rnd I stl (10) 33
 Has round numbers, like the (07) 33, but narrower. Also, the anchor markings are diagonal like (21).
 Some of these 33's have the "X" on the shank, some don't.
 $2\frac{1}{2} \times \frac{1}{4}$ rnd R mi (11) 29:b,30:b
 29:a and 30:a have absolutely square $\frac{3}{16}$ " shanks. The shanks on 29:b and 30:b are like those of other
 dates—almost $\frac{1}{4}$ " and round near the head, tapering to square near the point. The 29:b and 30:b have
 wider dates than the :a varieties, and the 30:b's 3 is taller than 30:a's.
 $1\frac{3}{4} \times \frac{1}{4}$ rnd R stl (17) 30:b Script numbers.
 $2\frac{1}{2} \times \frac{1}{4}$ sqr R stl (18) 33:b Small date.
 $2\frac{1}{2} \times \frac{1}{4}$ rnd I stl (18A) 26 Numbers are identical to rnd I (18B) 26.
 $2\frac{1}{2} \times \frac{1}{4}$ rnd R stl (18B) 25 Variations exist.
 $2\frac{1}{2} \times \frac{3}{16}$ rnd R gm stl (18B) 30:b Large numbers.
 $2\frac{1}{2} \times \frac{1}{4}$ rnd R stl (19) 38
 Like the $1\frac{1}{2}$ " 38, but the bottom of the 3 is longer.
 $2\frac{1}{2} \times \frac{1}{4}$ rnd R stl (19) 43:b Has larger numbers.
 $2 \times \frac{1}{4}$ rnd R stl (19) 39:c Numbers are farther apart.
 $2 \times \frac{1}{4}$ rnd R stl (19) 51,53
 The numbers are like those on the $2\frac{1}{2}$ " nails.
 $1\frac{1}{2} \times \frac{1}{4}$ rnd R stl (19) 37:b Has larger numbers than 37:a.
 $1\frac{1}{2} \times \frac{1}{4}$ rnd R stl (19) 48:b Has smaller numbers than 48:a.
 $1\frac{1}{2} \times \frac{1}{4}$ rnd R stl (23) 34:b
 Different style flat-top 3, and the 4 is closed at the top.
 $2 \times \frac{1}{4}$ rnd R stl (24) 36
 Has numbers like the $1\frac{1}{2}$ " (24) 36:b.
 $2\frac{1}{2} \times \frac{1}{4}$ rnd R stl (32) 74,74:b 74:a has smaller numbers than 74:b.

2 1/2 × 1/4 rnd R stl (32) 76,76:b
 76:a has an open 6. The 76:b has a closed 6 and larger numbers.

2 1/2 × 1/4 rnd I stl (39) 22,23
 The 23 has numbers identical to the TH&B copper (39) 23, pictured on page 63. The 22 is of similar style.

1 1/2 × 1/4 rnd R stl (39) 34:c Round "3".
 1 1/2 × 1/4 rnd R os cp stl (39) 27 The numbers look like rnd I (07) 27.
 1 1/2 × 1/4 rnd R os cp stl (39) 32 Same style as the 33.
 1 1/2 × 1/4 rnd R os cp stl (39) 33:b Small date.

2 1/2 × 1/4 rnd R stl (47) 44:b Low numbers.
 2 1/2 × 1/4 rnd R stl (47) 44:c Large first 4.

1 3/4 × 3/16 rnd I cop (60) 52:c
 Does not have the dot of (60). The numbers are the same style as 52:b, but are taller. May be (61).

1 3/4 × 3/16 rnd I gm cop (60) 56/4 The 6 is overstruck on the 4.

1 1/4 × 3/16 sqr I rs gm cop (60) 29:b
 Different style 9. This is the first 29 in [Lewis, 21].

1 1/4 × 1/5 rnd R gm cop (60) 34 Numbers are identical to the 3/16" 34:c.

1 1/2 × 3/16 rnd I cop (63) 30 A minor variation on the chisel point 30.

1 1/4 × 3/16 rnd I gm cop (63) 31
 Numbers are the same style as the (63) 32 and 38. The 1 has no flag or foot.

2 1/2 × 1/4 rnd I stl (64) 18:b
 The numbers are the same style of the 18, but are arranged on the head in odd positions.

2 1/2 × 1/4 rnd I stl () 11:b Has smaller numbers than 11:a.

2 1/2 × 1/4 rnd I stl () 12:b
 Tall numbers, flag and foot on the 1. A truly mysterious nail.

2 1/2 × 1/4 rnd I stl () 17
 This nail has (64) anchor markings, and may be related to the stl (64) 18 and 19, though the number style is completely different. Shown in [M-A '79, 5].

2 1/2 × 1/4 rnd R stl () 25 Similar to the rnd R (05) 25.

2 × 1/4 rnd R stl () 38
 Has narrow digits with a squarish 8, and is like (06) or (07).

2 1/2 × 1/4- rnd R stl () 28,30,31,32,33:b
 The diameter of the 33 measures .232", or just under 6 mm. The () nails have flat top 3's.

2 × 1/4- rnd R stl () 34-36
 See the note for the 2 1/2" nails just above.

1 1/2 × 3/16- rnd I gm cop () 13,14
 Cup-heads, thick numbers. The 13 has a flat top 3, and John Speicher beleives the 14 to be (01).

Code nails

2 × 1/4 rnd I stl (05) A
 Pennsylvania RR. Large letter. I forgot to include this in the photo section.

2 1/2 × 1/4 rnd I stl (07) C #3 Small letter, like M #4.

2 1/2 × 1/4 rnd I stl (07) X #6
 This nail might not have been found. At least one collector has substituted a BR&P X in its place.

2 1/2 × 1/4 rnd R stl (07) F #4 Similar to rnd R (07) F #1.

2 1/2 × 1/4 rnd R stl (06) X #2 The letter is like the (07) X #3.

2 1/2 × 1/4 rnd R stl (17) X #6 Thin like X #3, but not as large.

1 1/4 × 3/16 rnd R gm cop (60) 1,3
 Pennsylvania RR (page 134). The 1 has flag and foot, and the 3 has a flat top.

Reverse listing

This list of railroads by date nail was generated by a computer program which took the listing of date nails by railroad as its input. An index of abbreviations follows the list on page 198.

Date nails with digits only are represented here. No code nails or letter-number nails are listed. Finding the sources of such nails is usually not a problem.

The nails are arranged first by type, then by metal, then by indent (I) or raised (R), and so on backwards through the list of characteristics. For example, if you want to find

2 1/2 × 3/16 rnd R gm stl (07) 21

you first find the type (07) nails, then the steel nails, then the raised nails, then rnd, then 3/16, then 2 1/2" nails, and finally those with gm (gripper marks). Lengths and diameters are arranged from longest to shortest

Certain abbreviations appear in parentheses following railroad names. These mean

- (bt) From bridge timbers.
- (p) From railroad telegraph poles.
- (pr) From protect boards. Long Island RR.
- (sh) From second hand ties.
- (sh bt) From second hand bridge timbers.
- (sl) Inserted by the company which treated ties listed as "Short line code set". This only applies to the 2" rnd I (07) 34.

When no such code follows a railroad abbreviation, the nail was used by the railroad in ties.

I have relied on information supplied by many, many people in order to compile the list of nails used by each railroad. Often nailers will omit references to variations. Probably some nails listed as, say, 28:a, are really 28:b or 28:c. This is especially true for variations not shown in DNC. I wonder if any railroad listed as having used rnd R (07) 25 used the 25:b instead?

Very often there are questions about certain nails, so for a more complete understanding of any attribution you make, it is best to read about the nails used by your railroad in the main part of this book.

There are many, many minor variations on nails which are not indicated in this listing. Often when two railroads are listed as having used the same nail, there is some difference in the nails. For example, both the TH&B and the NYC are listed as having used the rnd I (14) 15. But the NYC version has thicker, deeper numbers than the TH&B nail. The difference is not so great that the NYC nail needs a separate listing, but the difference is real and immediately noticeable when holding the nails side by side.

Some nails are listed as having been found only in second hand ties. The railroad which originally used these nails is unknown.

Also, consider a nail like

2 × 1/4 rnd R stl (07) 25 C&P(sh), D&H(sh), GN, MT(sh), NYS&W(sh),
N&StL(sh), UV(sh), UP.

The source for the second hand 25's found on the C&P, D&H, etc., in this case is neither GN nor the UP, but is probably some electric railroad from New York state.

Right now the reverse listing comprises 2,202 different nails. Add to this number all letter-number dates and code nails, and the total number of nails listed in this book easily exceeds 3,500.

1 3/4 × 5/16	rnd I	stl (01) 3	A&A(sh), B&C(sh)
1 3/4 × 5/16	rnd I	stl (01) 05	C&NW
1 3/4 × 5/16	rnd I	stl (01) 5	C&NW, CB
1 3/4 × 5/16	rnd I	stl (01) 06	C&NW
1 3/4 × 5/16	rnd I	stl (01) 6	C&NW, CB&Q, CB
1 3/4 × 5/16	rnd I	stl (01) 6:b	MilRd
1 3/4 × 5/16	rnd I	stl (01) 07	C&NW
1 3/4 × 5/16	rnd I	stl (01) 7	C&NW, CB&Q, CB, MiCe(sh)
1 3/4 × 5/16	rnd I	stl (01) 8	C&NW, CB
1 3/4 × 5/16	rnd I	stl (01) 09	MKT
1 3/4 × 5/16	rnd I	stl (01) 9	MiCe(sh)
1 3/4 × 5/16	rnd I	stl (01) 10	C&NW, CB
1 3/4 × 5/16	rnd I	stl (01) 11	A&A(sh), C&NW, FJ&G(sh), GCS(sh), PSC, RV(sh)
1 3/4 × 5/16	rnd I	stl (01) 12	A&A(sh), C&NW, CB, FJ&G(sh), JW&NW(sh), NYC(sh), PSC
1 3/4 × 5/16	rnd I	stl (01) 13	A&A(sh), C&NW, CB, FJ&G(sh), GCS(sh), JW&NW(sh), NYC(sh), PSC, RV(sh), UV(sh)
1 3/4 × 5/16	rnd I	stl (01) 14	A&A(sh), CB, FJ&G(sh), JW&NW(sh), PSC
1 3/4 × 5/16	rnd I	stl (01) 15	A&A(sh), FJ&G(sh), GCS(sh), JW&NW(sh), NYC(sh), PSC, UV(sh)
1 3/4 × 5/16	rnd I	stl (01) 15:b	CB
2 1/2 × 1/4	rnd I	stl (01) 97	MR&BT
2 1/2 × 1/4	rnd I	stl (01) 98	MR&BT
2 1/2 × 1/4	rnd I	stl (01) 98:b	MR&BT
2 1/2 × 1/4	rnd I	stl (01) 99	MR&BT
2 1/2 × 1/4	rnd I	stl (01) 00	MR&BT
2 1/2 × 1/4	rnd I	stl (01) 2	B&O
2 1/2 × 1/4	rnd I	stl (01) 03	EP&SW
2 1/2 × 1/4	rnd I	stl (01) 3	B&O, EP&SW
2 1/2 × 1/4	rnd I	stl (01) 04	CB&Q, EP&SW, MR&BT, UP
2 1/2 × 1/4	rnd I	stl (01) 4	Big4, C&EI, MM&SE, SP
2 1/2 × 1/4	rnd I	stl (01) 05	CB&Q, EP&SW, MR&BT, OSL, UP
2 1/2 × 1/4	rnd I	stl (01) 5	Big4, C&EI, MM&SE, OSL, SP, UP
2 1/2 × 1/4	rnd I	stl (01) 5:b	UP
2 1/2 × 1/4	rnd I	stl (01) 06	EP&SW, MR&BT
2 1/2 × 1/4	rnd I	stl (01) 6	EP&SW
2 1/2 × 1/4	rnd I	stl (01) 07	D&H, EP&SW, MR&BT, OSL, UP
2 1/2 × 1/4	rnd I	stl (01) 08	GVG&N, MR&BT, MKT
2 1/2 × 1/4	rnd I	stl (01) 8	MM&SE
2 1/2 × 1/4	rnd I	stl (01) 09	MKT, SP
2 1/2 × 1/4	rnd I	stl (01) 10	MKT
2 1/2 × 1/4	rnd I	stl (01) 11	MKT
2 1/2 × 1/4	rnd I	stl (01) 12	L&HR, MKT, UP
2 1/2 × 1/4	rnd I	stl (01) 12:b	NYNH&H
2 1/2 × 1/4	rnd I	stl (01) 13	Big4, L&HR, MKT, NYNH&H
2 1/2 × 1/4	rnd I	stl (01) 14	CB, L&HR, NYNH&H, UV(sh)
2 1/2 × 1/4	rnd I	stl (01) 15	CB, L&HR, LV, MKT, NYC(sh), NYNH&H, NYO&W(sh), UP
2 1/2 × 1/4	rnd I	stl (01) 18	TH&B
2 1/2 × 1/4	rnd I	stl (01) 19	TH&B
2 1/2 × 1/4	rnd I	stl (01) 30	A&A(sh), D&MM(sh), D&H, FJ&G(sh), G&J(sh), M&NJ(sh)
2 × 1/4	rnd I	stl (01) 14	MKT
2 × 1/4	rnd I	stl (01) 15	MKT

1 3/4 × 1/4	rnd I		stl (01) 07	MKT
1 3/4 × 1/4	rnd I		stl (01) 11	MKT
2 1/2 × 1/4	sqr I	rs	stl (01) 13	Big4
2 1/2 × 1/4	rnd R		stl (01) 19	SFe
2 1/2 × 1/4	rnd R		stl (01) 27	L&N, LH&StL, RV(sh), Rut, SFe
2 1/2 × 1/4	rnd R		stl (01) 27:b	AC&Y(sh), CB, DT(sh), Erie, Frisco(sh), M&NJ(sh), MKT, NYS&W(sh), Rut, SFe, Tr&Gu(sh)
2 1/2 × 1/4	rnd R		stl (01) 28	L&N, LH&StL, NiPl, N&StL(sh), Rut, StJ&LC(sh)
2 1/2 × 1/4	rnd R		stl (01) 28:b	A&A(sh), NYS&W(sh), Rut
2 1/2 × 1/4	rnd R		stl (01) 29	Int(sh), L&N, LH&StL, Rut
2 1/2 × 1/4	rnd R		stl (01) 31	RV, SAL
2 × 1/4	rnd R		stl (01) 29	DT(sh)
2 × 1/4	rnd R		stl (01) 30	DT(sh)
1 1/2 × 1/4	rnd R		stl (01) 27	GT
1 1/2 × 1/4	rnd R		stl (01) 28	GT
1 1/2 × 1/4	rnd R		stl (01) 29	GT
1 1/2 × 1/4	rnd R		stl (01) 31	GT
2 1/2 × 9/40	rnd R		stl (01) 27	SP-T
2 1/2 × 9/40	rnd R		stl (01) 28	SP-T
2 1/2 × 1/4	sqr R		stl (01) 27	SFe
2 1/2 × 1/4	rnd I		stl (03) 29	NaP
2 1/2 × 1/4	rnd I		stl (03) 30	JW&NW(sh), NaP, P&PU
2 1/2 × 1/4	rnd I		stl (03) 30:b	P&PU, TC&GB
2 1/2 × 1/4	rnd I		stl (03) 31	P&PU
2 1/2 × 1/4	rnd I		stl (03) 31:b	P&PU
2 1/2 × 1/4	rnd I		stl (03) 32	P&PU
1 1/2 × 1/4	rnd I		stl (03) 30	B&H(sh), M&NJ(sh), NYO&W(sh), Ste(sh)
1 1/2 × 1/4	rnd I		stl (03) 31	M&NJ(sh), NYO&W(sh)
2 1/4 × 1/4	cut I		stl (03) 26	Bo&Al, MN&S, Rut, StJ&LC(sh)
2 1/4 × 1/4	cut I		stl (03) 26:b	Bo&Al, Rut
2 1/4 × 1/4	cut I		stl (03) 26:c	Bo&Al, FJ&G(sh), Rut
2 1/4 × 1/4	cut I		stl (03) 30	NaP
2 1/4 × 1/4	cut I		stl (03) 31	JW&NW(sh), NaP, UV(sh)
2 1/2 × 1/4	rnd R		stl (03) 29	L&WV, MC&CL
2 1/2 × 1/4	rnd R		stl (03) 30	Int, L&WV, MC&CL, PH&D, SB
2 1/2 × 1/4	rnd R		stl (03) 31	Int, Int(bt), L&WV, MC&CL, PH&D
2 1/2 × 1/4	rnd R		stl (03) 31:b	L&WV
2 1/2 × 1/4	rnd R		stl (03) 32	PH&D
2 1/2 × 1/4	rnd R		stl (03) 33	MC&CL
2 1/2 × 1/4	rnd R		stl (03) 34	MC&CL
2 1/2 × 1/4	rnd R		stl (03) 36	SFe
2 1/2 × 1/4	rnd R		stl (03) 37	SFe
2 1/2 × 1/4	rnd R		stl (03) 38	SFe
2 1/2 × 1/4	rnd R		stl (03) 39	SFe
2 1/2 × 1/4	rnd R		stl (03) 41	CB
2 1/2 × 1/4	rnd R		stl (03) 42	NYNH&H
2 1/2 × 1/4	rnd R		stl (03) 54	C&O, Cli
1 1/2 × 1/4	rnd R		stl (03) 29	D&RGW(sh)
2 1/2 × 1/4	cut R		stl (03) 32	NaP
2 1/2 × 1/4	cut R		stl (03) 33	NaP
2 1/2 × 1/4	cut R		stl (03) 34	NaP

2 1/2 × 1/4	cut R	stl (03) 35	A&A(sh), B&C(sh), B&M(sh), C&P(sh), M&NJ(sh), NYNH&H, NYO&W(sh), StJ&LC(sh), UV(sh)
2 1/2 × 1/4	cut R	stl (03) 36	B&C(sh), M&NJ(sh), NYNH&H, NYO&W(sh), StJ&LC(sh), UV(sh)
2 1/2 × 1/4	cut R	stl (03) 37	NaP
2 1/2 × 1/4	cut R	stl (03) 38	NaP
2 1/2 × 1/4	cut R	stl (03) 39	NaP
2 1/2 × 1/4	cut R	stl (03) 40	NaP
2 1/2 × 1/4	cut R	stl (03) 42	FJ&G, NaP
2 1/2 × 1/4	cut R	stl (03) 43	FJ&G
2 × 1/4	cut R	stl (03) 30	KGJ&E
2 × 1/4	cut R	stl (03) 31	KGJ&E
2 × 1/4	cut R	stl (03) 32	KGJ&E
2 × 1/4	cut R	stl (03) 33	KGJ&E
2 × 1/4	cut R	stl (03) 34	B&H(sh), KGJ&E, M&NJ(sh), Ste(sh)
2 × 1/4	cut R	stl (03) 34:b	M&NJ(sh), NYO&W(sh), Ste(sh)
2 × 1/4	cut R	stl (03) 35	KGJ&E, M&NJ(sh), NYO&W(sh), StJ&LC(sh)
2 × 1/4	cut R	stl (03) 36	B&H(sh), KGJ&E, M&NJ(sh), NYO&W(sh), Ste(sh)
2 × 1/4	cut R	stl (03) 37	B&H(sh), KGJ&E, M&NJ(sh), NYO&W(sh)
2 × 1/4	cut R	stl (03) 38	KGJ&E
2 1/2 × 1/4	rnd R	stl (04) 31	MoPac
2 1/2 × 1/4	rnd R	stl (04) 32	CB
2 1/2 × 1/4	rnd R	stl (04) 33	ACL, CB, SAL
2 1/2 × 1/4	rnd R	stl (04) 34	ACL
2 1/2 × 1/4	rnd R	stl (04) 35	CB, MoPac
2 1/2 × 1/4	rnd R	stl (04) 36	CB
2 1/2 × 1/4	rnd R	stl (04) 37	ACL, CB
2 1/2 × 1/4	rnd R	stl (04) 38	CB
2 1/2 × 1/4	rnd R	stl (04) 40	CB, VRR
2 1/2 × 1/4	rnd R	stl (04) 41	VRR
2 1/2 × 1/4	rnd R	stl (04) 44	CSS&SB(sh), Monon(sh), NC&StL
2 1/2 × 1/4	rnd R	stl (04) 45	CSS&SB(sh), F&C(sh), NC&StL
2 × 1/4	rnd R	stl (04) 31	L&N
2 × 1/4	rnd R	stl (04) 32	L&N
2 × 1/4	rnd R	stl (04) 33	TPTNO
2 × 1/4	rnd R	stl (04) 35	L&N, L&N(p)
2 × 1/4	rnd R	stl (04) 36	L&N, L&N(p)
2 × 1/4	rnd R	stl (04) 38	L&N, L&N(p)
2 1/2 × 1/5	rnd R	stl (04) 31	SP-T
2 1/2 × 1/5	rnd R	stl (04) 32	SP-T, Ver(sh)
2 1/2 × 1/5	rnd R	stl (04) 32:b	SP-W
2 1/2 × 1/5	rnd R	stl (04) 33	SP-T
2 1/2 × 1/5	rnd R gm	stl (04) 33	SP-T
2 1/2 × 1/5	rnd R gm	stl (04) 37	SP-T
2 1/2 × 1/5	rnd R gm	stl (04) 38	SP-T, Ver(sh)
2 1/2 × 1/5	rnd R gm	stl (04) 39	SP-T, Ver(sh)
2 1/2 × 1/5	rnd R gm	stl (04) 40	SP-T, Ver(sh)
2 1/2 × 1/5	rnd R gm	stl (04) 41	SP-T, Ver(sh)
2 1/2 × 1/5	rnd R gm	stl (04) 42	ILT, SP-T, Ver(sh)
2 × 1/5	rnd R	stl (04) 32:b	L&HR(sh), NC&StL
2 × 1/5	rnd R	stl (04) 33	A&A(sh), L&BR(sh), NC&StL
2 × 1/5	rnd R	stl (04) 34	A&A(sh), L&BR(sh), NC&StL
2 × 1/5	rnd R	stl (04) 35	NC&StL

2	×	1/5	rnd R	stl (04) 35:b	L&HR(sh), NC&StL
2	×	1/5	rnd R	stl (04) 36	NC&StL
2	×	1/5	rnd R	stl (04) 37	NC&StL
2	×	1/5	rnd R	stl (04) 38	NC&StL
2	×	1/5	rnd R	stl (04) 39	NC&StL
2	×	1/5	rnd R	stl (04) 40	NC&StL
2	×	1/5	rnd R	stl (04) 41:b	NC&StL
2	×	1/5	rnd R	stl (04) 42	A&A(sh), NC&StL
2 1/2	×	1/4	sqr R	stl (04) 39	NiPl
1 3/4	×	5/16	rnd I	stl (05) 16	A&A(sh), FJ&G(sh), GCS(sh), JW&NW(sh), M&NJ(sh), N&StL(sh), PSC, UV(sh)
1 3/4	×	5/16	rnd I	stl (05) 17	A&A(sh), FJ&G(sh), JW&NW(sh), NYC(sh), N&StL(sh), PSC, UV(sh)
2 1/2	×	1/4	rnd I	stl (05) 12	Erie
2 1/2	×	1/4	rnd I	stl (05) 13	NP
2 1/2	×	1/4	rnd I	stl (05) 13:b	NP
2 1/2	×	1/4	rnd I	stl (05) 14	NYC, NYNH&H
2 1/2	×	1/4	rnd I	stl (05) 17	BR&P, CB
2 1/2	×	1/4	rnd I	stl (05) 19	E&LS, NYO&W(sh)
2 1/2	×	1/4	rnd I	stl (05) 21	Big4, BR&P
2 1/2	×	1/4	rnd I	stl (05) 22	CNS&M, C&P(sh), CB, NYNH&H, N&StL(sh), StJ&LC(sh)
2 1/2	×	1/4	rnd I	stl (05) 23	CNS&M, CB
2 1/2	×	1/4	rnd I	stl (05) 24	CNS&M, CB
2 1/2	×	1/4	rnd I	stl (05) 25	BR&P, CNS&M, Ma&Pa(sh)
2 1/2	×	1/4	rnd I	stl (05) 25:b	BR&P, PRR
2 1/2	×	1/4	rnd I	stl (05) 25:c	PRR
2 1/2	×	1/4	rnd I	stl (05) 26	BR&P
2 1/2	×	1/4	rnd I	stl (05) 26:b	BR&P
2 1/2	×	1/4	rnd I	stl (05) 28	BR&P, CNS&M, MiCo
2 1/2	×	1/4	rnd I	stl (05) 29	CNS&M
2 1/2	×	1/4	rnd I	stl (05) 30	BR&P, CNS&M
2 1/2	×	1/4	rnd I	stl (05) 30:b	BR&P
2 1/2	×	1/4	rnd I	stl (05) 31	AC&Y(sh), A&A(sh), C&NW(sh), CNS&M, MiCo
2 1/2	×	1/4	rnd I	stl (05) 32	C&NW(sh), T&P
2 1/2	×	1/4	rnd I	stl (05) 33	CNS&M, MiCo
2 1/2	×	1/4	rnd I	stl (05) 34	G&J(sh)
2 1/2	×	1/4	rnd I	stl (05) 35	AC&Y(sh), A&A(sh), C&NW(sh), CNS&M, MiCo, TPTNO
2 1/2	×	1/4	rnd I	stl (05) 36	AC&Y(sh), D&MM(sh), D&H, Erie, FJ&G(sh), L&HR(sh), SSL(sh)
2 1/2	×	1/4	rnd I	stl (05) 36:b	B&H(sh), Erie, FJ&G(sh), M&NJ(sh), Prat(sh)
2 1/2	×	1/4	rnd I	stl (05) 50	C&O, C&NW(sh), IC, Ma&Pa(sh), PRR
2 1/2	×	1/4	rnd I	stl (05) 51	PRR
2 1/2	×	1/4	rnd I	stl (05) 52	Ma&Pa(sh), PRR
2 1/2	×	1/4	rnd I	stl (05) 63	P&NW
2	×	1/4	rnd I	stl (05) 45	Ma&Pa(sh), PRR
2	×	1/4	rnd I	stl (05) 47	PRR
1 1/2	×	1/4	rnd I	stl (05) 25	D&TSL
1 1/2	×	1/4	rnd I	stl (05) 26	D&TSL
1 1/2	×	1/4	rnd I	stl (05) 28	D&TSL
1 1/2	×	1/4	rnd I	stl (05) 32	D&TSL
1 1/2	×	1/4	rnd I	stl (05) 33	D&TSL

1 1/2 × 1/4	rnd I	stl (05) 34	D&TSL
1 1/2 × 1/4	rnd I	stl (05) 37	D&TSL
1 1/2 × 1/4	rnd I	stl (05) 38	D&TSL
1 1/2 × 1/4	rnd I	stl (05) 39	D&TSL
2 1/2 × 1/4	sqr I	stl (05) 14	NYC
2 1/2 × 1/4	sqr I	stl (05) 14:b	NYC
2 1/2 × 1/4	sqr I	stl (05) 15	GR(sh), NYC
2 1/2 × 1/4	sqr I	stl (05) 16	CNS&M
2 1/2 × 1/4	sqr I	stl (05) 21	Big4, D&MM(sh), NYC, UV(sh)
2 1/2 × 1/4	sqr I	stl (05) 22	Big4
2 1/2 × 1/4	sqr I	stl (05) 23	Big4, NYC, UV(sh)
2 1/2 × 1/4	sqr I	stl (05) 23:b	Big4, C&EI
2 1/2 × 1/4	sqr I	stl (05) 24	A&A(sh), C&EI, CNS&M, DT(sh), FJ&G(sh), GCS(sh), JW&NW(sh), NYC, NP(p), N&StL(sh), UV(sh)
2 1/2 × 1/4	sqr I	stl (05) 25	C&EI, GR(sh), NYC, NP(p), P&WV, UV(sh)
2 1/2 × 1/4	sqr I	stl (05) 25:b	NYC, NYO&W(p)
2 1/2 × 1/4	sqr I	stl (05) 26	C&EI, GR(sh), IHB(sh), JW&NW(sh), MiCe(sh), NYC, N&StL(sh), P&LE
2 1/2 × 1/4	sqr I	stl (05) 26:b	A&A(sh), C&EI, FJ&G(sh), GCS(sh), JW&NW(sh), NYC
2 1/2 × 1/4	sqr I	stl (05) 27	Big4, C&EI, GR(sh), M&NJ(sh), NYC, NP(p), UV(sh)
2 1/2 × 1/4	sqr I	stl (05) 28	Big4, C&EI, GR(sh), JW&NW(sh), NYC, NYC(p), NYO&W(p), NP(p), N&StL(sh), P&WV, UV(sh), WA&G(sh)
2 1/2 × 1/4	sqr I	stl (05) 29	Big4, C&EI, CSS&SB(sh), NP(p)
2 1/2 × 1/4	sqr I	stl (05) 30	Big4, Bo&Al, C&EI, CSS&SB(sh), NYC(sh), NYO&W(p), NP(p), P&WV
2 1/2 × 1/4	sqr I	stl (05) 31	A&A(sh), Big4, C&EI, CSS&SB(sh), GR(sh), JW&NW(sh), NYC, NYNH&H(sh), NP(p), P&WV, SSL(sh), UV(sh), Ver(sh)
2 1/2 × 1/4	sqr I	stl (05) 31:b	Big4
2 1/2 × 1/4	sqr I	stl (05) 31:c	CSS&SB(sh), NP(p)
2 1/2 × 1/4	sqr I	stl (05) 31:d	A&A(sh), NYC
2 1/2 × 1/4	sqr I	stl (05) 32	CSS&SB(sh), NYO&W(p)
2 1/2 × 1/4	sqr I	stl (05) 32:b	Big4, C&EI, NYC, NYO&W(sh)
2 1/2 × 1/4	sqr I	stl (05) 32:c	Big4, C&EI
2 1/2 × 1/4	sqr I	stl (05) 35	D&MM(sh), GN(p), NP(p)
2 1/2 × 1/4	sqr I	stl (05) 36	GN(p), NP(p)
2 1/2 × 1/4	sqr I	stl (05) 37	NP(p)
2 1/2 × 1/4	sqr I	stl (05) 38	NP(p)
2 1/2 × 1/4	sqr I	stl (05) 39	GN(p), NP(p)
2 1/2 × 1/4	sqr I	stl (05) 40	NP(p)
2 1/2 × 1/4	sqr I	stl (05) 41	GN(p), NP(p)
2 1/2 × 1/4	sqr I	stl (05) 42	GN(p), NP(p)
2 1/2 × 1/4	sqr I	stl (05) 43	GN(p), NP(p)
2 1/2 × 1/4	sqr I	stl (05) 44	GN(p), NP(p)
2 1/2 × 1/4	sqr I	stl (05) 45	GN(p)
2 1/2 × 1/4	sqr I	stl (05) 46	GN(p), NP(p)
2 1/2 × 1/4	sqr I	stl (05) 47	NP(p), Tr, WP-E
2 1/2 × 1/4	sqr I	stl (05) 48	D&M, GN(p), NP(p), Tr, WP-E
2 1/2 × 1/4	sqr I	stl (05) 49	FJ&G, MilRd(p), NP(p), Tr
2 1/2 × 1/4	sqr I	stl (05) 50	FJ&G, NP(p), PST, Tr, UC
2 1/2 × 1/4	sqr I	stl (05) 51	FJ&G, NP(p), PT, Tr, UC

2 1/2 × 1/4	sqr I	stl (05) 52	Int, NP(p), SP&S(bt), Tr, UC, WP-E
2 1/2 × 1/4	sqr I	stl (05) 53	Int, NP(p), SP&S(bt), UC
2 1/2 × 1/4	sqr I	stl (05) 54	Int, NP(p), UC
2 1/2 × 1/4	sqr I	stl (05) 55	Int, NP(p), WP-E
2 1/2 × 1/4	sqr I	stl (05) 56	Int, MilRd(p), NP(p), WP-E
2 1/2 × 1/4	sqr I	stl (05) 57	Int
2 1/2 × 1/4	sqr I	stl (05) 58	Int, Int(bt), USG
2 1/2 × 1/4	sqr I	stl (05) 59	Int, SP&S(bt)
2 1/2 × 1/4	sqr I	stl (05) 60	Tr
2 1/2 × 1/4	sqr I	stl (05) 63	SP&S(bt)
2 1/2 × 1/4	sqr I	stl (05) 64	A&S
2 1/2 × 1/4	rnd R	stl (05) 12	Erie, NYS&W(sh)
2 1/2 × 1/4	rnd R	stl (05) 23	Big4
2 1/2 × 1/4	rnd R	stl (05) 24	Big4
2 1/2 × 1/4	rnd R	stl (05) 25:b	Big4
2 1/2 × 1/4	rnd R	stl (05) 26	CNS&M, CB
2 1/2 × 1/4	rnd R	stl (05) 26:b	Big4, CB, DT(sh), IC, M&LS(sh), MiCe, NYC(sh)
2 1/2 × 1/4	rnd R	stl (05) 27	Big4, CNS&M, CB, DT(sh), M&LS(sh), MiCe, MoPac, NYC(sh), TH&B(sh)
2 1/2 × 1/4	rnd R	stl (05) 28	CB, DT(sh), MoPac, Tr&Gu(sh)
2 1/2 × 1/4	rnd R	stl (05) 29	CB, IaT(sh)
2 1/2 × 1/4	rnd R	stl (05) 30	CSS&SB(sh), CB, MeC
2 1/2 × 1/4	rnd R	stl (05) 31	CSS&SB(sh), CB
2 1/2 × 1/4	rnd R	stl (05) 31:b	CB, MeC
2 1/2 × 1/4	rnd R	stl (05) 33	CB
2 1/2 × 1/4	rnd R	stl (05) 34	C&WI, CB
2 1/2 × 1/4	rnd R	stl (05) 35	CB, EStL&S(sh)
2 1/2 × 1/4	rnd R	stl (05) 36	CB, EStL&S(sh)
2 1/2 × 1/4	rnd R	stl (05) 37	CB, EStL&S(sh), LS&I, M&LS
2 1/2 × 1/4	rnd R	stl (05) 38	CB, LS&I, M&LS
2 1/2 × 1/4	rnd R	stl (05) 39	CB, NYNH&H
2 1/2 × 1/4	rnd R	stl (05) 42	CB, N&W(sh bt), VRR
2 1/2 × 1/4	rnd R	stl (05) 43	AA, E&LS, N&W(sh bt), PM, VRR, Wab
2 1/2 × 1/4	rnd R	stl (05) 44	AA, E&LS, VRR, Wab
2 1/2 × 1/4	rnd R	stl (05) 44:b	AA, PM, VRR, Wab
2 1/2 × 1/4	rnd R	stl (05) 45	AA, ChRi, E&LS, PM, VRR, Wab
2 1/2 × 1/4	rnd R	stl (05) 45:b	AA, Wab
2 1/2 × 1/4	rnd R	stl (05) 46	AA, CW(sh bt), CoRa, E&LS, N&W(sh bt), PM, StJ&LC(sh), VRR, Wab
2 1/2 × 1/4	rnd R	stl (05) 46:b	Wab
2 1/2 × 1/4	rnd R	stl (05) 47	CoRa, VRR
2 1/2 × 1/4	rnd R	stl (05) 48	N&W(sh), VRR
2 1/2 × 1/4	rnd R	stl (05) 49	C&O, VRR
2 1/2 × 1/4	rnd R	stl (05) 50	C&O, VRR
2 1/2 × 1/4	rnd R	stl (05) 51	VRR
2 1/2 × 1/4	rnd R	stl (05) 52	RF&P(sh), VRR
2 1/2 × 1/4	rnd R	stl (05) 54	ChRi
2 1/2 × 1/4	rnd R	stl (05) 58	P&NW
2 × 1/4	rnd R	stl (05) 36	MV(sh)
2 × 1/4	rnd R	stl (05) 37	MV(sh)
2 × 1/4	rnd R	stl (05) 38	MV(sh)
1 1/2 × 1/4	rnd R	stl (05) 32	GT
1 1/2 × 1/4	rnd R	stl (05) 36	GT
1 1/2 × 1/4	rnd R	stl (05) 36:b	GT

1 1/2 × 1/4	rnd R	stl (05) 39	B&C(sh), CV, StJ&LC(sh)
1 1/2 × 1/4	rnd R	stl (05) 41	B&C(sh), CV, StJ&LC(sh)
1 1/2 × 1/4	rnd R	stl (05) 42	B&C(sh), CV, StJ&LC(sh)
1 1/2 × 1/4	rnd R	stl (05) 42:b	CV
1 1/2 × 1/4	rnd R	stl (05) 43	CV, StJ&LC(sh), Ver(sh)
1 1/2 × 1/4	rnd R	stl (05) 44	CV, GT, NS, StJ&LC(sh)
1 1/2 × 1/4	rnd R	stl (05) 44:b	CV, GT, NS
1 1/2 × 1/4	rnd R	stl (05) 44:c	GT
1 1/2 × 1/4	rnd R	stl (05) 45	NS
1 1/2 × 1/4	rnd R	stl (05) 46	NS
1 1/2 × 1/4	rnd R cp	stl (05) 39	GT
1 1/2 × 1/4	rnd R cp	stl (05) 41	GT
1 1/2 × 1/4	rnd R cp	stl (05) 45	GT
1 1/2 × 1/5	rnd R	stl (05) 56	WM
1 1/2 × 1/5	rnd R	stl (05) 57	WM
1 1/2 × 1/5	rnd R	stl (05) 58	D&M
1 1/2 × 1/5	rnd R	stl (05) 59	D&M, WM
1 1/2 × 1/5	rnd R	stl (05) 60	D&M
1 1/2 × 1/5	rnd R	stl (05) 61	D&M, WM
1 1/2 × 1/5	rnd R	stl (05) 62	D&M
1 1/2 × 1/5	rnd R	stl (05) 65	D&M
2 1/2 × 3/16	rnd R gm	stl (05) 26	SP-T
2 1/2 × 3/16	rnd R gm	stl (05) 27	SP-T
2 1/2 × 3/16	rnd R gm	stl (05) 28	SP-T
2 1/2 × 3/16	rnd R gm	stl (05) 29	SP-T
2 1/2 × 3/16	rnd R gm	stl (05) 30	SP-T
1 3/4 × 3/16	rnd R gm	stl (05) 33	MilRd
1 3/4 × 3/16	rnd R gm	stl (05) 34	MilRd
2 1/4 × 9/32	sqr R	stl (05) 30	N&W
2 1/2 × 1/4	sqr R	stl (05) 24	FJ&G(sh bt), NYC
2 1/2 × 1/4	sqr R	stl (05) 25	Bo&Al(sh), FJ&G(sh bt), JW&NW(sh), NYC, N&StL(sh), Rut, UV(sh), Ver(sh)
2 1/2 × 1/4	sqr R	stl (05) 25:b	NYC
2 1/2 × 1/4	sqr R	stl (05) 30	MisCe
2 1/2 × 1/4	sqr R	stl (05) 32	MisCe
2 1/2 × 1/4	sqr R	stl (05) 33	MisCe
2 1/2 × 1/4	sqr R	stl (05) 34	MisCe
2 1/2 × 1/4	sqr R	stl (05) 35	MisCe
2 1/2 × 1/4	sqr R	stl (05) 36	MisCe
2 1/2 × 1/4	sqr R	stl (05) 37	MisCe
2 1/2 × 1/4	sqr R	stl (05) 38	MisCe
2 1/2 × 1/4	sqr R	stl (05) 39	MisCe
2 1/2 × 1/4	sqr R	stl (05) 40	MisCe
2 1/2 × 1/4	sqr R	stl (05) 41	MisCe
2 1/2 × 1/4	sqr R	stl (05) 42	MisCe
2 1/2 × 1/4	sqr R	stl (05) 43	MisCe
2 1/2 × 1/4	sqr R	stl (05) 44	MisCe
2 1/2 × 1/4	sqr R	stl (05) 51	USG
2 1/2 × 1/4	sqr R	stl (05) 54	M&SV
2 1/2 × 1/4	sqr R	stl (05) 55	UC
2 1/2 × 1/4	sqr R	stl (05) 56	P&NW
2 1/2 × 1/4	sqr R	stl (05) 57	P&NW
2 1/2 × 1/4	sqr R	stl (05) 59	P&NW
2 × 1/4	sqr R	stl (05) 24	CGN

2	×	1/4	sqr	R	stl (05)	25	CGN
2 1/2	×	1/4	cut	R	stl (05)	43	N&W
2 1/2	×	1/4	cut	R	stl (05)	44	CW(sh bt), N&W, N&W(bt)
2 1/2	×	1/4	cut	R	stl (05)	45	N&W
2 1/2	×	1/4	cut	R	stl (05)	46	N&W
2 1/2	×	1/4	cut	R	stl (05)	47	CW(sh), N&W, N&W(bt)
2 1/2	×	1/4	cut	R	stl (05)	48	N&W
2 1/2	×	1/4	cut	R	stl (05)	49	CW(sh), N&W, RF&P(sh)
2 1/2	×	1/4	cut	R	stl (05)	50	Int, N&W, N&W(bt)
2 1/2	×	1/4	cut	R	stl (05)	51	Int, N&W, RF&P(sh)
2 1/2	×	1/4	cut	R	stl (05)	52	N&W, RF&P(sh)
2 1/2	×	1/4	cut	R	stl (05)	53	CW(sh), N&W, N&W(bt)
1 3/4	×	3/16	cut	R	stl (05)	34	GT
1 3/4	×	3/16	cut	R	stl (05)	35	GT
1 3/4	×	3/16	cut	R	stl (05)	36	GT
2 1/2	×	1/4	cut	R	stl (05?)	35	C&WI, M&NJ(sh)
2 1/2	×	1/4	cut	R	stl (05?)	36	C&WI
2 1/2	×	1/4	rnd	I	stl (06)	32	CNS&M, E&LS, IIT, LS&BC(sh)
2 1/2	×	1/4	rnd	I	stl (06)	33	E&LS, T&P
2 1/2	×	1/4	rnd	I	stl (06)	34	C&NW(sh), CNS&M, CSS&SB(sh), NP(p)
2 1/2	×	1/4	rnd	I	stl (06)	35	CSS&SB(sh)
2 1/2	×	1/4	rnd	I	stl (06)	36	C&NW(sh), CSS&SB(sh), NYO&W(sh), T&P
2 1/2	×	1/4	rnd	I	stl (06)	37	CSS&SB(sh)
2 1/2	×	1/4	rnd	I	stl (06)	38	CSS&SB(sh), FDDM&S, M&StL(sh), T&P
2 1/2	×	1/4	rnd	I	stl (06)	39	CSS&SB(sh), T&P
2 1/2	×	1/4	rnd	I	stl (06)	40	CSS&SB(sh), YW
2 1/2	×	1/4	rnd	I	stl (06)	41	CSS&SB(sh), E&LS
2 1/2	×	1/4	rnd	I	stl (06)	42	CSS&SB(sh)
2 1/2	×	1/4	rnd	I	stl (06)	43	Int, M&StL(sh)
2 1/2	×	1/4	rnd	I	stl (06)	44	C&EI, Int, YW
2 1/2	×	1/4	rnd	I	stl (06)	45	C&EI, C&IM
2 1/2	×	1/4	rnd	I	stl (06)	46	C&O, CSS&SB(sh), P&NW
2 1/2	×	1/4	rnd	I	stl (06)	47	CSS&SB(sh), M-I(bt)
2 1/2	×	1/4	rnd	I	stl (06)	48	C&O, CSS&SB(sh), IC, P&NW, YW
2 1/2	×	1/4	rnd	I	stl (06)	49	C&O, CSS&SB(sh), P&NW
2 1/2	×	1/4	rnd	I	stl (06)	50	C&O, Erie, P&NW, SSL(sh)
2 1/2	×	1/4	rnd	I	stl (06)	51	CoRa, Erie, LAJ
2 1/2	×	1/4	rnd	I	stl (06)	52	B&H(sh), C&O, D&H(sh), DT&I(sh), Erie, G&J(sh), LAJ, NYO&W(sh), P&NW, USG
2 1/2	×	1/4	rnd	I	stl (06)	53	LAJ, P&NW
2 1/2	×	1/4	rnd	I	stl (06)	54	Alm, GN(p), LAJ, M&SV
2 1/2	×	1/4	rnd	I	stl (06)	55	A&A(sh), BA&P(p), Erie, LAJ, Ma&Pa(sh), NYO&W(sh), PRR, USG
2 1/2	×	1/4	rnd	I	stl (06)	56	Alm, BA&P(p), IC, LAJ
2 1/2	×	1/4	rnd	I	stl (06)	57	LAJ, USG
2 1/2	×	1/4	rnd	I	stl (06)	58	LAJ
2 1/2	×	1/4	rnd	I	stl (06)	59	BA&P(p), LAJ
2 1/2	×	1/4	rnd	I	stl (06)	60	LAJ, P&NW
2 1/2	×	1/4	rnd	I	stl (06)	61	BA&P(p), LAJ
2 1/2	×	1/4	rnd	I	stl (06)	62	LAJ
2 1/2	×	1/4	rnd	I	stl (06)	63	LAJ, RI

2 1/2 × 1/4	rnd I	stl (06) 64	LAJ, RI
2 1/2 × 1/4	rnd I	stl (06) 65	LAJ
2 1/2 × 1/4	rnd I	stl (06) 66	LAJ
2 1/2 × 1/4	rnd I	stl (06) 67	LAJ
2 1/2 × 1/4	rnd I	stl (06) 68	LAJ
2 × 1/4	rnd I	stl (06) 53	BA&P(p)
2 × 1/4	rnd I	stl (06) 62	UC
2 × 1/4	rnd I	stl (06) 63	UC
1 1/2 × 1/4	rnd I	stl (06) 53	S-BC
1 × 1/4	rnd I	stl (06) 56	S-BC
1 1/2 × 1/5	rnd I	stl (06) 46	StJL
1 1/2 × 1/5	rnd I	stl (06) 66	D&M
2 1/2 × 1/4	rnd R	stl (06) 30	Frisco(sh), SFe, Wab
2 1/2 × 1/4	rnd R	stl (06) 31	AA, BS, CSS&SB(sh), CB, DM&CI(sh), EJ&E, FJ&G(sh), FDDM&S, Frisco(sh), IIT, MN&S, MoPac, RI, SFe, TP&W, Wab
2 1/2 × 1/4	rnd R	stl (06) 32	AA, CB&Q, CSS&SB(sh), CB, DM&IR, EStL&S(sh), EJ&E, GN, MC&CL, MER&L(p), MN&S, MoPac, RI, SFe, Soo, TPTNO(sh), Tr&Gu(sh), Wab
2 1/2 × 1/4	rnd R	stl (06) 33	AA, C&WI, CSS&SB(sh), EJ&E, GN, LS&I, MER&L(p), MoPac, MoPac(bt), RI, SFe, Soo, TP&W, Wab
2 1/2 × 1/4	rnd R	stl (06) 34	AA, CSS&SB(sh), CB, D&SL, DM&IR, EJ&E, GN, G&J(sh), MC&CL, MER&L(p), MN&S, RI, SFe, Soo, TP&W, Wab
2 1/2 × 1/4	rnd R	stl (06) 35	AA, Apac(sh), C&A(sh), CSS&SB(sh), CB, D&SL, DM&IR, EJ&E, GN, LS&I, MER&L(p), RI, SFe, Wab
2 1/2 × 1/4	rnd R	stl (06) 36	AA, C&IM, CSS&SB(sh), DM&IR, EJ&E, Frisco(sh), GN, LS&I, MisCe, MoPac, RI, SFe, Sie, Wab
2 1/2 × 1/4	rnd R	stl (06) 37	AA, CSS&SB(sh), CB, DM&IR, EJ&E, GN, MER&L(p), RI, SFe, Soo, Wab
2 1/2 × 1/4	rnd R	stl (06) 38	C&IM, CSS&SB(sh), DM&IR, EJ&E, GN, RI, SFe
2 1/2 × 1/4	rnd R	stl (06) 38:b	Wab
2 1/2 × 1/4	rnd R	stl (06) 39	AA, C&IM, CSS&SB(sh), CB, DM&IR, EJ&E, GN, RI, SFe, Wab
2 1/2 × 1/4	rnd R	stl (06) 40	C&IM, CSS&SB(sh), CB, DM&IR, EJ&E, GN, LS&I, RI, SFe, Wab
2 1/2 × 1/4	rnd R	stl (06) 40:b	SFe
2 1/2 × 1/4	rnd R	stl (06) 41	AA, C&O, C&IM, CSS&SB(sh), CB, EJ&E, E&LS, RI, Wab
2 1/2 × 1/4	rnd R	stl (06) 42	C&IM, CSS&SB(sh), CB, DM&IR, EJ&E, LS&I, RI
2 1/2 × 1/4	rnd R	stl (06) 43	C&IM, CSS&SB(sh), EJ&E, Int, LS&I, RI, SFe, Soo
2 1/2 × 1/4	rnd R	stl (06) 44	C&O, C&IM, EJ&E, Int, LS&I, RI, Soo
2 1/2 × 1/4	rnd R	stl (06) 45	C&O, C&IM, EJ&E, RI, Soo, YW
2 1/2 × 1/4	rnd R	stl (06) 46	C&O, DM&IR, EJ&E, LS&I, M&LS, RI, Soo
2 1/2 × 1/4	rnd R	stl (06) 47	DM&IR, EJ&E, E&LS, GN, LS&I, M&LS, RI, Soo, TT
2 1/2 × 1/4	rnd R	stl (06) 48	AA, A&A(sh), CSS&SB(sh), DM&IR, EJ&E, E&LS, GN, LS&I, M&LS, PM, RI, SFe, Ver(sh), Wab
2 1/2 × 1/4	rnd R	stl (06) 48:b	AA, B&G, CSS&SB(sh), DM&IR, GN, SFe, Soo
2 1/2 × 1/4	rnd R	stl (06) 49	BA&P(sh), CSS&SB(sh), DM&IR, EJ&E, E&LS, GN, LS&I, M&LS, RI, Soo
2 1/2 × 1/4	rnd R	stl (06) 50	CSS&SB(sh), CoRa, DM&IR, EJ&E, E&LS, GN, GN(p), LS&I, M&LS

2 1/2 × 1/4	rnd R	stl (06) 50:b	RI, Soo
2 1/2 × 1/4	rnd R	stl (06) 51	C&O, CoRa, EJ&E(p), E&LS, LS&I, M&LS
2 1/2 × 1/4	rnd R	stl (06) 51:b	CB, DM&IR, GN, RI, Soo
2 1/2 × 1/4	rnd R	stl (06) 52	AD&N, C&G, CB, DM&IR, E&LS, GN, IC, LS&I, M&LS, RI, Soo
2 1/2 × 1/4	rnd R	stl (06) 53	Alm, AD&N, DM&IR, GN, IaT(sh), NYO&W(p), NP(p), RI, Soo
2 1/2 × 1/4	rnd R	stl (06) 54	AD&N, C&O, C&NW(sh), DM&IR, E&LS, GN, IC, RI, Soo
2 1/2 × 1/4	rnd R	stl (06) 55	DM&IR, GN, LS&I, M&LS, RI, S-BC, Soo
2 1/2 × 1/4	rnd R	stl (06) 56	Alm, C&O, DM&IR, GN, LS&I, MeC, M&LS, RI, S-BC
2 1/2 × 1/4	rnd R	stl (06) 56:b	MeC, RI, SFe
2 1/2 × 1/4	rnd R	stl (06) 57	C&O, C&NW, CB, DM&IR, GN, PRR, RI, Soo
2 1/2 × 1/4	rnd R	stl (06) 58	Alm, C&NW, DM&IR, GN, NatMex, RI, Soo
2 1/2 × 1/4	rnd R	stl (06) 59	GN, M&LS, NatMex, RI
2 1/2 × 1/4	rnd R	stl (06) 60	Ba&Ar, EJ&E, GN, MeC, RI
2 1/2 × 1/4	rnd R	stl (06) 61	Alm, C&O, DM&IR, EJ&E, EJ&E(p), GN, RI, URR
2 1/2 × 1/4	rnd R	stl (06) 62	EJ&E, RI
2 1/2 × 1/4	rnd R	stl (06) 63	EJ&E, Soo, USG, Ver(sh)
2 1/2 × 1/4	rnd R	stl (06) 64	EJ&E
2 1/2 × 1/4	rnd R	stl (06) 65	EJ&E
2 1/2 × 1/4	rnd R	stl (06) 66	EJ&E, GN, MeC
2 1/2 × 1/4	rnd R	stl (06) 67	EJ&E, GN, MeC, UC
2 1/2 × 1/4	rnd R	stl (06) 68	EJ&E, GN, USG
2 1/2 × 1/4	rnd R	stl (06) 68:b	GN, MeC, RF&P, UC
2 1/2 × 1/4	rnd R	stl (06) 69	EJ&E, GN
2 1/2 × 1/4	rnd R	stl (06) 70	EJ&E, EJ&E(p)
2 1/2 × 1/4	rnd R	stl (06) 72	EJ&E, EJ&E(p)
2 × 1/4	rnd R	stl (06) 32	CB&Q
2 × 1/4	rnd R	stl (06) 33	CB&Q
2 × 1/4	rnd R	stl (06) 34	CB&Q
2 × 1/4	rnd R	stl (06) 39	MV(sh)
2 × 1/4	rnd R	stl (06) 48	Alm
2 × 1/4	rnd R	stl (06) 49	M&SV
2 × 1/4	rnd R	stl (06) 50	M&SV
2 × 1/4	rnd R	stl (06) 51	M&SV
2 × 1/4	rnd R	stl (06) 59	Alm
2 × 1/4	rnd R	stl (06) 61	Alm
2 × 1/4	rnd R	stl (06) 72	PST
2 × 1/4	rnd R GM	stl (06) 54	TAStL
2 × 1/4	rnd R GM	stl (06) 55	TAStL
1 3/4 × 1/4	rnd R	stl (06) 31	CB&Q
1 3/4 × 1/4	rnd R	stl (06) 34	CB&Q
1 3/4 × 1/4	rnd R	stl (06) 35	CB&Q
1 3/4 × 1/4	rnd R	stl (06) 36	CB&Q
1 3/4 × 1/4	rnd R	stl (06) 37	CB&Q
1 3/4 × 1/4	rnd R	stl (06) 38	CB&Q
1 3/4 × 1/4	rnd R	stl (06) 39	CB&Q, CB&Q(p)
1 3/4 × 1/4	rnd R	stl (06) 40	CB&Q
1 3/4 × 1/4	rnd R	stl (06) 41	CB&Q
1 1/2 × 1/4	rnd R	stl (06) 31	GT
1 1/2 × 1/4	rnd R	stl (06) 47	B&C(sh), CV, DW&P

1 1/2 × 1/4	rnd R	stl (06)	49	DM&CI(sh), D&M
1 1/2 × 1/4	rnd R	stl (06)	50	D&M
1 1/2 × 1/4	rnd R	stl (06)	52	GT
1 1/2 × 1/4	rnd R	stl (06)	53	GT, TAsTL
1 1/2 × 1/4	rnd R	stl (06)	55	GT
1 1/2 × 1/4	rnd R	stl (06)	56	GT, Soo
1 1/2 × 1/4	rnd R cp	stl (06)	45	DW&P
1 1/2 × 1/4	rnd R cp	stl (06)	46	DW&P
1 1/2 × 1/4	rnd R GM	stl (06)	35	MilRd
1 × 1/4	rnd R	stl (06)	35	KO&G, MKT
1 × 1/4	rnd R	stl (06)	36	KO&G, MKT
1 × 1/4	rnd R	stl (06)	37	KO&G, MKT
1 × 1/4	rnd R	stl (06)	38	KO&G, MKT
1 1/2 × 1/5	rnd R	stl (06)	42	AC&Y(sh), CNS&M
1 1/2 × 1/5	rnd R	stl (06)	43	A&A(sh), C&NW(sh), CNS&M
1 1/2 × 1/5	rnd R	stl (06)	44	CNS&M
1 1/2 × 1/5	rnd R	stl (06)	45	CB&Q, StJL
1 1/2 × 1/5	rnd R	stl (06)	46	AC&Y(sh), B&C(sh), C&NW(sh), CNS&M
1 1/2 × 1/5	rnd R	stl (06)	47	AC&Y(sh), B&C(sh), C&NW(sh), CNS&M
1 1/2 × 1/5	rnd R	stl (06)	48	B&C(sh), StJL
1 1/2 × 1/5	rnd R	stl (06)	49	CNS&M, StJL
1 1/2 × 1/5	rnd R	stl (06)	50	C&NW(sh), CNS&M
1 1/2 × 1/5	rnd R	stl (06)	51	AC&Y(sh), C&NW(sh), CNS&M, D&M
1 1/2 × 1/5	rnd R	stl (06)	52	AC&Y(sh), C&NW(sh), CNS&M, D&M
1 1/2 × 1/5	rnd R	stl (06)	53	AC&Y(sh), C&NW(sh), CNS&M, D&M
1 1/2 × 1/5	rnd R	stl (06)	54	AC&Y(sh), C&NW(sh), CNS&M, D&M
1 1/2 × 1/5	rnd R	stl (06)	55	AC&Y(sh), C&NW(sh), CNS&M, D&M
1 1/2 × 1/5	rnd R	stl (06)	56	AC&Y(sh), CNS&M, D&M
1 1/2 × 1/5	rnd R	stl (06)	57	AC&Y(sh), C&NW(sh), CNS&M, D&M
1 1/2 × 1/5	rnd R	stl (06)	58	CNS&M
1 1/2 × 1/5	rnd R	stl (06)	60	WM
1 3/4 × 3/16	rnd R gm	stl (06)	33	DT(sh), MilRd
1 3/4 × 3/16	rnd R gm	stl (06)	34	DT(sh), MilRd
2 1/2 × 1/4	sqr R rs	stl (06)	56	C&O
2 1/2 × 1/4	pnt R rs	stl (06)	48	SFe
2 1/2 × 1/4	pnt R rs	stl (06)	56	C&O, SFe
1 1/4 × 3/16	rnd I	cop (06)	40	MiCo
2 1/2 × 1/4	rnd R	cop (06)	33	B&G
2 1/2 × 1/4	rnd R	cop (06)	34	B&G
2 1/2 × 1/4	rnd R	cop (06)	37	B&G
1 1/4 × 3/16	rnd R	cop (06)	39	CNS&M
1 1/4 × 3/16	rnd R	cop (06)	40	CNS&M, G&GE
1 1/4 × 3/16	rnd R	cop (06)	41	CNS&M
1 3/4 × 5/16	rnd I GM	stl (07)	09	CB
1 3/4 × 5/16	rnd I GM	stl (07)	11	CB
1 3/4 × 5/16	rnd I GM	stl (07)	25	C&NW
1 3/4 × 5/16	rnd I GM	stl (07)	26	C&NW, H&NE(sh)
1 3/4 × 5/16	rnd I GM	stl (07)	27	C&NW
1 3/4 × 5/16	rnd I GM	stl (07)	27:b	C&NW
2 × 11/40	rnd I	stl (07)	9	C&NW, MiCe(sh)
2 × 11/40	rnd I	stl (07)	31	C&NW
2 1/2 × 1/4	rnd I	stl (07)	99	GN
2 1/2 × 1/4	rnd I	stl (07)	00	GN

2 1/2 × 1/4	rnd I	stl (07) 01	GN
2 1/2 × 1/4	rnd I	stl (07) 02	GN
2 1/2 × 1/4	rnd I	stl (07) 03	C&A, EP&SW, GN, SP
2 1/2 × 1/4	rnd I	stl (07) 04	C&A, GN, SP
2 1/2 × 1/4	rnd I	stl (07) 05	C&A, GN, OSL, SP, UP
2 1/2 × 1/4	rnd I	stl (07) 5	OSL, SFe, SP, UP
2 1/2 × 1/4	rnd I	stl (07) 5:b	SFe
2 1/2 × 1/4	rnd I	stl (07) 06	GN, OSL, RI, SP, UP
2 1/2 × 1/4	rnd I	stl (07) 06:b	SP
2 1/2 × 1/4	rnd I	stl (07) 06:c	StLRM&P
2 1/2 × 1/4	rnd I	stl (07) 6	SFe, SP, UP
2 1/2 × 1/4	rnd I	stl (07) 6:b	SP
2 1/2 × 1/4	rnd I	stl (07) <u>6</u>	Big4, SFe
2 1/2 × 1/4	rnd I	stl (07) 07	BA&P(sh), C&A, CB&Q, GN, NYNH&H, NP, OSL, RI, SP, UP
2 1/2 × 1/4	rnd I	stl (07) 7	Big4, OSL, SFe, SP, UP
2 1/2 × 1/4	rnd I	stl (07) 08	Big4, BA&P(sh), EP&SW, E&LS, Frisco, GN, MR&BT, NYNH&H, NP, RI, StFC(sh), StLIM&S, SLR, SP, UP
2 1/2 × 1/4	rnd I	stl (07) 08:b	CB&Q, GN, IC, RI, SP
2 1/2 × 1/4	rnd I	stl (07) 08:c	MKT, Monon
2 1/2 × 1/4	rnd I	stl (07) 08:d	MilRd
2 1/2 × 1/4	rnd I	stl (07) 8	B&O, CB&Q, Frisco, IS, NP, OSL, SFe, SP, UP
2 1/2 × 1/4	rnd I	stl (07) 09	CB&Q, CAM(sh), DM&CI(sh), EJ&S(sh), EP&SW, E&LS, GN, IC, M&GR, MR&BT, NYNH&H, RI, SP
2 1/2 × 1/4	rnd I	stl (07) 09:b	Big4, BA&P(sh), CAM(sh), Frisco, GN, NYNH&H, NP, OSL, RI, SP, UP
2 1/2 × 1/4	rnd I	stl (07) 09:c	RI, SP
2 1/2 × 1/4	rnd I	stl (07) <u>09</u>	CB&Q, StFC(sh), SP
2 1/2 × 1/4	rnd I	stl (07) 9	CB&Q, Monon, OSL, StLIM&S, SFe, SP, UP
2 1/2 × 1/4	rnd I	stl (07) 9:b	CB&Q
2 1/2 × 1/4	rnd I	stl (07) <u>9</u>	MR&BT, SFe, UP
2 1/2 × 1/4	rnd I	stl (07) 10	BR&P, CB&Q, CAM(sh), EJ&S(sh), EP&SW, Erie, E&LS, GN, IC, L&HR, LV, L&N, M&GR, NYNH&H, NP, OSL, RI, StLIM&S, SFe, SP, T&P, UP
2 1/2 × 1/4	rnd I	stl (07) 10:b	DM&CI(sh), MR&BT, OSL, RI
2 1/2 × 1/4	rnd I	stl (07) 10:c	Big4, BA&P(sh), Erie, Frisco, GN, Monon, NYC, NYNH&H, NP, RI, SP, UP
2 1/2 × 1/4	rnd I	stl (07) 10:d	C&A, SFe
2 1/2 × 1/4	rnd I	stl (07) 10:e	RI
2 1/2 × 1/4	rnd I	stl (07) 10:f	GN
2 1/2 × 1/4	rnd I	stl (07) <u>10</u>	CB&Q, SFe, SP
2 1/2 × 1/4	rnd I	stl (07) 11	BR&P, C&A, CB&Q, DM&CI(sh), EJ&S(sh), Erie, E&LS, FJ&G(sh), GN, IIT, M&GR, M&O(sh), MR&BT, MoPac, MM&SE, NYC, NP, OSL, RI, StLIM&S, UP
2 1/2 × 1/4	rnd I	stl (07) 11:b	BR&P
2 1/2 × 1/4	rnd I	stl (07) 11:c	SP, T&P
2 1/2 × 1/4	rnd I	stl (07) 11:d	SP
2 1/2 × 1/4	rnd I	stl (07) 12	A&A(sh), B&O, BR&P, CB&Q, CB, D&MM(sh), EJ&S(sh), Erie, E&LS, FJ&G(sh), IIT, LV, L&N, M&GR, MER&L(p), MR&BT, Monon, MM&SE, NYO&W(sh), NP, RI, SLR, Sch, SP, UP
2 1/2 × 1/4	rnd I	stl (07) 12:b	SP

2 1/2 × 1/4	rnd I	stl (07) 13	A&A(sh), Bo&Al, BR&P, BA&P(sh), CBE, CB, EJ&S(sh), Erie, E&LS, FJ&G(sh), IIT, LV, L&BR(sh), M&GR, MR&BT, MM&SE, NYC, NYS&W(sh), NP, OSL, RI, Sch, SP, UP
2 1/2 × 1/4	rnd I	stl (07) 14	A&A(sh), BR&P, BA&P(sh), CAM(sh), D&MM(sh), EJ&S(sh), Erie, E&LS, FJ&G(sh), IS, IIT, LV, M&GR, MM&SE, NYO&W(sh), NP, RI, Sch, SP, UP, WJ&S
2 1/2 × 1/4	rnd I	stl (07) 15	BA&P(sh), EJ&S(sh), Erie, IIT, M&GR, MiCe, MR&BT, RI, SFe, SP, UP
2 1/2 × 1/4	rnd I	stl (07) 15:b	A&A(sh), BA&P(sh), Erie, FJ&G(sh), LV, L&BR(sh), NYNH&H, NP, StFC(sh), Sch, T&P
2 1/2 × 1/4	rnd I	stl (07) 15:c	A&A(sh), FJ&G(sh), L&BR(sh), NP, Sch
2 1/2 × 1/4	rnd I	stl (07) 16	A&A(sh), BR&P, BA&P(sh), CNS&M, CBE, CB, EJ&S(sh), Erie, E&LS, FJ&G(sh), L&HR, M&GR, MiCe, M&NJ(sh), MM&SE, NYC(sh), NYNH&H, NP, N&StL(sh), OSL, RI, StFC(sh), SFe, Sch, SP, T&P, UP
2 1/2 × 1/4	rnd I	stl (07) 17	Big4, CNS&M, CBE, CB, EJ&S(sh), Erie, E&LS, FJ&G(sh), L&HR, LV, M&GR, MiCe, MR&BT, MM&SE, NYC(sh), NYO&W(sh), NYS&W(sh), OSL, SFe, SP, T&P, UP
2 1/2 × 1/4	rnd I	stl (07) 17:b	RI
2 1/2 × 1/4	rnd I	stl (07) 17:c	StFC(sh)
2 1/2 × 1/4	rnd I	stl (07) 18	Big4, BR&P, C&A, CBE, CAM(sh), CB, EJ&S(sh), E&LS, GR&I, M&GR, MR&BT, RI, SFe, SP
2 1/2 × 1/4	rnd I	stl (07) 18:b	CNS&M, D&H(sh), L&HR, MiCe, MM&SE, NYNH&H, NP, T&P, UP
2 1/2 × 1/4	rnd I	stl (07) 18:c	SP
2 1/2 × 1/4	rnd I	stl (07) 19	BR&P, CB, IS, L&HR, NYO&W(sh), RI, SFe, SP, T&P, UP
2 1/2 × 1/4	rnd I	stl (07) 19:b	BR&P, CNS&M, LV, MM&SE, NYNH&H
2 1/2 × 1/4	rnd I	stl (07) 20	B&H(sh), BR&P, CNS&M, CB, Erie, E&LS, L&HR, LV, MC&CL, MR&BT, MoPac, MM&SE, NYO&W(sh), NYS&W(sh), NP, Prat(sh), RI, SFe, SP, T&P, UP
2 1/2 × 1/4	rnd I	stl (07) 21	CNS&M, CBE, CAM(sh), CB, Erie, E&LS, L&HR, L&NE, LV, M&NJ(sh), MR&BT, MM&SE, NYO&W(sh), NYS&W(sh), RI, SN, SLR, SFe, SP, T&P, UP
2 1/2 × 1/4	rnd I	stl (07) 22	A&A(sh), BR&P, CBE, CAM(sh), Erie, E&LS, IIT, KCM&O, L&HR, L&NE, M&O(sh), MR&BT, MM&SE, NYS&W(sh), RI, SFe, SP, T&P, TC&GB
2 1/2 × 1/4	rnd I	stl (07) 23	A&A(sh), B&C(sh), BR&P, CSS&SB(sh), C&P(sh), CBE, Erie, E&LS, IIT, KCM&O, KCS, L&HR, MR&BT, MM&SE, NYNH&H, NYS&W(sh), N&StL(sh), P&LE, RI, SFe, SP, T&P, TC&GB, UV(sh)
2 1/2 × 1/4	rnd I	stl (07) 24	Apac(sh), A&A(sh), B&C(sh), B&H(sh), BR&P, C&NW, CSS&SB(sh), CBE, DT(sh), Erie, E&LS, FEC, Frisco(sh), IIT, KCM&O, L&HR, Ma&Pa(sh), M&NJ(sh), MR&BT, MoPac, MM&SE, NYS&W(sh), PRR, P&LE, Prat(sh), RI, SFe, SP, T&P, Tr, TC&GB
2 1/2 × 1/4	rnd I	stl (07) 24	C&NW
2 1/2 × 1/4	rnd I	stl (07) 25	A&A(sh), Bo&Al, CSS&SB(sh), CBE, CB, Erie, E&LS, GCS(sh), IIT, KCM&O, KCS, L&HR, M&NJ(sh), MM&SE, NYC(sh), NYS&W(sh), P&PU, SFe, SP, SP-T, T&P, TC&GB, UV(sh)

2 1/2 × 1/4	rnd I	stl (07) 25:b	CB, L&HR, SFe, SP, SP-T
2 1/2 × 1/4	rnd I	stl (07) 25:c	DT(sh), SFe
2 1/2 × 1/4	rnd I	stl (07) 25:d	FJ&G(sh), UV(sh)
2 1/2 × 1/4	rnd I	stl (07) 26	A&A(sh), B&H(sh), BR&P, CW, CSS&SB(sh), CBE, D&H, Erie, E&LS, GCS(sh), IIT, L&WV, NYO&W(sh), NYS&W(sh), P&PU, RV(sh), T&P, TC&GB
2 1/2 × 1/4	rnd I	stl (07) 26:b	A&A(sh), KCS, L&HR
2 1/2 × 1/4	rnd I	stl (07) 26:c	A&A(sh), FJ&G(sh), UV(sh)
2 1/2 × 1/4	rnd I	stl (07) 27	A&A(sh), B&C(sh), B&H(sh), Bo&Al, B&M(sh), BR&P, CW, CSS&SB(sh), D&MM(sh), D&H, DT&I(sh), Erie, E&LS, GN, G&J(sh), IIT, KCS, L&HR, M&NJ(sh), MN&S, NYO&W(sh), NYS&W(sh), N&StL(sh), P&PU, Prat(sh), T&P, TC&GB
2 1/2 × 1/4	rnd I	stl (07) 28	A&A(sh), B&C(sh), B&H(sh), Big4(sh), Bo&Al, CW, CSS&SB(sh), D&H, Erie, E&LS, G&J(sh), IIT, KCS, L&HR, M&NJ(sh), MN&S, MR&BT, NatMex, NYO&W(sh), NYS&W(sh), P&PU, Prat(sh), SFe(sh), T&P, TPTNO, TPTNO, TP&W, TC&GB
2 1/2 × 1/4	rnd I	stl (07) 28:b	B&H(sh), Erie, KCM&O
2 1/2 × 1/4	rnd I	stl (07) 29	A&A(sh), B&C(sh), B&H(sh), Big4(sh), Bo&Al, BR&P, CSS&SB(sh), D&H, Erie, E&LS, G&J(sh), IIT, KCS, L&WV(sh), L&HR, M&NJ(sh), MN&S, NYO&W(sh), NYS&W(sh), PRR, P&PU, Prat(sh), Rut(sh), StJ&LC(sh), T&P, TP&W, TC&GB
2 1/2 × 1/4	rnd I	stl (07) 30	AC&Y(sh), CSS&SB(sh), DT&I(sh), Erie, E&LS, G&J(sh), IIT, Int(sh), L&HR, M&NJ(sh), M&StL(sh), NYO&W(sh), NYS&W(sh), P&WV, T&P, WR&E
2 1/2 × 1/4	rnd I	stl (07) 30:b	D&MM(sh), Erie, JW&NW(sh), Prat(sh)
2 1/2 × 1/4	rnd I	stl (07) 30:c	Int(sh), L&BR(sh), PS&N, UV(sh)
2 1/2 × 1/4	rnd I	stl (07) 31	AC&Y(sh), A&A(sh), B&H(sh), CSS&SB(sh), D&SL, DM&CI, DT&I(sh), Erie, E&LS, G&J(sh), IIT, Int(sh), Key, L&WV(sh), L&HR, M&NJ(sh), M&StL(sh), NYO&W(sh), NYS&W(sh), P&WV, PS&N, Prat(sh), Soo, T&P, UV(sh)
2 1/2 × 1/4	rnd I	stl (07) 31:b	BR&P, D&H, Prat(sh)
2 1/2 × 1/4	rnd I	stl (07) 32	B&H(sh), BR&P, CSS&SB(sh), D&MM(sh), D&H, DT&I(sh), Erie, FJ&G(sh), Int(sh), L&WV(sh), L&HR, M&NJ(sh), M&StL(sh), NYO&W(sh), NYS&W(sh), PS&N, RV(sh)
2 1/2 × 1/4	rnd I	stl (07) 33	AC&Y(sh), A&A(sh), B&H(sh), CSS&SB(sh), D&H, Erie, Erie(bt), FJ&G(sh), IIT, Int(sh), L&HR, M&NJ(sh), M&StL(sh), NYO&W(sh), NYS&W(sh), NP(p), PS&N, SSL(sh), UV(sh), WR&E
2 1/2 × 1/4	rnd I	stl (07) 34	AC&Y(sh), B&H(sh), CW, D&MM(sh), DT&I(sh), Erie, E&LS, FJ&G(sh), G&J(sh), Int(sh), L&HR, M&NJ(sh), M&StL(sh), NYO&W(sh), NYS&W(sh), PS&N, UC, Ver(sh)
2 1/2 × 1/4	rnd I	stl (07) 34:b	L&BR(sh), M&StL(sh), PS&N, UV(sh)
2 1/2 × 1/4	rnd I	stl (07) 35	B&H(sh), D&MM(sh), DT&I(sh), Erie, E&LS, FJ&G(sh), L&HR, M&NJ(sh), NYO&W(sh), NYS&W(sh), SSL(sh), To&Go, UC, WA&G(sh)
2 1/2 × 1/4	rnd I	stl (07) 36	E&LS, L&HR, NYS&W(sh), RV(sh), T&P, To&Go, UC

2 1/2 × 1/4	rnd I	stl (07) 37	A&A(sh), B&H(sh), D&MM(sh), DT&I(sh), Erie, E&LS, FJ&G(sh), L&HR, M&NJ(sh), NYO&W(sh), NYS&W(sh), RV(sh), To&Go, UC, Ver(sh)
2 1/2 × 1/4	rnd I	stl (07) 38	B&H(sh), CW, DT&I(sh), Erie, E&LS, L&HR, NYS&W(sh), RV(sh), Ver(sh)
2 1/2 × 1/4	rnd I	stl (07) 39	A&A(sh), B&H(sh), D&H(p), DT&I(sh), Erie, E&LS, L&HR, NYS&W(sh), RV(sh), SSL(sh), YW
2 1/2 × 1/4	rnd I	stl (07) 40	B&H(sh), DT&I(sh), Erie, E&LS, G&J(sh), L&WV(sh), RV(sh), SSL(sh), YW
2 1/2 × 1/4	rnd I	stl (07) 40:b	WR&E
2 1/2 × 1/4	rnd I	stl (07) 41	B&H(sh), D&H(p), DT&I(sh), Erie, GN, NaP, NYO&W(sh), SSL(sh), UC, YW
2 1/2 × 1/4	rnd I	stl (07) 42	AC&Y(sh), A&A(sh), DT&I(sh), Erie, G&J(sh)
2 1/2 × 1/4	rnd I	stl (07) 43	AC&Y(sh), B&H(sh), CW, DT&I(sh), Erie, FJ&G(sh), G&J(sh), NYO&W(sh), RV(sh), SSL(sh), Ver(sh)
2 1/2 × 1/4	rnd I	stl (07) 44	AC&Y(sh), A&A(sh), B&H(sh), CW, D&H(p), DT&I(sh), Erie, G&J(sh), L&BR(sh), M&StL(sh), RV(sh)
2 1/2 × 1/4	rnd I	stl (07) 45	AC&Y(sh), B&H(sh), D&H(p), DT&I(sh), Erie, G&J(sh), SSL(sh), WA&G(sh)
2 1/2 × 1/4	rnd I	stl (07) 46	AC&Y(sh), B&H(sh), D&MM(sh), D&H(p), DT&I(sh), Erie, NYO&W(sh), SSL(sh)
2 1/2 × 1/4	rnd I	stl (07) 47	AC&Y(sh), A&A(sh), B&H(sh), D&H(p), DT&I(sh), Erie, L&HR, SSL(sh)
2 1/2 × 1/4	rnd I	stl (07) 48	AC&Y(sh), A&A(sh), B&H(sh), D&H(p), DT&I(sh), Erie, L&HR, NYNH&H(sh), SSL(sh)
2 1/2 × 1/4	rnd I	stl (07) 49	AC&Y(sh), L&HR, PRR
2 1/2 × 1/4	rnd I	stl (07) 49:b	A&A(sh), D&H(p), DT&I(sh), Erie, PRR, SSL(sh)
2 1/2 × 1/4	rnd I	stl (07) 49:c	DT&I(sh), Erie
2 1/2 × 1/4	rnd I	stl (07) 50	AC&Y(sh), A&A(sh), B&H(sh), C&NW(sh), D&H(p), Erie, G&J(sh), L&HR, Ma&Pa(sh), M&NJ(sh), NYO&W(sh), PRR, RV(sh), SSL(sh), Ste(sh)
2 1/2 × 1/4	rnd I	stl (07) 51	AC&Y(sh), A&A(sh), B&H(sh), D&H(p), DT&I(sh), Erie, NYNH&H(sh)
2 1/2 × 1/4	rnd I	stl (07) 51:b	L&HR
2 1/2 × 1/4	rnd I	stl (07) 52	Erie, G&J(sh), L&HR, NYC(sh), NYNH&H(sh), NYO&W(sh), SSL(sh)
2 1/2 × 1/4	rnd I	stl (07) 53	AC&Y(sh), B&O, B&H(sh), BC(sh), D&H(p), Erie, L&HR, SSL(sh)
2 1/2 × 1/4	rnd I	stl (07) 53:b	Erie
2 1/2 × 1/4	rnd I	stl (07) 54	AC&Y(sh), B&O, DT&I(sh), Erie, FJ&G(sh), L&HR, NYO&W(sh), StJ&LC(sh)
2 1/2 × 1/4	rnd I	stl (07) 55	L&HR
2 1/2 × 1/4	rnd I	stl (07) 56	L&HR, PRR
2 1/2 × 1/4	rnd I	stl (07) 57	PRR
2 1/2 × 1/4	rnd I	stl (07) 58	Ma&Pa(sh), PRR
2 1/2 × 1/4	rnd I	stl (07) 59	PRR
2 1/2 × 1/4	rnd I	stl (07) 60	Ma&Pa(sh), PRR
2 1/2 × 1/4	rnd I	stl (07) 61	PRR, StJ&LC(sh)
2 1/2 × 1/4	rnd I	stl (07) 62	A&A(sh), C&O, PRR
2 1/2 × 1/4	rnd I	stl (07) 63	PRR
2 1/2 × 1/4	rnd I	stl (07) 64	Ma&Pa(sh), NYNH&H(sh), PRR
2 1/2 × 1/4	rnd I	stl (07) 65	Ma&Pa(sh), PRR
2 1/2 × 1/4	rnd I	stl (07) 65:b	PRR
2 1/2 × 1/4	rnd I GM	stl (07) 4	SFe

2 1/2 × 1/4	rnd I	GM	stl (07) 5	SFe
2 1/2 × 1/4	rnd I	GM	stl (07) 09	B&O, MM&SE
2 1/2 × 1/4	rnd I	GM	stl (07) 9	B&O, SFe
2 1/2 × 1/4	rnd I	GM	stl (07) 10	B&O, SFe
2 1/2 × 1/4	rnd I	GM	stl (07) 10:b	B&O, MM&SE
2 1/2 × 1/4	rnd I	GM	stl (07) 10:c	B&O, MM&SE
2 1/2 × 1/4	rnd I	GM	stl (07) 10	SFe
2 1/2 × 1/4	rnd I	GM	stl (07) 11	SFe
2 1/2 × 1/4	rnd I	GM	stl (07) 11:b	SFe
2 1/2 × 1/4	rnd I	GM	stl (07) 12	SFe, SP
2 1/2 × 1/4	rnd I	GM	stl (07) 13	SFe
2 1/2 × 1/4	rnd I	GM	stl (07) 14	SFe
2 1/2 × 1/4	rnd I	GM	stl (07) 15	L&N, SFe
2 1/2 × 1/4	rnd I	bullseye	stl (07) 4	SFe
2 1/2 × 1/4	rnd I	hs	stl (07) 50	WP-E
2 1/2 × 1/4	rnd I	hs	stl (07) 51	WP-E
2 × 1/4	rnd I		stl (07) 07	SP
2 × 1/4	rnd I		stl (07) 08	SP
2 × 1/4	rnd I		stl (07) 09	SP
2 × 1/4	rnd I		stl (07) 10	SP
2 × 1/4	rnd I		stl (07) 11	SP
2 × 1/4	rnd I		stl (07) 21	OSL, UP
2 × 1/4	rnd I		stl (07) 24	A&A(sh), B&C(sh), B&H(sh), B&M(sh), CW, C&P(sh), D&MM(sh), Int(sh), L&BR(sh), M&NJ(sh), NYNH&H, NYS&W(sh), N&StL(sh), StJ&LC(sh), UV(sh)
2 × 1/4	rnd I		stl (07) 28	NatMex
2 × 1/4	rnd I		stl (07) 34	D&MM(sl), FJ&G(sl), L&BR(sl), StJ&LC(sl), War(sl)
2 × 1/4	rnd I		stl (07) 44	PRR
2 × 1/4	rnd I		stl (07) 64	PST
1 1/2 × 1/4	rnd I		stl (07) 10	KCS
1 1/2 × 1/4	rnd I		stl (07) 11	KCS
1 1/2 × 1/4	rnd I		stl (07) 12	KCS
1 1/2 × 1/4	rnd I		stl (07) 13	KCS
1 1/2 × 1/4	rnd I		stl (07) 14	KCS
1 1/2 × 1/4	rnd I		stl (07) 15	KCS
1 1/2 × 1/4	rnd I		stl (07) 15:b	KCS
1 1/2 × 1/4	rnd I		stl (07) 16	KCS
1 1/2 × 1/4	rnd I		stl (07) 17	KCS
1 1/2 × 1/4	rnd I		stl (07) 18	KCS
1 1/2 × 1/4	rnd I		stl (07) 19	KCS
1 1/2 × 1/4	rnd I		stl (07) 20	KCS
1 1/2 × 1/4	rnd I		stl (07) 21	KCS
1 1/2 × 1/4	rnd I		stl (07) 22	KCS
1 1/2 × 1/4	rnd I		stl (07) 23	KCS
1 1/2 × 1/4	rnd I		stl (07) 24	KCS
1 1/2 × 1/4	rnd I		stl (07) 27	A&BR, D&TSL, UV(sh)
1 1/2 × 1/4	rnd I		stl (07) 29	D&TSL
1 1/2 × 1/4	rnd I		stl (07) 30	D&TSL
1 1/2 × 1/4	rnd I		stl (07) 31	D&TSL, DT(sh)
1 1/2 × 1/4	rnd I		stl (07) 36	DT(sh)
1 1/2 × 1/4	rnd I		stl (07) 36:b	D&TSL
1 1/2 × 1/4	rnd I		stl (07) 39	D&TSL
1 1/2 × 1/4	rnd I		stl (07) 40	D&TSL, DT(sh)

1 1/2 × 1/4	rnd I		stl (07) 41	D&TSL, DT(sh)
1 1/2 × 1/4	rnd I		stl (07) 42	D&TSL, DT(sh)
1 1/2 × 1/4-	rnd I		stl (07) 4	RI
1 1/2 × 1/4-	rnd I		stl (07) 5	RI
1 1/2 × 1/4-	rnd I		stl (07) 6	RI
1 1/2 × 1/4-	rnd I		stl (07) 7	RI
2 1/2 × 9/40	rnd I		stl (07) 10	SFe
2 1/2 × 9/40	rnd I	GM	stl (07) 12	SFe
2 1/2 × 1/8+	rnd I		stl (07) 24	SP
2 1/2 × 1/4+	dia I		stl (07) 8	CB&Q
2 1/2 × 1/4	dia I		stl (07) 06	EP&SW
2 1/2 × 1/4	dia I		stl (07) 06:b	EP&SW
2 1/2 × 1/4	dia I		stl (07) 07	EP&SW
2 1/2 × 1/4	dia I		stl (07) 08	EP&SW
2 1/2 × 1/4	dia I		stl (07) 08:b	RI
2 1/2 × 1/4	dia I		stl (07) 08:c	RI
2 1/2 × 1/4	dia I		stl (07) 09	RI
2 1/2 × 1/4	dia I		stl (07) 09:c	EP&SW
2 1/2 × 1/4	dia I		stl (07) 9:b	To&Go
2 1/2 × 1/4	dia I		stl (07) 9:c	To&Go
2 1/2 × 1/4	dia I		stl (07) 10	C&EI
2 1/2 × 1/4	dia I		stl (07) 10:b	EP&SW, RI, To&Go, UV(sh)
2 1/2 × 1/4	dia I		stl (07) 10:c	LV, RI
1 1/2 × 1/4	dia I		stl (07) 08	C&EI
1 1/2 × 1/4	dia I		stl (07) 9	C&EI
1 1/2 × 1/4	dia I		stl (07) 9:b	C&EI
1 1/2 × 1/4	dia I		stl (07) 10	C&EI
1 1/2 × 1/4	dia I		stl (07) 10:b	C&EI
2 1/2 × 1/4-	dia I		stl (07) 5	Big4, StLRM&P(sh)
2 1/2 × 1/4-	dia I		stl (07) 5:b	Big4
2 1/2 × 1/4-	dia I		stl (07) 06:b	Big4
2 1/2 × 1/4-	dia I		stl (07) 6	Big4, SFe
2 1/2 × 1/4-	dia I		stl (07) 6:b	SFe
2 1/2 × 1/4-	dia I		stl (07) 07	Big4
2 1/2 × 1/4-	dia I		stl (07) 7	Big4, SFe
2 1/2 × 1/4-	dia I		stl (07) 08	Big4
2 1/2 × 1/4-	dia I		stl (07) 8	Big4
2 1/2 × 1/4-	dia I		stl (07) 8:b	SFe
2 1/2 × 1/4-	dia I		stl (07) 09:b	Big4
2 1/2 × 1/4-	dia I		stl (07) 09:c	Big4
2 1/2 × 1/4-	dia I		stl (07) 9	SFe
2 1/2 × 1/4-	dia I		stl (07) 9:b	SFe
2 1/2 × 1/4-	dia I		stl (07) 10	Big4
2 1/2 × 1/4-	dia I		stl (07) 10:b	SFe
2 1/2 × 1/4-	dia I	hb	stl (07) 4	SFe
2 1/2 × 1/4-	dia I	hb	stl (07) 5	SFe
2 1/2 × 1/4-	dia I	hb	stl (07) 6	SFe
2 1/2 × 1/4-	dia I	hb	stl (07) 7	SFe
2 1/2 × 1/4-	dia I	hb	stl (07) 8	SFe
2 1/2 × 1/4-	dia I	hb	stl (07) 9	SFe
2 1/2 × 1/4-	dia I	hb	stl (07) 9:b	SFe
2 1/2 × 1/4-	dia I	hb	stl (07) 10:b	SFe
2 1/2 × 1/4-	dia I	hb	stl (07) 10	SFe
2 1/2 × 1/4-	dia I	hb	stl (07) 12	SFe

2 1/2 × 1/4	sqr	I	stl (07) 10	LV, RI, SFe, To&Go
2 1/2 × 1/4	sqr	I	stl (07) 11	Big4, Bo&Al, BC(sh), L&HR, LV, NYC, RI, SLR, To&Go, UP
2 1/2 × 1/4	sqr	I	stl (07) 12	Big4, M&O(sh), NYC, NYC(p), RI, To&Go, UP
2 1/2 × 1/4	sqr	I	stl (07) 13	Big4, Erie, GR(sh), M&O(sh), NYC, RI, To&Go, UV(sh)
2 1/2 × 1/4	sqr	I	stl (07) 14	SLR, To&Go, UP
2 1/2 × 1/4	sqr	I	stl (07) 15	OSL, SFe, UP
2 1/2 × 1/4	sqr	I	stl (07) 16	Big4, OSL, SFe, UP
2 1/2 × 1/4	sqr	I	stl (07) 17	SFe, UP
2 1/2 × 1/4	sqr	I	stl (07) 17:b	SFe
2 1/2 × 1/4	sqr	I	stl (07) 18	A&A(sh), Big4, FJ&G(sh), JW&NW(sh), N&StL(sh), PSC, SFe
2 1/2 × 1/4	sqr	I	stl (07) 19	A&A(sh), Big4, GR(sh), NYC, SFe, UV(sh), UP
2 1/2 × 1/4	sqr	I	stl (07) 19:b	NYC, OSL, UP
2 1/2 × 1/4	sqr	I	stl (07) 20	A&A(sh), Big4, NYC, SFe, UV(sh), UP
2 1/2 × 1/4	sqr	I	stl (07) 20:b	NYC
2 1/2 × 1/4	sqr	I	stl (07) 21	Big4, MiCe(sh), SFe
2 1/2 × 1/4	sqr	I	stl (07) 22	A&A(sh), Big4, DT(sh), FJ&G(sh), GR(sh), M&O(sh), NYC, N&StL(sh), SFe, UV(sh)
2 1/2 × 1/4	sqr	I	stl (07) 23	A&A(sh), C&EI, DT(sh), FJ&G(sh), GR(sh), IHB(sh), M&O(sh), MiCe(sh), NYC, N&StL(sh), SFe
2 1/2 × 1/4	sqr	I	stl (07) 24	Big4, C&EI, MiCe(sh), NiPl, SFe
2 1/2 × 1/4	sqr	I	stl (07) 25	Big4, C&EI, Erie, MiCe(sh), NiPl, SFe
2 1/2 × 1/4	sqr	I	stl (07) 26	Big4, C&EI, FJ&G, NYC
2 1/2 × 1/4	sqr	I	stl (07) 26:b	A&A(sh), Big4, JW&NW(sh), NYO&W(p), NiPl, N&StL(sh), UV(sh)
2 1/2 × 1/4	sqr	I	stl (07) 27	A&A(sh), Big4, C&EI, FJ&G, GCS(sh), IHB(sh), MiCe(sh), M&NJ(sh), NYC, NYNH&H(sh), UV(sh)
2 1/2 × 1/4	sqr	I	stl (07) 28	A&A(sh), Big4, C&EI, CSS&SB(sh), FJ&G, IHB(sh), MiCe(sh), MBI(sh), NYC
2 1/2 × 1/4	sqr	I	stl (07) 28:b	Big4
2 1/2 × 1/4	sqr	I	stl (07) 29	A&A(sh), C&EI, FJ&G, IHB(sh), MiCe(sh), NYC, NYC(p), NYNH&H(sh), P&WV, UV(sh)
2 1/2 × 1/4	sqr	I	stl (07) 30	A&A(sh), D&MM(sh), FJ&G, GR(sh), IHB(sh), MiCe(sh), NYC, RV, UV(sh), WA&G(sh)
2 1/2 × 1/4	sqr	I	stl (07) 31	Big4, C&EI, FJ&G, MiCe(sh), NYO&W(p)
2 1/2 × 1/4	sqr	I	stl (07) 32	DT(sh), FJ&G
2 1/2 × 1/4	sqr	I	stl (07) 33	FJ&G
2 1/2 × 1/4	sqr	I	stl (07) 34	C&EI, FJ&G
2 1/2 × 1/4	sqr	I	stl (07) 35	FJ&G, NP(p), WP-E
2 1/2 × 1/4	sqr	I	stl (07) 36	FJ&G, NP(p)
2 1/2 × 1/4	sqr	I	stl (07) 37	C&EI, FJ&G, GN(p), NP(p)
2 1/2 × 1/4	sqr	I	stl (07) 38	C&EI, FJ&G, NP(p)
2 1/2 × 1/4	sqr	I	stl (07) 39	C&EI, FJ&G, NP(p)
2 1/2 × 1/4	sqr	I	stl (07) 40	C&EI, NP(p)
2 1/2 × 1/4	sqr	I	stl (07) 40:b	FJ&G
2 1/2 × 1/4	sqr	I	stl (07) 41	C&EI, FJ&G, NP(p)
2 1/2 × 1/4	sqr	I	stl (07) 42	C&EI, NP(p)
2 1/2 × 1/4	sqr	I	stl (07) 43	C&EI, GN(p)
2 1/2 × 1/4	sqr	I hb	stl (07) 11	SFe
2 1/2 × 1/4	sqr	I hb	stl (07) 12	SFe
2 1/2 × 1/4	sqr	I hb	stl (07) 13	SFe
2 1/2 × 1/4	sqr	I hb	stl (07) 14	SFe

2 1/2 × 1/4	sqr I	hb	stl (07) 15	SFe
2 1/2 × 1/4-	sqr I		stl (07) 10	Big4
2 1/2 × 1/4-	sqr I		stl (07) 10:b	Big4
2 1/4 × 9/32	rnd R		stl (07) 34	Int, Int(bt)
2 × 11/40	rnd R		stl (07) 20	UP
2 × 11/40	rnd R		stl (07) 21	UP
2 1/2 × 1/4	rnd R		stl (07) 05	RI
2 1/2 × 1/4	rnd R		stl (07) 07	RI
2 1/2 × 1/4	rnd R		stl (07) 08	RI
2 1/2 × 1/4	rnd R		stl (07) 09	RI
2 1/2 × 1/4	rnd R		stl (07) 10	RI
2 1/2 × 1/4	rnd R		stl (07) 11	RI
2 1/2 × 1/4	rnd R		stl (07) 12	CB&Q, IC, RI, UV(sh)
2 1/2 × 1/4	rnd R		stl (07) 13	CB&Q, GR&I, L&N, RI, UV(sh)
2 1/2 × 1/4	rnd R		stl (07) 14	CB&Q, L&N, MER&L, NYNH&H, RI, UV(sh)
2 1/2 × 1/4	rnd R		stl (07) 15	GR&I, L&N, MM&SE, NN, RI, SP, TH&B, UV(sh), WJ&S
2 1/2 × 1/4	rnd R		stl (07) 16	GR&I, L&WV, L&N, MER&L, MM&SE, RI, TH&B, UP, Wab
2 1/2 × 1/4	rnd R		stl (07) 16:b	L&N
2 1/2 × 1/4	rnd R		stl (07) 17	C&O, GR&I, L&N, NYC, RI, To&Go, UP, Wab, WJ&S
2 1/2 × 1/4	rnd R		stl (07) 18	BR&P, GR&I, L&N, RI, Wab
2 1/2 × 1/4	rnd R		stl (07) 19	A&A(sh), D&H(sh), L&N, MER&L, NYC(sh), NYO&W(sh), RI, Wab
2 1/2 × 1/4	rnd R		stl (07) 20	CNS&M, GR&I, L&N, MR&BT, MM&SE, NP, OSL, RI, Wab
2 1/2 × 1/4	rnd R		stl (07) 21	L&N, MC&CL, MER&L, NP, RI, StFC(sh), Wab, WJ&S
2 1/2 × 1/4	rnd R		stl (07) 22	A&A(sh), IC, JW&NW(sh), L&N, MC&CL, RI, UV(sh), WJ&S
2 1/2 × 1/4	rnd R		stl (07) 23	A&A(sh), C&NW, CoRa, EStL&S(sh), L&NE, L&N, LH&StL, MC&CL, M&NJ(sh), MKT, RI, StFC(sh), Soo, UV(sh)
2 1/2 × 1/4	rnd R		stl (07) 23:b	L&N
2 1/2 × 1/4	rnd R		stl (07) 24	A&A(sh), CoRa, CB, DM&CI(sh), DM&IR, FJ&G(sh), GN, IC, L&NE, L&N, M&LS(sh), MC&CL, MiCe, M&NJ(sh), MV(sh), N&StL(sh), RI, StFC(sh), SP, Tr&Gu(sh), UV(sh), Wab
2 1/2 × 1/4	rnd R		stl (07) 25	AC&Y(sh), A&A(sh), B&C, B&M, CW, ChRi, C&P(sh), CoRa, CB, EStL&S(sh), GN, G&J(sh), IC, JW&NW(sh), L&NE, L&N, M&LS(sh), MC&CL, MiCe, MoPac, MV(sh), NYC, NYNH&H, N&StL(sh), RI, StFC(sh), StJ&LC, StJ&LC(sh), StPB&T(sh), SP, TH&B(sh), Tr&Gu(sh), UV(sh), Wab
2 1/2 × 1/4	rnd R		stl (07) 25:b	A&A(sh), B&H(sh), JW&NW(sh), NYNH&H
2 1/2 × 1/4	rnd R		stl (07) 26	AC&Y(sh), AA, B&C(sh), B&M, C&O, ChRi, C&IM, C&P(sh), CoRa, D&H, D&N(sh), FJ&G(sh), G&J(sh), IIT, L&NE, L&N, L&BR(sh), MC&CL, MoPac, MV(sh), N&StL(sh), StFC(sh), StJ&LC(sh), Soo, SB, Tr, UV(sh), Ver(sh), WJ&S
2 1/2 × 1/4	rnd R		stl (07) 26:b	A&A(sh), B&H(sh), JW&NW(sh), L&N, MoPac, NYNH&H, N&StL(sh), UV(sh)
2 1/2 × 1/4	rnd R		stl (07) 26:c	GN, IC, NYNH&H

2 1/2 × 1/4	rnd R	stl (07) 26:d	A&A(sh), CW, M&NJ(sh), NYO&W(sh)
2 1/2 × 1/4	rnd R	stl (07) 26:e	RI
2 1/2 × 1/4	rnd R	stl (07) 26:f	MoPac
2 1/2 × 1/4	rnd R	stl (07) 27	BS, CV, C&O, ChRi, C&IM, CoRa, CB, DM&IR, EStL&S(sh), Frisco(sh), GN, KCM&O, L&WV, L&N, MER&L(p), PH&D, RI, SN(bt), StFC(sh), StJ&LC(sh), SFe, Sie(sh), Soo, SP&S, TT
2 1/2 × 1/4	rnd R	stl (07) 27:b	A&BB(sh), AC&Y(sh), A&A(sh), B&C(sh), B&M, CV, CW, FJ&G(sh), GCS(sh), JW&NW(sh), L&NE, MV(sh), NYNH&H, N&StL(sh), SFe, UV(sh)
2 1/2 × 1/4	rnd R	stl (07) 28	A&BB(sh), AC&Y(sh), A&A(sh), B&C(sh), BS, B&M, CV, C&O, CW, ChRi, C&IM, CB&Q, C&P(sh), DM&IR, EStL&S(sh), FJ&G(sh), Frisco(sh), GN, IIT, JW&NW(sh), KCM&O, LS&BC(sh), L&HR(sh), L&NE, L&N, LH&StL, M&LS(sh), MC&CL, M&NJ(sh), MER&L(p), MoPac, MV(sh), NatMex, NYNH&H, NYO&W(sh), N&StL(sh), PH&D, RV(sh), RI, StFC(sh), StJ&LC(sh), SFe, SAL, Sie, Soo, SB, SP&S, TT, UV(sh), WP-E
2 1/2 × 1/4	rnd R	stl (07) 28:b	A&A(sh), B&M, FJ&G(sh), GCS(sh), L&WV, L&WV(sh), NYNH&H, SFe, SSL(sh), Wab
2 1/2 × 1/4	rnd R	stl (07) 29	AC&Y(sh), A&A(sh), B&C(sh), B&LE, BS, B&M, CV, C&O, CW, ChRi, C&IM, CB&Q, CSS&SB(sh), C&P(sh), C&S, D&H, DM&IR, EJ&E, GN, IC, IIT, Int(sh), KCM&O, KCS, L&WV, LS&BC(sh), L&NE, L&BR(sh), MC&CL, MER&L(p), NYNH&H, NYO&W(sh), N&StL(sh), PH&D, RI, StFC(sh), StJ&LC(sh), SFe, SAL, Sie, SB, TT, UV(sh), Wab
2 1/2 × 1/4	rnd R	stl (07) 29:b	AA, A&A(sh), B&M, D&N(sh), Frisco(sh), L&N, NYNH&H, Prat(sh), SFe, Wab
2 1/2 × 1/4	rnd R	stl (07) 30	AC&Y(sh), AA, A&A(sh), ACL, B&C, B&C(sh), B&H(sh), B&LE, B&M, CV, C&O, CW, ChRi, C&IM, C&NW(sh), CB&Q, CSS&SB(sh), C&P, C&P(sh), D&MM(sh), DM&CI(sh), DM&IR, EStL&S(sh), EJ&E, E&LS, FDDM&S, GN, GW(sh), IC, L&WV(sh), LC&M(sh), LS&BC(sh), L&NE, L&N, M&NJ(sh), MN&S, MV(sh), NYNH&H, NYO&W(sh), RV(sh), RI, Rut, StFC(sh), StJ&LC, StJ&LC(sh), SAL, Sie, SB, SP&S, TP&W, TT, UV(sh), Wab, War(sh)
2 1/2 × 1/4	rnd R	stl (07) 30:b	B&M
2 1/2 × 1/4	rnd R	stl (07) 31	AC&Y(sh), AA, A&A(sh), ACL, B&C, B&C(sh), B&H(sh), B&LE, B&G, B&M, CV, C&O, CW, ChRi, C&IM, CB&Q, C&P(sh), CoRa, D&MM(sh), D&SL, DM&IR, EStL&S(sh), FJ&G(sh), F&C(sh), GN, GW(sh), IC, JW&NW(sh), LS&I, LS&BC(sh), L&NE, L&BR(sh), MeC, M&LS, MiCe, M&NJ(sh), MV(sh), NYNH&H, NYO&W(sh), NYS&W(sh), N&StL(sh), Prat(sh), Rut, StFC(sh), StJ&LC, StJ&LC(sh), SAL, SB, SP&S, TT, UV(sh)
2 1/2 × 1/4	rnd R	stl (07) 32	AC&Y(sh), A&A(sh), ACL, B&C, B&C(sh), B&H(sh), B&LE, BS, B&M, CV, CW, ChRi, C&P(sh), D&MM(sh), D&H, D&SL, GW(sh), JW&NW(sh), L&WV, LS&I, L&HR(sh), L&NE, M&LS, MV(sh), NYNH&H, RV(sh), StJ&LC, StJ&LC(sh), SAL, SB, TT, UV(sh), WP-E

2 1/2 × 1/4	rnd R	stl (07) 33	A&A(sh), B&C, B&C(sh), B&LE, BS, B&M, CV, CB&Q, C&P(sh), Col, D&MM(sh), D&H, D&SL, DM&IR, EStL&S(sh), F&C(sh), J&SC(sh), L&WV, L&WV(sh), L&NE, MeC, M&LS, M&NJ(sh), MN&S, MV(sh), NYNH&H, NiPl, N&StL(sh), RV(sh), StJ&LC, StJ&LC(sh), SB, TT, UV(sh), WP-E
2 1/2 × 1/4	rnd R	stl (07) 34	AC&Y(sh), A&A(sh), B&C(sh), B&LE, B&M, CV, C&O, CB, D&H, F&C(sh), LS&I, L&NE, MeC, M&LS, MV(sh), NYNH&H, RV(sh), StJ&LC(sh), SAL, SSL(sh), TT, War(sh), WP-E
2 1/2 × 1/4	rnd R	stl (07) 34:b	B&M, MeC
2 1/2 × 1/4	rnd R	stl (07) 35	AC&Y(sh), A&A(sh), B&C(sh), B&LE, B&M, CV, C&O, Col, D&H, DT&I(sh), F&C(sh), G&J(sh), LS&I, L&NE, MeC, M&LS, Ma&Pa(sh), NYNH&H, RV(sh), StJ&LC(sh), TT
2 1/2 × 1/4	rnd R	stl (07) 35:b	RV
2 1/2 × 1/4	rnd R	stl (07) 36	AC&Y(sh), A&A(sh), B&LE, B&M, CV, C&O, Col, D&H, F&C(sh), G&J(sh), J&SC(sh), L&HR(sh), L&NE, MeC, M&LS, NYNH&H, RF&P, StJ&LC(sh), TT, WP-E
2 1/2 × 1/4	rnd R	stl (07) 36:b	MeC, M&LS
2 1/2 × 1/4	rnd R	stl (07) 37	AC&Y(sh), B&LE, B&M, C&O, ChRi, Col, D&H, FJ&G(sh), F&C(sh), G&J(sh), Int(bt), Int(sh), J&SC(sh), KCT, L&NE, MeC, Ma&Pa(sh), NY&LB, NYNH&H, N&StL(sh), RF&P, StJ&LC(sh), SSL(sh), TT
2 1/2 × 1/4	rnd R	stl (07) 37:b	B&M, D&H
2 1/2 × 1/4	rnd R	stl (07) 38	AC&Y(sh), A&A(sh), B&LE, B&M, C&O, ChRi, CSS&SB(sh), D&H, DT&I(sh), FJ&G(sh), F&C(sh), G&J(sh), J&SC(sh), L&HR(sh), L&NE, MeC, M&NJ(sh), NY&LB, NYNH&H, RF&P, StJ&LC(sh), TT
2 1/2 × 1/4	rnd R	stl (07) 39	AC&Y(sh), A&A(sh), B&H(sh), B&LE, B&M, C&O, ChRi, D&H, DT&I(sh), F&C(sh), G&J(sh), IRCA(sh), J&SC(sh), L&WV(sh), L&HR(sh), L&NE, MeC, Ma&Pa(sh), M&StL(sh), NY&LB, RF&P, TT, Ver(sh)
2 1/2 × 1/4	rnd R	stl (07) 40	AC&Y(sh), A&A(sh), B&C(sh), B&ML(sh), B&LE, B&M, C&O, ChRi, D&H, DT&I(sh), FJ&G(sh), F&C(sh), G&J(sh), IRCA(sh), J&SC(sh), L&HR(sh), L&NE, MeC, M&LS, NY&LB, NYS&W(sh), RF&P, StJ&LC(sh), TT
2 1/2 × 1/4	rnd R	stl (07) 40:b	RF&P
2 1/2 × 1/4	rnd R	stl (07) 40:c	SSL(sh)
2 1/2 × 1/4	rnd R	stl (07) 41	AC&Y(sh), B&C(sh), B&LE, B&M, ChRi, D&H, Erie, FJ&G(sh), F&C(sh), G&J(sh), L&HR(sh), L&NE, MeC, M&NJ(sh), NY&LB, RF&P, StJ&LC(sh), SSL(sh), TT, USG(sh)
2 1/2 × 1/4	rnd R	stl (07) 42	A&A(sh), B&C(sh), C&O, D&MM(sh), D&H, DL&W, DT&I(sh), Erie, FJ&G(sh), J&SC(sh), L&WV(sh), L&NE, M&LS, NY&LB, NYO&W(sh), NYS&W(sh), RF&P, TT
2 1/2 × 1/4	rnd R	stl (07) 43	AC&Y(sh), A&A(sh), C&O, D&H, DL&W, Erie, G&J(sh), J&SC(sh), LV, M&LS, Ma&Pa(sh), NYO&W(sh), RF&P, Ste(sh), TT
2 1/2 × 1/4	rnd R	stl (07) 44	AC&Y(sh), B&C, DL&W, DT&I(sh), Erie, J&SC(sh), M&LS, NYO&W(sh), NYS&W(sh), P&WV, RF&P, StJ&LC, TT

2 1/2 × 1/4	rnd R	stl (07) 44:b	AC&Y(sh), A&A(sh), D&H, DL&W, FJ&G, G&J(sh), NYNH&H
2 1/2 × 1/4	rnd R	stl (07) 45	AC&Y(sh), A&A(sh), B&C, B&C(sh), B&H(sh), D&H, DL&W, Erie, G&J(sh), J&SC(sh), M&NJ(sh), NYS&W(sh), RF&P, StJ&LC
2 1/2 × 1/4	rnd R	stl (07) 46	A&A(sh), B&C(sh), B&M, D&H, DL&W, Erie, F&C(sh), G&J(sh), IRCA(sh), J&SC(sh), L&WV(sh), L&HR, MeC, NYO&W(sh), P&NW, RF&P, StJ&LC(sh), USG(sh)
2 1/2 × 1/4	rnd R	stl (07) 47	A&A(sh), B&C(sh), B&H(sh), B&M, D&H, DL&W, Erie, F&C(sh), G&J(sh), IRCA(sh), J&SC(sh), L&HR, MeC, NYO&W(sh), RV(sh), RF&P, StJ&LC(sh), W-SSB
2 1/2 × 1/4	rnd R	stl (07) 48	B&C(sh), B&ML(sh), B&M, ChRi, D&H, D&H(p), DL&W, Erie, F&C(sh), G&J(sh), L&WV(sh), MeC, NYO&W(sh), StJ&LC(sh), W-SSB
2 1/2 × 1/4	rnd R	stl (07) 49	AC&Y(sh), Ba&Ar, B&C(sh), B&M, D&H, DL&W, Erie, FJ&G(sh), F&C(sh), G&J(sh), IRCA(sh), L&WV(sh), MeC, M&NJ(sh), NYO&W(sh), RF&P, StJ&LC(sh), USG(sh), Ver(sh), W-SSB
2 1/2 × 1/4	rnd R	stl (07) 50	AC&Y(sh), Ba&Ar, B&C(sh), B&LE, B&M, ChRi, D&H, DL&W, DT&I(sh), Erie, FJ&G(sh), F&C(sh), G&J(sh), IRCA(sh), L&WV(sh), MeC, M&NJ(sh), RF&P, StJ&LC(sh)
2 1/2 × 1/4	rnd R	stl (07) 51	AC&Y(sh), Ba&Ar, B&LE, B&M, D&H, DL&W, Erie, F&C(sh), G&J(sh), IRCA(sh), LV, MeC, RF&P, StJ&LC(sh), USG(sh), W-SSB
2 1/2 × 1/4	rnd R	stl (07) 52	AC&Y(sh), A&A(sh), Ba&Ar, B&H(sh), B&LE, B&M, ChRi, D&H, DL&W, Erie, F&C(sh), G&J(sh), J&SC(sh), MeC, M&NJ(sh), NYS&W(sh), RF&P, StJ&LC(sh), USG(sh)
2 1/2 × 1/4	rnd R	stl (07) 53	A&A(sh), Ba&Ar, B&LE, B&M, ChRi, D&H, DT&I(sh), Erie, G&J(sh), LS&I, MeC, M&LS, NYO&W(sh), NYS&W(sh), N&W, RF&P, StJ&LC(sh)
2 1/2 × 1/4	rnd R	stl (07) 54	Ba&Ar, B&LE, B&M, C&O, CW(sh), ChRi, D&H, DT&I(sh), Erie, F&C(sh), G&J(sh), LS&I, MeC, M&LS, NYS&W(sh), N&W, RF&P
2 1/2 × 1/4	rnd R	stl (07) 55	Ba&Ar, B&ML(sh), B&LE, B&M, C&O, ChRi, D&H, MeC, N&W, RF&P
2 1/2 × 1/4	rnd R	stl (07) 56	Ba&Ar, B&LE, B&M, D&H, MeC, NYNH&H(sh), N&W, RF&P
2 1/2 × 1/4	rnd R	stl (07) 57	B&O, Ba&Ar, B&LE, B&M, D&H, Erie, L&WV(sh), LS&I, MeC, M&LS, Ma&Pa(sh), M&NJ(sh), NYNH&H(sh), NYS&W(sh), N&W, PRR, RF&P, SSL(sh)
2 1/2 × 1/4	rnd R	stl (07) 58	B&O, Ba&Ar, B&LE, B&M, C&O, CW(sh), D&H, DL&W, Erie, FEC, LS&I, MeC, M&LS, N&W, RF&P, VRR
2 1/2 × 1/4	rnd R	stl (07) 59	Ba&Ar, B&LE, B&M, D&H, MeC, M&LS, NYNH&H(sh), N&W, PRR, RF&P, URR
2 1/2 × 1/4	rnd R	stl (07) 60	B&LE, MeC, RF&P
2 1/2 × 1/4	rnd R	stl (07) 61	Ba&Ar, IRCA(sh), MeC, NYNH&H(sh), RF&P
2 1/2 × 1/4	rnd R	stl (07) 62	IRCA(sh), MeC, RF&P
2 1/2 × 1/4	rnd R	stl (07) 62:b	Ba&Ar, DM&IR, MeC
2 1/2 × 1/4	rnd R	stl (07) 63	MeC, PRR, RF&P

2 1/2 × 1/4	rnd R	stl (07) 64	MeC, RF&P
2 1/2 × 1/4	rnd R	stl (07) 65	RF&P
2 1/2 × 1/4	rnd R	stl (07) 66	RF&P
2 1/2 × 1/4	rnd R GM	stl (07) 12	OSL, UP
2 1/2 × 1/4	rnd R GM	stl (07) 13	OSL, UP
2 1/2 × 1/4	rnd R GM	stl (07) 14	OSL, UP
2 1/2 × 1/4	rnd R GM	stl (07) 15	OSL, UP
2 1/2 × 1/4	rnd R GM	stl (07) 16	UP
2 1/2 × 1/4	rnd R GM	stl (07) 17	UP
2 1/2 × 1/4	rnd R GM	stl (07) 18	UP
2 1/2 × 1/4	rnd R GM	stl (07) 19	OSL, UP
2 1/2 × 1/4	rnd R GM	stl (07) 20	UP
2 1/2 × 1/4	rnd R gm	stl (07) 25	C&NW, DT(sh)
2 1/2 × 1/4	rnd R gm	stl (07) 26	C&NW, DT(sh)
2 × 1/4	rnd R	stl (07) 22	UP
2 × 1/4	rnd R	stl (07) 23	UP
2 × 1/4	rnd R	stl (07) 23:b	UP
2 × 1/4	rnd R	stl (07) 24	GN
2 × 1/4	rnd R	stl (07) 25	C&P(sh), D&H(sh), GN, MT(sh), NYS&W(sh), N&StL(sh), UV(sh), UP
2 × 1/4	rnd R	stl (07) 26	GN, KCM&O, MT(sh)
2 × 1/4	rnd R	stl (07) 27	DM&IR, GN, MT(sh), SB, UP
2 × 1/4	rnd R	stl (07) 28	CB&Q, GN, MT(sh)
2 × 1/4	rnd R	stl (07) 29	C&NW(sh), CB&Q, GN, MT(sh)
2 × 1/4	rnd R	stl (07) 30	AA, C&NW, CB&Q, GN, MT(sh)
2 × 1/4	rnd R	stl (07) 31	CB&Q
2 × 1/4	rnd R	stl (07) 33	L&N, Tr&Gu(sh)
2 × 1/4	rnd R	stl (07) 34	NYO&W(p), O&NW(sh), UP
2 × 1/4	rnd R	stl (07) 34:b	DL&W, Int(sh), L&N, NYO&W(sh), UP
2 × 1/4	rnd R	stl (07) 35	NYO&W(p)
2 × 1/4	rnd R	stl (07) 36	BA&P(sh), NYO&W(p), O&NW(sh), UP
2 × 1/4	rnd R	stl (07) 37	C&H
2 × 1/4	rnd R	stl (07) 38	C&H, WP-E
2 × 1/4	rnd R	stl (07) 39	AC&F
2 × 1/4	rnd R	stl (07) 41	AC&F, MV(sh)
2 × 1/4	rnd R	stl (07) 44	Ma&Pa(sh), PRR, UC
2 × 1/4	rnd R	stl (07) 46	Tr
2 × 1/4	rnd R	stl (07) 57	NYCTA
2 × 1/4	rnd R	stl (07) 59	LS&I
2 × 1/4	rnd R	stl (07) 61	PST, UC
2 × 1/4	rnd R	stl (07) 65	MeC, USG
2 × 1/4	rnd R	stl (07) 66	UC
1 3/4 × 1/4	rnd R	stl (07) 15	CB&Q
1 3/4 × 1/4	rnd R	stl (07) 15:b	CB&Q
1 3/4 × 1/4	rnd R	stl (07) 15:c	CB&Q
1 3/4 × 1/4	rnd R	stl (07) 16	CB&Q
1 3/4 × 1/4	rnd R	stl (07) 17	CB&Q
1 3/4 × 1/4	rnd R	stl (07) 18	CB&Q
1 3/4 × 1/4	rnd R	stl (07) 19	CB&Q
1 3/4 × 1/4	rnd R	stl (07) 20	CB&Q
1 3/4 × 1/4	rnd R	stl (07) 21	CB&Q
1 3/4 × 1/4	rnd R	stl (07) 22	CB&Q
1 3/4 × 1/4	rnd R	stl (07) 23	CB&Q

1 3/4 × 1/4	rnd R	stl (07) 24	CB&Q
1 3/4 × 1/4	rnd R	stl (07) 24:b	CB&Q
1 3/4 × 1/4	rnd R	stl (07) 25	CB&Q
1 3/4 × 1/4	rnd R	stl (07) 26	CB&Q
1 3/4 × 1/4	rnd R	stl (07) 27	CB&Q
1 3/4 × 1/4	rnd R	stl (07) 28	CB&Q
1 1/2 × 1/4	rnd R	stl (07) 15	UP
1 1/2 × 1/4	rnd R	stl (07) 16	UP
1 1/2 × 1/4	rnd R	stl (07) 17	UP
1 1/2 × 1/4	rnd R	stl (07) 18	UP
1 1/2 × 1/4	rnd R	stl (07) 19	OSL, UP
1 1/2 × 1/4	rnd R	stl (07) 29	Soo
1 1/2 × 1/4	rnd R	stl (07) 30	GT
1 1/2 × 1/4	rnd R	stl (07) 37	B&C(sh), CV
1 1/2 × 1/4	rnd R	stl (07) 38	B&C(sh), CV, StJ&LC(sh)
1 1/2 × 1/4	rnd R	stl (07) 39	L&HR
1 1/2 × 1/4	rnd R	stl (07) 41	J&SC(sh)
1 1/2 × 1/4	rnd R	stl (07) 42	D&M
1 1/2 × 1/4	rnd R	stl (07) 45	CV
1 1/2 × 1/4	rnd R	stl (07) 46	CV, GT
1 1/2 × 1/4	rnd R	stl (07) 47	CV, GT
1 1/2 × 1/4	rnd R	stl (07) 57	GT, PST
1 1/2 × 1/4	rnd R	stl (07) 59	PST
1 1/2 × 1/4	rnd R	stl (07) 65	ACL, SAL(bt)
1 1/2 × 1/4	rnd R cp	stl (07) 46	CV
1 1/2 × 1/5	rnd R	stl (07) 42	B&M, F&C(sh), MeC, StJ&LC(sh), USG(sh), Ver(sh)
1 1/2 × 1/5	rnd R	stl (07) 43	B&C(sh), MeC, StJ&LC(sh)
1 1/2 × 1/5	rnd R	stl (07) 43:b	MeC
1 1/2 × 1/5	rnd R	stl (07) 43:c	B&M, B&M(p), F&C(sh), MeC
1 1/2 × 1/5	rnd R	stl (07) 44	B&C(sh), B&M, F&C(sh), G&U(sh), MeC, StJ&LC(sh)
1 1/2 × 1/5	rnd R	stl (07) 45	B&C(sh), B&M, F&C(sh), MeC, StJ&LC(sh), USG(sh)
1 1/2 × 1/5	rnd R	stl (07) 58	WM
1 1/2 × 1/5	rnd R	stl (07) 58:b	WM
1 1/2 × 1/5	rnd R	stl (07) 64	NS
1 1/2 × 1/5	rnd R	stl (07) 65	NS
2 1/2 × 3/16	rnd R	stl (07) 16	OSL
2 1/2 × 3/16	rnd R	stl (07) 17	OSL
2 1/2 × 3/16	rnd R gm	stl (07) 16	SLR
2 1/2 × 3/16	rnd R gm	stl (07) 18	OSL
2 1/2 × 3/16	rnd R gm	stl (07) 19	OSL
2 1/2 × 3/16	rnd R gm	stl (07) 20	OSL
2 1/2 × 3/16	rnd R gm	stl (07) 26	SP-T
2 1/2 × 3/16	rnd R gm	stl (07) 27	TC
2 1/2 × 3/16	rnd R gm	stl (07) 28	SP-W, TC
2 1/2 × 3/16	rnd R gm	stl (07) 28:b	SP-W
2 1/2 × 3/16	rnd R gm	stl (07) 29	SP-T, SP-W
2 1/2 × 3/16	rnd R gm	stl (07) 29:b	MV(sh), TC, TC
2 1/2 × 3/16	rnd R gm	stl (07) 30	SP-T
2 1/2 × 3/16	rnd R gm	stl (07) 30:b	TC
2 1/2 × 3/16	rnd R gm	stl (07) 31	SP-T, TC, Ver(sh)
2 1/2 × 3/16	rnd R gm	stl (07) 32	SP-T, TC
2 1/2 × 3/16	rnd R gm	stl (07) 33	SP-W, TC, Tr
2 1/2 × 3/16	rnd R gm	stl (07) 34	Tr

2 1/2 × 3/16	rnd R gm	stl (07) 36	SP-W, Tr
2 1/2 × 3/16	rnd R gm	stl (07) 37	CCT(sh), SP-W, SP-W(bt)
2 1/2 × 3/16	rnd R gm	stl (07) 38	CCT(sh), SP-W
2 1/2 × 3/16	rnd R gm	stl (07) 40	CCT(sh), SP-W
2 1/2 × 3/16	rnd R gm	stl (07) 40:b	SP-W
1 3/4 × 3/16	rnd R gm	stl (07) 30	MilRd
1 3/4 × 3/16	rnd R gm	stl (07) 30:b	MilRd
1 3/4 × 3/16	rnd R gm	stl (07) 31	IaT(sh), MilRd
1 3/4 × 3/16	rnd R gm	stl (07) 31:b	MilRd
1 3/4 × 3/16	rnd R gm	stl (07) 32	DT(sh), MilRd
1 1/2 × 3/16	rnd R	stl (07) 37	CB&Q
2 1/2 × 7/40	rnd R	stl (07) 15	UP
2 1/2 × 7/40	rnd R	stl (07) 16	UP
2 1/2 × 7/40	rnd R	stl (07) 17	UP
2 1/2 × 7/40	rnd R gm	stl (07) 12	SP, UP
2 1/2 × 7/40	rnd R gm	stl (07) 13	SP, UP
2 1/2 × 7/40	rnd R gm	stl (07) 13:b	SP
2 1/2 × 7/40	rnd R gm	stl (07) 14	SP, UP
2 1/2 × 7/40	rnd R gm	stl (07) 15	SP
2 1/2 × 7/40	rnd R gm	stl (07) 15:b	SP
2 1/2 × 7/40	rnd R gm	stl (07) 17	UP
2 1/2 × 7/40	rnd R gm	stl (07) 18	UP
2 1/2 × 7/40	rnd R gm	stl (07) 19	UP
2 1/2 × 7/40	rnd R gm	stl (07) 20	UP
2 1/2 × 1/8+	rnd R	stl (07) 20	Wab
2 1/2 × 1/8+	rnd R	stl (07) 22	Wab
2 1/2 × 1/8+	rnd R	stl (07) 24	Wab
2 1/2 × 1/8+	rnd R	stl (07) 25	Wab
2 1/2 × 1/8+	rnd R	stl (07) 26	Wab
2 1/2 × 1/8+	rnd R gm	stl (07) 19	SP
2 1/2 × 1/8+	rnd R gm	stl (07) 21	SP
2 1/2 × 1/8+	rnd R gm	stl (07) 21:b	SP
2 1/2 × 1/8+	rnd R gm	stl (07) 22	SFe
1 1/2 × 1/8+	rnd R	stl (07) 23	Wab
1 1/2 × 1/8+	rnd R	stl (07) 27	Wab
1 1/2 × 1/8+	rnd R	stl (07) 28	Wab
2 1/2 × 1/4	dia R	stl (07) 13	RI
2 1/2 × 1/4	dia R	stl (07) 16	To&Go
2 1/2 × 1/4	dia R	stl (07) 22	MoPac
2 1/2 × 1/4	dia R	stl (07) 23	MoPac
2 1/2 × 1/4	dia R	stl (07) 53	ChRi
2 1/2 × 1/4	dia R rs	stl (07) 10	RI
2 1/2 × 1/4	dia R rs	stl (07) 12	RI
2 1/2 × 1/4	dia R rs	stl (07) 13	IC
2 1/2 × 1/4	dia R rs	stl (07) 14	RI
2 1/2 × 1/4	dia R rs	stl (07) 15	RI
2 1/2 × 1/4	dia R rs	stl (07) 16	RI
2 1/2 × 1/4	dia R rs	stl (07) 17	RI
2 1/2 × 1/4	dia R rs	stl (07) 17:b	LV
2 1/2 × 1/4	dia R rs	stl (07) 18	RI
2 1/2 × 1/4	dia R rs	stl (07) 19	L&N, RI
2 1/2 × 1/4	dia R rs	stl (07) 20	L&N, RI
2 1/2 × 1/4	dia R rs	stl (07) 21	RI
2 1/2 × 1/4	dia R rs	stl (07) 23	IC

2 1/4 × 9/32	sqr	R	stl (07) 25	N&W, N&W(bt)
2 1/4 × 9/32	sqr	R	stl (07) 26	CW(sh bt), N&W, N&W(bt)
2 1/4 × 9/32	sqr	R	stl (07) 26:b	N&W
2 1/4 × 9/32	sqr	R	stl (07) 27	N&W
2 1/4 × 9/32	sqr	R	stl (07) 28	N&W
2 1/4 × 9/32	sqr	R	stl (07) 31	Int
2 1/4 × 9/32	sqr	R	stl (07) 32	Int
2 1/4 × 9/32	sqr	R	stl (07) 33	Int
2 1/4 × 9/32	sqr	R	stl (07) 34	Int
2 1/2 × 11/40	sqr	R	stl (07) 20	MisCe
2 1/2 × 11/40	sqr	R	stl (07) 21	MisCe
2 1/2 × 1/4	sqr	R	stl (07) 10	RI
2 1/2 × 1/4	sqr	R	stl (07) 12	RI
2 1/2 × 1/4	sqr	R	stl (07) 13	RI
2 1/2 × 1/4	sqr	R	stl (07) 14	Big4, RI
2 1/2 × 1/4	sqr	R	stl (07) 15	Big4, RI
2 1/2 × 1/4	sqr	R	stl (07) 16	Big4, CRW, RI, To&Go
2 1/2 × 1/4	sqr	R	stl (07) 17	Big4, CRW, GR(sh), NYC, RI
2 1/2 × 1/4	sqr	R	stl (07) 18	Big4, CRW, GR(sh), M&O(sh), NYC, RI, UV(sh), UP
2 1/2 × 1/4	sqr	R	stl (07) 19	CRW, RI, UP
2 1/2 × 1/4	sqr	R	stl (07) 20	CRW, OSL, RI, UP
2 1/2 × 1/4	sqr	R	stl (07) 21	N&W
2 1/2 × 1/4	sqr	R	stl (07) 22	MisCe, NiPl, N&W
2 1/2 × 1/4	sqr	R	stl (07) 23	CRW, MisCe, NiPl, N&W, N&W(bt)
2 1/2 × 1/4	sqr	R	stl (07) 24	Big4, LH&StL, MisCe, N&W
2 1/2 × 1/4	sqr	R	stl (07) 24:b	D-GC
2 1/2 × 1/4	sqr	R	stl (07) 25	Big4, B&M, MisCe
2 1/2 × 1/4	sqr	R	stl (07) 25:b	B&M
2 1/2 × 1/4	sqr	R	stl (07) 26	A&A(sh), B&M, CRW, MisCe
2 1/2 × 1/4	sqr	R	stl (07) 27	CRW, MisCe, NiPl, P&LE, URR
2 1/2 × 1/4	sqr	R	stl (07) 28	CRW, DM&IR, MisCe, NiPl, SFe, URR
2 1/2 × 1/4	sqr	R	stl (07) 29	A&BB(sh), MisCe, NYO&W(p), NiPl, SFe, URR
2 1/2 × 1/4	sqr	R	stl (07) 30	A&BB(sh), MisCe, NiPl, URR
2 1/2 × 1/4	sqr	R	stl (07) 31	A&BB(sh), MisCe, NiPl, RV, SFe, URR
2 1/2 × 1/4	sqr	R	stl (07) 32	NiPl, RV, SFe, SAL, URR
2 1/2 × 1/4	sqr	R	stl (07) 33	NYC(sh), NiPl, RV, SFe, URR
2 1/2 × 1/4	sqr	R	stl (07) 34	NiPl, RV, SFe, URR, WP-E
2 1/2 × 1/4	sqr	R	stl (07) 35	B&LE, Int, RV, SFe, URR
2 1/2 × 1/4	sqr	R	stl (07) 36	Int, RV, SFe, URR
2 1/2 × 1/4	sqr	R	stl (07) 36:b	RV
2 1/2 × 1/4	sqr	R	stl (07) 36:c	RV
2 1/2 × 1/4	sqr	R	stl (07) 37	B&LE, Int, Int(bt), NiPl, RV, SFe, URR
2 1/2 × 1/4	sqr	R	stl (07) 38	Int, NiPl, RV, SFe, URR
2 1/2 × 1/4	sqr	R	stl (07) 39	B&LE, C&O, Int, NiPl, RV, URR
2 1/2 × 1/4	sqr	R	stl (07) 40	FJ&G, Int, MisCe, NiPl, RV, SFe, URR
2 1/2 × 1/4	sqr	R	stl (07) 40:b	NiPl
2 1/2 × 1/4	sqr	R	stl (07) 41	DL&W, Int, L&WV(sh), NYS&W(sh), RV, URR
2 1/2 × 1/4	sqr	R	stl (07) 42	Int, Int(bt), URR
2 1/2 × 1/4	sqr	R	stl (07) 43	SFe, URR
2 1/2 × 1/4	sqr	R rs	stl (07) 14	IC
2 1/2 × 1/4	sqr	R rs	stl (07) 15	Big4
2 1/2 × 1/4	sqr	R rs	stl (07) 24	D-GC, IC
2 1/2 × 1/4	sqr	R rs	stl (07) 25	LH&StL
2 1/2 × 1/4	sqr	R rs	stl (07) 26	LH&StL

2 1/2 × 1/4	sqr	R rs	stl (07) 27	LH&StL
2 × 1/4	sqr	R	stl (07) 14	CGN
2 × 1/4	sqr	R	stl (07) 15	CGN
2 × 1/4	sqr	R	stl (07) 16	CGN
2 × 1/4	sqr	R	stl (07) 17	CGN
2 × 1/4	sqr	R	stl (07) 24	GN
2 × 1/4	sqr	R	stl (07) 25	GN, StJ&LC(sh)
2 × 1/4	sqr	R	stl (07) 26	GN
2 × 1/4	sqr	R	stl (07) 27	GN
2 × 1/4	sqr	R	stl (07) 28	GN
2 × 1/4	sqr	R	stl (07) 29	GN
2 × 1/4	sqr	R	stl (07) 35	C&O
2 × 1/4	sqr	R	stl (07) 40	C&H
2 × 1/4	sqr	R	stl (07) 41	C&H
1 1/2 × 1/4	sqr	R	stl (07) 15	UP
1 1/2 × 1/4	sqr	R	stl (07) 16	UP
1 1/2 × 1/4	sqr	R	stl (07) 17	UP
1 1/2 × 1/4	sqr	R	stl (07) 18	UP
1 1/2 × 1/4	sqr	R	stl (07) 19	OSL, UP
1 1/2 × 1/4	sqr	R	stl (07) 34	URR
1 1/2 × 1/4	sqr	R	stl (07) 36	GT
2 × 3/16	sqr	R	stl (07) 40	G&GE
2 × 3/16	sqr	R	stl (07) 41	G&GE
2 1/2 × 1/4	cut	R	stl (07) 32	N&W, N&W(p)
2 1/2 × 1/4	cut	R	stl (07) 33	N&W, N&W(p), N&W(bt)
2 1/2 × 1/4	cut	R	stl (07) 34	CW(sh), NYNH&H, N&W, N&W(p), SAL, TC
2 1/2 × 1/4	cut	R	stl (07) 35	CW(sh), M&NJ(sh), NYO&W(sh), N&W, N&W(p), N&W(bt), SAL, TC, TP&W
2 1/2 × 1/4	cut	R	stl (07) 36	N&W, N&W(p), SAL, TC, TP&W
2 1/2 × 1/4	cut	R	stl (07) 37	C&WI, N&W, N&W(bt), SAL, TC, TP&W
2 1/2 × 1/4	cut	R	stl (07) 38	CW(sh), C&WI, N&W, SAL, TC, TP&W
2 1/2 × 1/4	cut	R	stl (07) 39	C&WI, N&W, N&W(p), N&W(bt), TP&W
2 1/2 × 1/4	cut	R	stl (07) 40	CW(sh), C&WI, N&W, N&W(p), N&W(bt), TP&W
2 1/2 × 1/4	cut	R	stl (07) 41	CW(sh bt), C&WI, N&W, N&W(p), TP&W
2 1/2 × 1/4	cut	R	stl (07) 42	CW(sh bt), N&W, N&W(p), N&W(bt)
2 1/2 × 1/4	cut	R	stl (07) 42:b	CW(sh bt), N&W, N&W(p), N&W(bt)
2 1/2 × 1/4	cut	R	stl (07) 43	CW(sh), N&W
2 1/2 × 1/4	pnt	R rs	stl (07) 15	IC
2 1/2 × 1/4	pnt	R rs	stl (07) 25	IC
2 1/2 × 1/4	pnt	R rs	stl (07) 34	SFe
2 1/2 × 1/4	pnt	R rs	stl (07) 35	SFe
2 1/2 × 1/4	pnt	R rs	stl (07) 36	SFe
2 1/2 × 1/4	pnt	R rs	stl (07) 37	SFe
2 1/2 × 1/4	pnt	R rs	stl (07) 38	SFe
2 1/2 × 1/4	hex	R rs	stl (07) 16	IC
2 1/2 × 1/4	hex	R rs	stl (07) 26	IC
2 1/2 × 1/4	hex	R rs	stl (07) 26:b	IC
2 1/2 × 1/4	irr	R rs	stl (07) 18	DL&W, Erie
2 1/2 × 1/4	irr	R ss	stl (07) 48	URR
2 1/2 × 1/4	irr	R ss	stl (07) 49	URR
2 1/2 × 1/4	irr	R ss	stl (07) 52	URR
2 1/2 × 1/4	irr	R ss	stl (07) 53	URR
2 1/2 × 1/4	irr	R ss	stl (07) 64	C&O
2 1/2 × 1/4	tri on rnd	R rs	stl (07) 17	IC

2 1/2 × 1/4	rnd R-I	hs	stl (07)	42	WP-E
2 1/2 × 1/4	rnd R-I	hs	stl (07)	43	WP-E
2 1/2 × 1/4	rnd R-I	hs	stl (07)	44	WP-E
1 1/2 × 3/16	rnd I	gm	cop (07)	11	P&LE
1 1/2 × 3/16	rnd I	gm	cop (07)	12	P&LE
1 1/2 × 3/16	rnd I	gm	cop (07)	15	P&LE
1 1/2 × 3/16	rnd I	gm	cop (07)	16	P&LE
1 1/4 × 3/16	rnd I		cop (07)	03	CB
1 1/4 × 3/16	rnd I		cop (07)	05	CB
1 1/4 × 3/16	rnd I		cop (07)	06	CB
1 1/4 × 3/16	rnd I		cop (07)	07	CB
1 1/4 × 3/16	rnd I		cop (07)	08	CB
1 1/4 × 3/16	rnd I		cop (07)	10	CB
1 1/4 × 3/16	rnd I		cop (07)	27	LI
1 1/4 × 3/16	rnd I		cop (07)	29	MilRd
1 1/4 × 3/16	rnd I		cop (07)	29:b	MilRd
1 1/4 × 3/16	rnd I		cop (07)	30	DT&I
1 1/4 × 3/16	rnd I		cop (07)	30:b	DT&I
1 1/4 × 3/16	rnd I		cop (07)	31	DT&I
1 1/4 × 3/16	sqr I	rs	cop (07)	29	MilRd
1 1/4 × 3/16	sqr I	rs	cop (07)	30	MilRd
2 1/2 × 1/4	rnd R		cop (07)	32	B&G
2 1/2 × 1/4	cut R		stl (07?)	29	KCT
2 1/2 × 1/4	cut R		stl (07?)	30	KCT
2 1/2 × 1/4	cut R		stl (07?)	31	KCT
2 1/2 × 1/4	rnd I		stl (08)	44	Erie
2 1/2 × 1/4	rnd I		stl (08)	45	Erie
2 1/2 × 1/4	sqr I		stl (08)	46	AC&F
2 1/2 × 1/4	rnd R		stl (08)	44	ChRi
2 1/2 × 1/4	rnd R		stl (08)	44:b	D&H(sh), G&U, IC
2 1/2 × 1/4	sqr R		stl (08)	44	URR
2 1/2 × 1/4	sqr R		stl (08)	45	URR
2 1/2 × 1/4	sqr R		stl (08)	46	URR
2 1/2 × 1/4	irr R	ss	stl (08)	47	URR
2 1/2 × 1/4	irr R	ss	stl (08)	48	URR
2 1/2 × 1/4	rnd I		stl (09)	28	L&M
2 1/2 × 1/4	rnd I		stl (09)	29	L&M
2 1/2 × 1/4	rnd I		stl (09)	30	L&M
2 1/2 × 1/4	rnd I		stl (09)	30:b	L&M
2 1/2 × 1/4	rnd I		stl (09)	31	L&M
2 1/2 × 1/4	rnd I		stl (09)	32	L&M
2 1/2 × 1/4	rnd R		stl (09)	30	L&M
2 1/2 × 1/4	rnd R		stl (09)	32	C&IM, IIT
2 1/2 × 1/4	rnd R		stl (09)	33	C&IM, IIT, P&PU
2 1/2 × 1/4	rnd R		stl (09)	34	C&IM, P&PU
2 1/2 × 1/4	rnd R		stl (09)	34:b	P&PU
2 1/2 × 1/4	rnd R		stl (09)	35	C&IM, CB, IIT, L&M, M-I, MoPac, P&PU, StFC(sh)
2 1/2 × 1/4	rnd R		stl (09)	36	CB, P&PU
2 1/2 × 1/4	rnd R		stl (09)	37	C&IM, L&M, P&PU, TS
2 1/2 × 1/4	rnd R		stl (09)	38	AC&Y(sh), AA, DT(sh), P&PU, Wab
2 1/2 × 1/4	rnd R		stl (09)	38:b	Wab

2 1/2 × 1/4	rnd R	stl (09) 38:c	Wab
2 1/2 × 1/4	rnd R	stl (09) 39	CB, P&PU
2 1/2 × 1/4	rnd R	stl (09) 40	AA, C&EI(sh), P&PU, Wab
2 1/2 × 1/4	rnd R	stl (09) 41	P&PU
2 1/2 × 1/4	rnd R	stl (09) 42	P&PU
2 1/2 × 1/4	rnd R	stl (09) 43	CB
2 1/2 × 1/4	rnd R	stl (09) 44	CB, FDDM&S, SFe(sh), T&P
2 1/2 × 1/4	rnd R	stl (09) 44:b	CB, T&P
2 1/2 × 1/4	rnd R	stl (09) 45	C&IM, CB, GT, MisCe
2 1/2 × 1/4	rnd R	stl (09) 46	C&IM, CB, MisCe
2 1/2 × 1/4	rnd R	stl (09) 46:b	C&IM, CB
2 1/2 × 1/4	rnd R	stl (09) 47	ChRi, CB, P&PU, RI, TP&W
2 1/2 × 1/4	rnd R	stl (09) 47:b	CB, MisCe, RI
2 1/2 × 1/4	rnd R	stl (09) 47:c	CB
2 1/2 × 1/4	rnd R	stl (09) 48	C&IM, CB, GT, MisCe, P&PU, TP&W
2 1/2 × 1/4	rnd R	stl (09) 49	C&IM, IIT, MisCe, P&PU
2 1/2 × 1/4	rnd R	stl (09) 50	C&IM, C&WI, CB, MisCe, P&PU, TP&W
2 1/2 × 1/4	rnd R	stl (09) 50:b	CB, VRR
2 1/2 × 1/4	rnd R	stl (09) 50:c	CB
2 1/2 × 1/4	rnd R	stl (09) 50:d	CB
2 1/2 × 1/4	rnd R	stl (09) 51	C&IM, C&WI, C&G, GT, IC, KCS, MisCe, P&PU, RF&P(sh)
2 1/2 × 1/4	rnd R	stl (09) 51:b	VRR
2 1/2 × 1/4	rnd R	stl (09) 52	C&IM, MisCe, S-BC, TASTL, VRR
2 1/2 × 1/4	rnd R	stl (09) 53	C&IM, MiCo, MisCe, P&PU, RF&P(sh), S-BC, VRR
2 1/2 × 1/4	rnd R	stl (09) 53:b	CB
2 1/2 × 1/4	rnd R	stl (09) 54	C&IM, CB, MiCo, MisCe, P&PU, VRR
2 1/2 × 1/4	rnd R	stl (09) 55	C&IM, CB, MiCo, MisCe, P&PU, VRR
2 1/2 × 1/4	rnd R	stl (09) 56	C&IM, CB, MisCe, PRR, P&PU, TASTL, VRR
2 1/2 × 1/4	rnd R	stl (09) 57	C&IM, D&M, MisCe, P&PU, TASTL, VRR
2 1/2 × 1/4	rnd R	stl (09) 58	C&IM, FEC, MexPa, MisCe, P&PU
2 1/2 × 1/4	rnd R	stl (09) 59	C&IM, DM&IR, FEC, M&SV, MisCe, P&PU
2 1/2 × 1/4	rnd R	stl (09) 60	C&IM, DM&IR, FEC, GT, M&SV, MisCe, P&PU
2 1/2 × 1/4	rnd R	stl (09) 61	C&IM, FEC, P&PU
2 1/2 × 1/4	rnd R	stl (09) 62	C&IM, FEC, GT, M&SV, P&PU
2 1/2 × 1/4	rnd R	stl (09) 63	C&IM, GT, P&PU, SFe
2 1/2 × 1/4	rnd R	stl (09) 64	GT, P&PU
2 1/2 × 1/4	rnd R	stl (09) 65	GT, P&PU, P&NW, SFe
2 1/2 × 1/4	rnd R	stl (09) 66	SFe
2 1/2 × 1/4	rnd R	stl (09) 67	P&PU
2 1/2 × 1/4	rnd R	stl (09) 69	D&M, SFe
1 1/2 × 1/4	rnd R	stl (09) 45	GT
1 1/2 × 1/4	rnd R	stl (09) 46	GT
1 1/2 × 1/4	rnd R	stl (09) 47	GT
1 1/2 × 1/4	rnd R	stl (09) 49	GT
1 1/2 × 1/4	rnd R	stl (09) 50	GT
1 1/2 × 1/4	rnd R	stl (09) 54	GT
1 1/2 × 1/4	rnd R	stl (09) 58	GT
1 1/2 × 1/4	rnd R	stl (09) 59	CV, GT
1 1/2 × 1/4	rnd R	stl (09) 60	CV, GT
1 1/2 × 1/4	rnd R	stl (09) 61	CV, GT
1 1/2 × 1/4	rnd R	stl (09) 62	CV
1 1/2 × 1/4	rnd R	stl (09) 63	ACL, CV, SAL(bt)

1 1/2 × 1/4	rnd R	stl (09) 64	ACL, CV, C&IM, DW&P, SAL(bt)
1 1/2 × 1/4	rnd R	stl (09) 65	CV, C&IM
1 1/2 × 1/4	rnd R	stl (09) 66	ACL, CV, C&IM, D&M, SAL(bt)
1 1/2 × 1/4	rnd R	stl (09) 67	C&IM, D&M, SAL(bt)
2 1/2 × 1/5	rnd R gm	stl (09) 35	SP-T, Ver(sh)
2 1/2 × 1/5	rnd R gm	stl (09) 36	Ver(sh)
1 1/2 × 1/5	rnd R	stl (09) 45	AC&Y(sh), A&A(sh), C&NW(sh), CNS&M
2 1/2 × 1/4	rnd I	stl (10) 33	AC&Y(sh), DT&I(sh), Erie
2 1/2 × 1/4	rnd I	stl (10) 34	Erie
2 1/2 × 1/4	rnd I	stl (10) 36	DT&I(sh), MiCo
2 1/2 × 1/4	rnd R	stl (10) 24	L&N, N&W
2 1/2 × 1/4	rnd R	stl (10) 25	L&N, N&W, N&W(bt)
2 1/2 × 1/4	rnd R	stl (10) 27	L&N
2 1/2 × 1/4	rnd R	stl (10) 28	CB, IIT, L&N, Tr&Gu(sh)
2 1/2 × 1/4	rnd R	stl (10) 29	CB, L&N, M&LS(sh), MiCe, MoPac, TH&B(sh)
2 1/2 × 1/4	rnd R	stl (10) 30	CB, MiCe, TH&B(sh)
2 1/2 × 1/4	rnd R	stl (10) 34	L&WV
2 1/2 × 1/4	rnd R	stl (10) 36	LS&I, M&LS
2 1/2 × 1/4	rnd R	stl (10) 37	DT(sh), SB
2 1/2 × 1/4	rnd R	stl (10) 39	LS&I, M&LS
2 1/2 × 1/4	rnd R	stl (10) 41	LS&I, M&LS
1 1/2 × 1/4	rnd R	stl (10) 41	GT
1 1/2 × 1/4	rnd R cp	stl (10) 39	DW&P
1 1/2 × 1/4	rnd R cp	stl (10) 40	DW&P, GT
1 1/2 × 1/4	rnd R cp	stl (10) 41	DW&P, GT
1 1/2 × 1/4	rnd R cp	stl (10) 42	GT
1 1/2 × 1/4	rnd R cp	stl (10) 44	GT
2 1/2 × 3/16	rnd R	stl (10) 79	Apac
2 1/2 × 3/16	rnd R	stl (10) 80	Apac
2 1/2 × 3/16	rnd R	stl (10) 81	Apac
2 1/2 × 3/16	rnd R	stl (10) 82	Apac
2 1/2 × 3/16	rnd R	stl (10) 83	Apac
2 1/2 × 3/16	rnd R	stl (10) 84	Apac
2 1/2 × 3/16	rnd R	stl (10) 85	Apac
2 1/2 × 3/16	rnd R	stl (10) 86	Apac
2 1/2 × 3/16	rnd R	stl (10) 87	Apac
2 1/2 × 3/16	rnd R	stl (10) 88	Apac
2 1/2 × 3/16	rnd R	stl (10) 90	Apac
2 1/2 × 3/16	rnd R	stl (10) 91	Apac
2 1/2 × 3/16	rnd R	stl (10) 99	USG
2 1/4 × 9/32	sqr R	stl (10) 27	N&W
2 1/4 × 9/32	sqr R	stl (10) 28	CW(sh), N&W, N&W(bt)
2 1/4 × 9/32	sqr R	stl (10) 29	CW(sh), N&W, N&W(p), N&W(bt)
2 1/4 × 9/32	sqr R	stl (10) 30	N&W, N&W(p), N&W(bt)
2 1/4 × 9/32	sqr R	stl (10) 31	CW(sh), N&W, N&W(p)
2 1/4 × 9/32	sqr R	stl (10) 32	CW(sh), N&W, N&W(p), N&W(bt)
2 1/2 × 1/4	rnd I	mi (11) 10	NYNH&H
2 1/2 × 1/4	rnd I	mi (11) 11	NYNH&H
2 1/2 × 1/4	rnd I	mi (11) 13	DL&W, NYNH&H
2 1/2 × 1/4	rnd I	mi (11) 15	NYNH&H
2 1/2 × 1/4	rnd I	mi (11) 16	NYC
2 1/2 × 1/4	rnd I	mi (11) 24	SAL

2 1/2 × 1/4	rnd I	gm	mi (11)	14	L&WV
2 × 3/16	rnd I		mi (11)	14	DL&W
1 1/4 × 3/16	rnd I		mi (11)	30	E&LS, IIT
2 1/2 × 1/4	rnd R		mi (11)	10	DL&W, PRR, StFC(sh)
2 1/2 × 1/4	rnd R		mi (11)	11	DL&W, UV(sh)
2 1/2 × 1/4	rnd R		mi (11)	11:b	DL&W
2 1/2 × 1/4	rnd R		mi (11)	12	DL&W
2 1/2 × 1/4	rnd R		mi (11)	13	DL&W
2 1/2 × 1/4	rnd R		mi (11)	14	A&A(sh), DL&W, L&WV
2 1/2 × 1/4	rnd R		mi (11)	15	D&MM(sh), DL&W, L&WV, LV, Prat(sh)
2 1/2 × 1/4	rnd R		mi (11)	16	D&MM(sh), DL&W, UV(sh)
2 1/2 × 1/4	rnd R		mi (11)	16:b	LV
2 1/2 × 1/4	rnd R		mi (11)	16:c	LV
2 1/2 × 1/4	rnd R		mi (11)	16:d	LV
2 1/2 × 1/4	rnd R		mi (11)	17	D&MM(sh), DL&W
2 1/2 × 1/4	rnd R		mi (11)	18	DL&W, Prat(sh)
2 1/2 × 1/4	rnd R		mi (11)	19	DL&W, StFC(sh)
2 1/2 × 1/4	rnd R		mi (11)	20	DL&W, StFC(sh)
2 1/2 × 1/4	rnd R		mi (11)	21	D&MM(sh), DL&W
2 1/2 × 1/4	rnd R		mi (11)	21:b	DL&W, StFC(sh)
2 1/2 × 1/4	rnd R		mi (11)	22	DL&W, Prat(sh), StFC(sh)
2 1/2 × 1/4	rnd R		mi (11)	23	D&MM(sh), DL&W, Prat(sh)
2 1/2 × 1/4	rnd R		mi (11)	24	Bo&Al, DL&W, Prat(sh)
2 1/2 × 1/4	rnd R		mi (11)	25	B&M, DL&W, NYS&W(sh), P&LE, StJ&LC(sh)
2 1/2 × 1/4	rnd R		mi (11)	26	B&C(sh), B&M, CV, DL&W, NYS&W(sh), TC&GB
2 1/2 × 1/4	rnd R		mi (11)	27	B&M, CV, D&MM(sh), DL&W, NYS&W(sh)
2 1/2 × 1/4	rnd R		mi (11)	28	B&C(sh), B&M, CV, D&MM(sh), DL&W, P&LE, StJ&LC(sh)
2 1/2 × 1/4	rnd R		mi (11)	29	B&M, B&M(p), D&MM(sh), DL&W, M&StL(sh), NC&StL, P&LE, StJ&LC(sh)
2 1/2 × 1/4	rnd R		mi (11)	29:b	B&M, DL&W
2 1/2 × 1/4	rnd R		mi (11)	30	B&C(sh), B&ML(sh), B&M, B&M(p), DL&W, L&WV(sh), NYO&W(sh), P&LE, StJ&LC(sh)
2 1/2 × 1/4	rnd R		mi (11)	30:b	DL&W, NYS&W(sh)
2 1/2 × 1/4	rnd R		mi (11)	31	D&MM(sh), DL&W, P&LE
2 1/2 × 1/4	rnd R		mi (11)	32	B&M, D&MM(sh), DL&W, NYO&W(sh), NYS&W(sh)
2 1/2 × 1/4	rnd R		mi (11)	33	DL&W
2 × 3/16	rnd R		mi (11)	17	TH&B
2 × 3/16	rnd R		mi (11)	20:b	NN
2 × 3/16	rnd R		mi (11)	21	NN
2 × 3/16	rnd R		mi (11)	24	B&M
2 × 3/16	rnd R		mi (11)	26	A&A(sh), NC&StL, NiPl
2 × 3/16	rnd R		mi (11)	27	A&A(sh), NC&StL, UV(sh)
2 × 3/16	rnd R		mi (11)	28	NC&StL
2 × 3/16	rnd R		mi (11)	29	L&HR(sh), NC&StL
2 × 3/16	rnd R		mi (11)	30	A&A(sh), NC&StL
2 × 3/16	rnd R		mi (11)	31	A&A(sh), L&HR(sh), L&BR(sh), NC&StL
1 1/2 × 3/16	rnd R		mi (11)	28	IIT
1 1/4 × 3/16	rnd R		mi (11)	18	C&O
1 1/4 × 3/16	rnd R		mi (11)	25	FJ&G(sh), NC&StL
1 1/4 × 3/16	rnd R		mi (11)	26	FJ&G(sh)
1 1/4 × 3/16	rnd R		mi (11)	27	FJ&G(sh)
1 1/4 × 3/16	rnd R		mi (11)	28	FJ&G(sh)
1 × 3/16	rnd R		mi (11)	23	Bo&Al

2 1/2 × 1/4	sqr R rs	mi (11)	16	GR(sh), NYC, N&StL(sh)
2 1/2 × 1/4	sqr R rs	mi (11)	17	NYC
2 1/2 × 1/4	tri R rs	mi (11)	27	IC
2 1/2 × 1/4	tri R rs	mi (11)	27:b	IC
2 1/2 × 1/4	bowtie R rs	mi (11)	18	IC
2 1/2 × 1/4	bowtie R rs	mi (11)	28	IC
2 1/2 × 1/4	cross R rs	mi (11)	19	IC
2 1/2 × 1/4	cross R rs	mi (11)	29	IC
2 1/2 × 1/4	octagon R rs	mi (11)	20	IC
2 1/2 × 1/4	tombstone R rs	mi (11)	21	IC
2 1/2 × 1/4	rnd I	stl (12)	71	Pac, S-BC
2 1/2 × 1/4	rnd I	stl (12)	75	S-BC
2 1/2 × 1/4	rnd R	stl (12)	58	MR
2 1/2 × 1/4	rnd R	stl (12)	59	MR
2 1/2 × 1/4	rnd R	stl (12)	60	MR
2 1/2 × 1/4	rnd R	stl (12)	75	S-BC
2 1/2 × 5/16	rnd I cp	mi (13)	11	PRR
2 1/2 × 1/4	rnd I	stl (14)	15	BR&P, BA&P(sh), CB, E&LS, MM&SE, NYC, NP, TH&B, UP
1 3/4 × 11/40	rnd I	stl (17)	29	C&NW
1 3/4 × 1/4	rnd I	stl (17)	29	C&NW
1 3/4 × 1/4	rnd I	stl (17)	30	C&NW
1 1/2 × 1/4	rnd I	stl (17)	29	DM&CI
2 1/2 × 1/4	rnd R	stl (17)	29	SFe
2 1/2 × 1/4	rnd R	stl (17)	30	Frisco(sh), KCS, MKT, MoPac, SFe, Sie(sh), TPTNO, TC&GB
2 1/2 × 1/4	rnd R	stl (17)	30:b	MoPac, SFe, Tr&Gu(sh)
2 1/2 × 1/4	rnd R	stl (17)	30:c	A&LM, M&NE, SN
2 1/2 × 1/4	rnd R	stl (17)	30:d	M&LS(sh), Soo
2 1/2 × 1/4	rnd R	stl (17)	31	A&LM, KCS, M&NE, MoPac, TC&GB
2 1/2 × 1/4	rnd R	stl (17)	31:b	Frisco(sh), KCS, SFe
2 1/2 × 1/4	rnd R	stl (17)	32	A&LM, CB, KCS, M&NE, MoPac, StFC(sh), SFe
2 1/2 × 1/4	rnd R	stl (17)	33	A&LM, CB, KCS, M&NE, MoPac, SFe, SP&S
2 1/2 × 1/4	rnd R	stl (17)	34	A&LM, KCS, MKT, SP&S
2 1/2 × 1/4	rnd R	stl (17)	35	A&LM, CB, Frisco(sh), KCS, M&NE, M-I, MoPac, StFC(sh), SFe
2 1/2 × 1/4	rnd R	stl (17)	36	A&LM, CB, KCS, M&NE, M-I, MoPac, SFe
2 1/2 × 1/4	rnd R	stl (17)	36:b	MoPac
2 1/2 × 1/4	rnd R	stl (17)	37	A&LM, EStL&S(sh), KCS, M&NE, MoPac, P&N, TPTNO
2 1/2 × 1/4	rnd R	stl (17)	38	A&LM, CB, KCS, M&NE, P&N, StFC(sh), SFe, Sie(sh), TPTNO(sh)
2 1/2 × 1/4	rnd R	stl (17)	39	A&LM, KCS, M&NE, P&N, StFC(sh)
2 1/2 × 1/4	rnd R	stl (17)	40	A&LM, AD&N, C&A(sh), EStL&S(sh), KCS, M&NE, StFC(sh), SFe
2 1/2 × 1/4	rnd R	stl (17)	41	A&LM, AD&N, C&A(sh), C&EI(sh), KCS, M&NE, StFC(sh), SFe
2 1/2 × 1/4	rnd R	stl (17)	42	AA, A&LM, AD&N, C&EI(sh), KCS, M&NE, MKT, SFe, Wab
2 1/2 × 1/4	rnd R	stl (17)	43	A&LM, AD&N, KCS, KCT, M&NE, M-I, RI, SFe

2 1/2 × 1/4	rnd	R	stl (17) 44	A&LM, FDDM&S, KCS, KCT, M&NE, SFe
2 1/2 × 1/4	rnd	R	stl (17) 45	A&LM, AD&N, CB, KCS, M&NE, SFe
2 1/2 × 1/4	rnd	R	stl (17) 45:b	AD&N, SFe
2 1/2 × 1/4	rnd	R	stl (17) 46	A&LM, AD&N, KCS, M&NE, SFe
2 1/2 × 1/4	rnd	R	stl (17) 47	AA, A&LM, AD&N, B&C(sh), E&LS, M&NE, PM, StJ&LC(sh), SFe, Ver(sh), Wab
2 1/2 × 1/4	rnd	R	stl (17) 48	A&LM, AD&N, KCS
2 1/2 × 1/4	rnd	R	stl (17) 49	AA, A&LM, AD&N, B&C(sh), ChRi, CB, D&MM(sh), E&LS, G&J(sh), KCS, KCT, M&LS(sh), SFe, TP&W, Wab
2 1/2 × 1/4	rnd	R	stl (17) 50	A&LM, AD&N, KCS
2 1/2 × 1/4	rnd	R	stl (17) 51	A&LM, AD&N, TP&W
2 1/2 × 1/4	rnd	R	stl (17) 52	A&LM, AD&N, KCS
2 1/2 × 1/4	rnd	R	stl (17) 53	A&LM, KCS, SFe
2 1/2 × 1/4	rnd	R	stl (17) 54	A&LM, KCS
2 1/2 × 1/4	rnd	R	stl (17) 55	A&LM, AD&N, KCS
2 1/2 × 1/4	rnd	R	stl (17) 56	A&LM, AD&N, KCS, Tr&Gu
2 1/2 × 1/4	rnd	R	stl (17) 57	A&LM, AD&N, KCS, Tr&Gu
2 1/2 × 1/4	rnd	R	stl (17) 58	A&LM, AD&N, KCS, Tr&Gu
2 1/2 × 1/4	rnd	R	stl (17) 59	A&LM, AD&N, KCS
2 1/2 × 1/4	rnd	R	stl (17) 60	A&LM, AD&N, KCS
2 1/2 × 1/4	rnd	R	stl (17) 61	A&LM, AD&N, KCS, P&NW
2 1/2 × 1/4	rnd	R	stl (17) 62	A&LM, AD&N, KCS, P&NW
2 1/2 × 1/4	rnd	R	stl (17) 67	RSS
2 1/2 × 1/4	rnd	R	stl (17) 69	RSS
2 × 1/4	rnd	R	stl (17) 29	UP
2 × 1/4	rnd	R	stl (17) 29:b	BA&P(sh), UP
2 × 1/4	rnd	R	stl (17) 30	B&G(sh), O&NW(sh), UP
2 × 1/4	rnd	R	stl (17) 31	UP
2 × 1/4	rnd	R	stl (17) 32	B&G(sh), O&NW(sh), UP
2 × 1/4	rnd	R	stl (17) 33	UP
2 × 1/4	rnd	R	stl (17) 36	FDDM&S, UP
1 3/4 × 1/4	rnd	R	stl (17) 30	C&NW
1 3/4 × 1/4	rnd	R	stl (17) 30:b	C&NW
1 × 1/4	rnd	R	stl (17) 31	MKT
1 × 1/4	rnd	R	stl (17) 31:b	MKT
1 × 1/4	rnd	R	stl (17) 32	MKT
1 × 1/4	rnd	R	stl (17) 35	GB&W(sh), MKT
2 1/2 × 1/4	sqr	R	stl (17) 40	SFe
2 1/2 × 1/4	sqr	R	stl (17) 41	SFe
2 1/2 × 1/4	sqr	R rs	stl (17) 42	SFe
2 1/2 × 1/4	sqr	R rs	stl (17) 44	SFe
2 1/2 × 1/4	sqr	R rs	stl (17) 45	A&LM, AD&N, SFe
2 1/2 × 1/4	sqr	R rs	stl (17) 46	SFe
2 1/2 × 1/4	sqr	R rs	stl (17) 47	SFe
2 1/2 × 1/4	sqr	R rs	stl (17) 49	CB, SFe
2 1/2 × 1/4	sqr	R rs	stl (17) 53	SFe
2 1/2 × 1/4	pnt	R rs	stl (17) 40	SFe
2 1/2 × 1/4	pnt	R rs	stl (17) 40:b	SFe
2 1/2 × 1/4	pnt	R rs	stl (17) 40:c	SFe
2 1/2 × 1/4	pnt	R rs	stl (17) 40:d	SFe
2 1/2 × 1/4	pnt	R rs	stl (17) 41	SFe
2 1/2 × 1/4	pnt	R rs	stl (17) 42	SFe
2 1/2 × 1/4	pnt	R rs	stl (17) 43	SFe

2 1/2 × 1/4	pnt R rs	stl (17) 43:b	SFe
2 1/2 × 1/4	pnt R rs	stl (17) 44	SFe
2 1/2 × 1/4	pnt R rs	stl (17) 44:b	SFe
2 1/2 × 1/4	pnt R rs	stl (17) 45	SFe
2 1/2 × 1/4	pnt R rs	stl (17) 46	SFe
2 1/2 × 1/4	pnt R rs	stl (17) 47	SFe
2 1/2 × 1/4	pnt R rs	stl (17) 49	SFe
2 1/2 × 1/4	pnt R rs	stl (17) 53	SFe
2 1/2 × 1/4	dia I	stl (18) 09	EP&SW
2 1/2 × 1/4	sqr I	stl (18) 10	EP&SW, UP
2 1/2 × 1/4	sqr I	stl (18) 11	EP&SW, UP
2 1/2 × 1/4	sqr I	stl (18) 12	SLR, UP
2 1/2 × 1/4	sqr I	stl (18) 13	SLR, UP
2 1/2 × 1/4	sqr I	stl (18) 13:b	SLR, UP
2 1/2 × 1/4	sqr I	stl (18) 14	UP
2 1/2 × 1/4	sqr I	stl (18) 15	SLR, UP
2 1/2 × 1/4	sqr I	stl (18) 19	UP, Utah
2 1/2 × 1/4	sqr I	stl (18) 26	SFe
2 1/2 × 1/4	sqr R	stl (18) 20	Utah
2 1/2 × 1/4	sqr R	stl (18) 21	UP, Utah
2 1/2 × 1/4	sqr R	stl (18) 22	UP, Utah
2 1/2 × 1/4	sqr R	stl (18) 23	UP, Utah
2 1/2 × 1/4	sqr R	stl (18) 24	NN, UP, Utah
2 1/2 × 1/4	sqr R	stl (18) 25	SLR, UP, Utah
2 1/2 × 1/4	sqr R	stl (18) 26	SLR, UP, Utah
2 1/2 × 1/4	sqr R	stl (18) 27	UP, Utah
2 1/2 × 1/4	sqr R	stl (18) 28	UP, Utah
2 1/2 × 1/4	sqr R	stl (18) 29	Utah
2 1/2 × 1/4	sqr R	stl (18) 30	SFe, Utah
2 1/2 × 1/4	sqr R	stl (18) 31	SFe, Utah
2 1/2 × 1/4	sqr R	stl (18) 32	SFe, Utah
2 1/2 × 1/4	sqr R	stl (18) 33	SFe, Utah
2 1/2 × 1/4	sqr R	stl (18) 33:b	SFe
2 1/2 × 1/4	sqr R	stl (18) 34	SFe, Utah
2 1/2 × 1/4	sqr R	stl (18) 35	Utah
2 1/2 × 1/4	sqr R	stl (18) 36	B&G, Utah
2 1/2 × 1/4	sqr R	stl (18) 37	Utah
2 1/2 × 1/4	sqr R	stl (18) 38	SFe, Utah
2 1/2 × 1/4	sqr R	stl (18) 39	SFe, Utah
2 1/2 × 1/4	sqr R	stl (18) 40	Utah
2 1/2 × 1/4	sqr R	stl (18) 41	Utah
2 1/2 × 1/4	sqr R	stl (18) 44	SFe
2 1/2 × 1/4	sqr R	stl (18) 45	SFe
2 1/2 × 1/4	sqr R	stl (18) 46	SFe, Utah
2 1/2 × 1/4	sqr R	stl (18) 47	SFe, Utah
2 1/2 × 1/4	sqr R	stl (18) 48	SFe, Utah
2 1/2 × 1/4	sqr R	stl (18) 49	Utah
2 1/2 × 1/4	sqr R	stl (18) 50	SFe
2 1/2 × 1/4	sqr R	stl (18) 51	SFe
2 1/2 × 1/4	sqr R	stl (18) 52	SFe
2 1/2 × 1/4	sqr R	stl (18) 54	SFe
2 1/2 × 1/4	sqr R	stl (18) 55	SFe
2 1/2 × 1/4	sqr R	stl (18) 56	SFe

2 1/2 × 1/4	sqr R	stl (18) 58	SFe
2 1/2 × 1/4	sqr R	stl (18) 59	SFe
2 1/2 × 1/4	rnd I	stl (18A) 5	SLR, SP, UP
2 1/2 × 1/4	rnd I	stl (18A) 07	SLR, UP
2 1/2 × 1/4	rnd I	stl (18A) 08	EP&SW, OSL, SLR, SP, UP
2 1/2 × 1/4	rnd I	stl (18A) 8	EP&SW, SP, UP
2 1/2 × 1/4	rnd I	stl (18A) 09	EP&SW, SLR, SP, UP
2 1/2 × 1/4	rnd I	stl (18A) 10	EP&SW, SLR, SP, UP
2 1/2 × 1/4	rnd I	stl (18A) 11	SP
2 1/2 × 1/4	rnd I	stl (18A) 20	SP
2 1/2 × 1/4	rnd I	stl (18A) 21	SP
2 1/2 × 1/4	rnd I	stl (18A) 22	SP
2 1/2 × 1/4	rnd I	stl (18A) 23	SP
2 1/2 × 1/4	rnd I	stl (18A) 24	CAM(sh), SFe, SP
2 1/2 × 1/4	rnd I	stl (18A) 25	SFe, SP
2 1/2 × 1/4	rnd I	stl (18A) 26	SFe
2 × 1/4	rnd I	stl (18A) 20	SP
1 3/4 × 1/4+	rnd R	stl (18A) 18	C&S
2 1/2 × 1/4	rnd R	stl (18A) 22	B&G
2 1/2 × 1/4	rnd R	stl (18A) 24	B&G(sh), SP, Utah
2 1/2 × 1/4	rnd R	stl (18A) 25	B&G(sh), Utah
2 1/2 × 1/4	rnd R	stl (18A) 29	KCM&O, SFe
2 1/2 × 1/4	rnd R	stl (18A) 34	SN, TS, Utah
2 × 1/4	rnd R	stl (18A) 24	UP
2 × 1/4	rnd R	stl (18A) 25	UP
2 × 1/4	rnd R	stl (18A) 26	UP
2 × 1/4	rnd R	stl (18A) 28	UP
2 1/2 × 1/8+	rnd R gm	stl (18A) 28	NN
2 1/2 × 1/8+	rnd R gm	stl (18A) 29	NN
2 1/2 × 1/4	rnd I	stl (18B) 4	UP
2 1/2 × 1/4	rnd I	stl (18B) 05	SP
2 1/2 × 1/4	rnd I	stl (18B) 5	SLR, UP
2 1/2 × 1/4	rnd I	stl (18B) 06	SP
2 1/2 × 1/4	rnd I	stl (18B) 6	SLR, UP
2 1/2 × 1/4	rnd I	stl (18B) 6	OSL, UP
2 1/2 × 1/4	rnd I	stl (18B) 08	CAM(sh), EP&SW, UP
2 1/2 × 1/4	rnd I	stl (18B) 18	SP
2 1/2 × 1/4	rnd I	stl (18B) 25	SFe
2 1/2 × 1/4	rnd I	stl (18B) 26	Frisco(sh), SFe
2 1/2 × 1/4	rnd I	stl (18B) 27	Utah
2 1/2 × 1/4	rnd I	stl (18B) 28	T&P
2 1/2 × 1/4	rnd I	stl (18B) 29	T&P, TPTNO
2 1/2 × 1/4	rnd I	stl (18B) 31	TC&GB
2 1/2 × 1/4	rnd I	stl (18B) 32	TC&GB
2 1/2 × 1/4	rnd I	stl (18B) 33	T&P
2 1/2 × 1/4	rnd I	stl (18B) 34	T&P
2 1/2 × 1/4	rnd I	stl (18B) 35	T&P, TPTNO, TC&GB
2 1/2 × 1/4	rnd I	stl (18B) 36	TPTNO
2 1/2 × 1/4	rnd I hs	stl (18B) 41	GN
2 1/2 × 1/8+	rnd I gm	stl (18B) 21	SLR
1 × 1/8+	rnd I hs gm	stl (18B) 8	Tr
1 × 1/8+	rnd I hs gm	stl (18B) 9	Tr

1 3/4 × 1/4+ rnd R	stl (18B) 16 C&S
1 3/4 × 1/4+ rnd R	stl (18B) 17 C&S
2 1/2 × 1/4 rnd R	stl (18B) 21 L&N
2 1/2 × 1/4 rnd R	stl (18B) 21:b 3LR, UP
2 1/2 × 1/4 rnd R	stl (18B) 22 L&N
2 1/2 × 1/4 rnd R	stl (18B) 25 SFe(sh), Soo, SP, SP-M
2 1/2 × 1/4 rnd R	stl (18B) 26 AC&Y(sh), B&G(sh), Frisco(sh), O&NW(sh), SFe, SP&S, Utah
2 1/2 × 1/4 rnd R	stl (18B) 27 B&G(sh), FW&DC, GW(sh), SN, Utah
2 1/2 × 1/4 rnd R	stl (18B) 28 B&G(sh), CB&Q(sh), C&S, FW&DC, GW(sh), KCM&O, SN, SFe, Utah, War(sh)
2 1/2 × 1/4 rnd R	stl (18B) 29 B&G(sh), CB&Q(sh), C&S, FW&DC, GW(sh), KCM&O, SN, SFe, Utah
2 1/2 × 1/4 rnd R	stl (18B) 30 B&G(sh), FW&DC, SN, TS, Utah
2 1/2 × 1/4 rnd R	stl (18B) 31 FW&DC, MoPac, SN, SFe, SP-W, TS, Tr, UP, Utah
2 1/2 × 1/4 rnd R	stl (18B) 32 MoPac, SN, SLG&W(sh), SFe, TS, Tr, TC&GB, Utah
2 1/2 × 1/4 rnd R	stl (18B) 33 B&G(sh), GW(sh), MoPac, SN, SLG&W(sh), SFe, TC&GB, Utah
2 1/2 × 1/4 rnd R	stl (18B) 34 B&G(sh), BA&P(sh), GN, SLG&W(sh), SFe, TC&GB, Utah
2 1/2 × 1/4 rnd R	stl (18B) 35 B&G(sh), BA&P(sh), FDDM&S, GN, MoPac, SN, SLG&W(sh), SFe(sh), TS, Tr, TC&GB, Utah
2 1/2 × 1/4 rnd R	stl (18B) 36 B&G(sh), BA&P(sh), SN, SLG&W(sh), SFe, TS, Tr, TC&GB, Utah
2 × 1/4 rnd R	stl (18B) 24 UP
2 × 1/4 rnd R	stl (18B) 25 UP
2 × 1/4 rnd R	stl (18B) 26 UP
2 × 1/4 rnd R	stl (18B) 27 UP
2 × 1/4 rnd R	stl (18B) 28 UP, Utah(sh)
2 × 1/4 rnd R	stl (18B) 29 B&G(sh), UP, Utah(sh)
2 × 1/4 rnd R	stl (18B) 30 CB&Q(sh), C&S, War(sh)
2 × 1/4 rnd R	stl (18B) 35 O&NW(sh), UP, Utah(sh)
1 1/2 × 1/4 rnd R	stl (18B) 30 D&RGW
2 1/2 × 1/5 rnd R gm	stl (18B) 36 SP-T, Ver(sh)
2 1/2 × 3/16 rnd R gm	stl (18B) 16 SP
2 1/2 × 3/16 rnd R gm	stl (18B) 25 SP-W
2 1/2 × 3/16 rnd R gm	stl (18B) 26 SP-W
2 1/2 × 3/16 rnd R gm	stl (18B) 27 FW&DC, SP-W
2 1/2 × 3/16 rnd R gm	stl (18B) 28 SP-W
2 1/2 × 3/16 rnd R gm	stl (18B) 29 SP-W
2 1/2 × 3/16 rnd R gm	stl (18B) 30 SP-W
2 1/2 × 3/16 rnd R gm	stl (18B) 30:b SP-W
2 1/2 × 3/16 rnd R gm	stl (18B) 34 SP-W, Tr
2 1/2 × 3/16 rnd R gm	stl (18B) 35 SP-W
2 1/2 × 1/8+ rnd R	stl (18B) 30 NN
2 1/2 × 1/8+ rnd R	stl (18B) 31 B&G, NN
2 1/2 × 1/8+ rnd R	stl (18B) 32 NN
2 1/2 × 1/8+ rnd R	stl (18B) 33 NN
2 1/2 × 1/8+ rnd R	stl (18B) 34 NN
2 1/2 × 1/8+ rnd R	stl (18B) 35 NN
2 1/2 × 1/8+ rnd R	stl (18B) 36 NN
2 1/2 × 1/8+ rnd R gm	stl (18B) 17 SP
2 1/2 × 1/8+ rnd R gm	stl (18B) 18 SP
2 1/2 × 1/8+ rnd R gm	stl (18B) 20 SP

2 1/2 × 1/8+ rnd R gm	stl (18B) 21 SP
2 1/2 × 1/8+ rnd R gm	stl (18B) 22 NN, SP, Tr
2 1/2 × 1/8+ rnd R gm	stl (18B) 23 NN, SP
2 1/2 × 1/8+ rnd R gm	stl (18B) 23:b SP, Tr
2 1/2 × 1/8+ rnd R gm	stl (18B) 24 NN, SP
2 1/2 × 1/8+ rnd R gm	stl (18B) 24:b SP, Tr
2 1/2 × 1/8+ rnd R gm	stl (18B) 24:c SP
2 1/2 × 1/8+ rnd R gm	stl (18B) 25 NN, SP, Tr
2 1/2 × 1/8+ rnd R gm	stl (18B) 26 NN, Tr
2 1/2 × 1/8+ rnd R gm	stl (18B) 27 NN, Tr
2 1/2 × 1/8+ rnd R gm	stl (18B) 28 Tr
2 1/2 × 1/8+ rnd R gm	stl (18B) 29 Tr
2 × 1/8+ rnd R gm	stl (18B) 24 SP
2 1/2 × 1/4 pnt R rs	stl (18B) 36 SFe
2 1/2 × 1/4 rnd I	stl (18C) 37 T&P
2 1/2 × 1/4 rnd I	stl (18C) 40 SFe(sh), T&P, TPTNO
2 1/2 × 1/4 rnd I	stl (18C) 41 SFe(sh), T&P, TPTNO
2 1/2 × 1/4 rnd I	stl (18C) 43 TC&GB
2 1/2 × 1/4 rnd I	stl (18C) 59 SMV
2 × 1/4 rnd I	stl (18C) 49 PD
2 × 1/4 rnd I	stl (18C) 50 PD
2 × 1/4 rnd I	stl (18C) 52 OP&E
2 × 1/4 rnd I	stl (18C) 53 OP&E
2 × 1/4 rnd I	stl (18C) 59 SMV
2 × 1/4 rnd I	stl (18C) 68 S-BC
2 × 1/4 rnd I	stl (18C) 69 S-BC
2 1/2 × 1/4 rnd R	stl (18C) 36 BA&P(sh), GN, SFe
2 1/2 × 1/4 rnd R	stl (18C) 37 B&G(sh), BA&P(sh), GN, MoPac, SN, SLG&W(sh), SFe, Tr, TC&GB, Utah
2 1/2 × 1/4 rnd R	stl (18C) 38 B&G(sh), SN, TS, Tr, TC&GB, Utah
2 1/2 × 1/4 rnd R	stl (18C) 39 B&G(sh), SN, SLG&W(sh), SFe, TS, Tr, TC&GB, Utah
2 1/2 × 1/4 rnd R	stl (18C) 40 B&G(sh), SN, TS, Tr, TC&GB, Utah
2 1/2 × 1/4 rnd R	stl (18C) 41 B&G(sh), M-I, SN, SLG&W(sh), T&P, TS, Tr, TC&GB, Utah
2 1/2 × 1/4 rnd R	stl (18C) 42 B&G(sh), SFe(sh), T&P, TPTNO, Utah
2 1/2 × 1/4 rnd R	stl (18C) 43 B&G(sh), DT&I(sh), SFe(sh), T&P, TPTNO, Utah
2 1/2 × 1/4 rnd R	stl (18C) 44 B&G(sh), SN, SLG&W(sh), SFe, T&P, TPTNO, TC&GB, Utah
2 1/2 × 1/4 rnd R	stl (18C) 45 Apac(sh), B&G(sh), F&C(sh), SN, SFe, SFe(sh), Sie(sh), T&P, TPTNO, TC&GB, Utah
2 1/2 × 1/4 rnd R	stl (18C) 46 B&G(sh), SN, SFe, SFe(sh), T&P, TPTNO, TC&GB, Utah
2 1/2 × 1/4 rnd R	stl (18C) 47 B&G(sh), F&C(sh), SFe, SFe(sh), Sie(sh), T&P, TPTNO, TC&GB, Utah
2 1/2 × 1/4 rnd R	stl (18C) 48 FDDM&S, SFe, SFe(sh), Sie(sh), T&P, TPTNO, TC&GB, Utah
2 1/2 × 1/4 rnd R	stl (18C) 49 FDDM&S, F&C(sh), SFe(sh), T&P, TPTNO, TC&GB, Utah
2 1/2 × 1/4 rnd R	stl (18C) 50 Apac(sh), SFe, TC&GB
2 1/2 × 1/4 rnd R	stl (18C) 51 Alm, BA&P(sh), SFe, SI, TC&GB
2 1/2 × 1/4 rnd R	stl (18C) 52 SFe, TC&GB
2 1/2 × 1/4 rnd R	stl (18C) 52:b SFe

2 1/2 × 1/4	rnd	R	stl (18C) 53	TC&GB
2 1/2 × 1/4	rnd	R	stl (18C) 54	Apac(sh), SFe, SI, TC&GB
2 1/2 × 1/4	rnd	R	stl (18C) 55	Apac(sh), SFe, TC&GB
2 1/2 × 1/4	rnd	R	stl (18C) 56	TC&GB
2 1/2 × 1/4	rnd	R	stl (18C) 56:b	SFe
2 1/2 × 1/4	rnd	R	stl (18C) 57	SFe, TC&GB
2 1/2 × 1/4	rnd	R	stl (18C) 58	Alm, SFe, Sie(sh), TC&GB
2 1/2 × 1/4	rnd	R	stl (18C) 59	Alm, SFe, TC&GB
2 1/2 × 1/4	rnd	R	stl (18C) 60	Alm, SFe, SMV, TC&GB
2 1/2 × 1/4	rnd	R	stl (18C) 61	Alm, SFe, SMV, TC&GB, USG
2 1/2 × 1/4	rnd	R	stl (18C) 62	Alm, MilRd, SFe, SMV, TC&GB
2 1/2 × 1/4	rnd	R	stl (18C) 63	SMV, TC&GB
2 1/2 × 1/4	rnd	R	stl (18C) 64	SFe, SMV, TC&GB
2 1/2 × 1/4	rnd	R	stl (18C) 65	TC&GB
2 1/2 × 1/4	rnd	R	stl (18C) 66	TC&GB
2 1/2 × 1/4	rnd	R	stl (18C) 67	SFe, TC&GB
2 1/2 × 1/4	rnd	R	stl (18C) 68	SFe, TC&GB
2 1/2 × 1/4	rnd	R	stl (18C) 69	TC&GB
2 1/2 × 1/4	rnd	R	stl (18C) 70	TC&GB, USG
2 × 1/4	rnd	R	stl (18C) 47	KC
2 × 1/4	rnd	R	stl (18C) 48	Alm, KC
2 × 1/4	rnd	R	stl (18C) 49	Alm
2 × 1/4	rnd	R	stl (18C) 50	Alm, KC
2 × 1/4	rnd	R	stl (18C) 51	Alm, KC
2 × 1/4	rnd	R	stl (18C) 52	Alm, KC, SI
2 × 1/4	rnd	R	stl (18C) 53	Alm
2 × 1/4	rnd	R	stl (18C) 64	UP
1 3/4 × 1/4	rnd	R	stl (18C) 53	SI
1 3/4 × 1/4	rnd	R	stl (18C) 54	SI
1 3/4 × 1/4	rnd	R	stl (18C) 55	SI
2 1/2 × 1/5	rnd	R	stl (18C) 49	SP-T
2 1/2 × 1/5	rnd	R	stl (18C) 50	SP-T, Ver(sh)
2 1/2 × 1/5	rnd	R	stl (18C) 51	SP-T, Ver(sh)
2 1/2 × 3/16	rnd	R	stl (18C) 53	S-BC
2 1/2 × 3/16	rnd	R	stl (18C) 54	S-BC
2 1/2 × 3/16	rnd	R	stl (18C) 55	S-BC
2 1/2 × 3/16	rnd	R gm	stl (18C) 39	CCT(sh), SN(sh), SMV, SP-W, SP-W(bt)
2 1/2 × 3/16	rnd	R gm	stl (18C) 41	CCT(sh), SP-W
2 1/2 × 3/16	rnd	R gm	stl (18C) 42	CCT(sh), SP-W, TC&GB
2 1/2 × 3/16	rnd	R gm	stl (18C) 42:b	SP-W
1 1/2 × 3/16	rnd	R	stl (18C) 54	SLG&W
2 1/2 × 1/8+	rnd	R	stl (18C) 37	NN
2 1/2 × 1/8+	rnd	R	stl (18C) 38	NN
2 1/2 × 1/8+	rnd	R	stl (18C) 39	NN
2 1/2 × 1/8+	rnd	R	stl (18C) 40	NN
2 1/2 × 1/8+	rnd	R	stl (18C) 41	NN
2 1/2 × 1/8+	rnd	R	stl (18C) 42	NN
2 1/2 × 1/4	pnt	R rs	stl (18C) 39	SFe
2 1/2 × 1/4	pnt	R rs	stl (18C) 45	SFe
2 1/2 × 1/4	pnt	R rs	stl (18C) 46	SFe
2 1/2 × 1/4	pnt	R rs	stl (18C) 47	SFe
2 1/2 × 1/4	pnt	R rs	stl (18C) 48	SFe
2 1/2 × 1/4	pnt	R rs	stl (18C) 50	SFe

2 1/2 × 1/4	pnt R rs	stl (18C) 51	SFe, SI
2 1/2 × 1/4	pnt R rs	stl (18C) 52	SFe
2 1/2 × 1/4	pnt R rs	stl (18C) 54	SFe
2 1/2 × 1/4	pnt R rs	stl (18C) 55	SFe
2 1/2 × 1/4	pnt R rs	stl (18C) 57	SFe
2 1/2 × 1/4	pnt R rs	stl (18C) 58	SFe
2 1/2 × 1/4	pnt R rs	stl (18C) 59	SFe
2 1/2 × 1/4+	rnd R	stl (19) 67	RF&P
2 1/2 × 1/4	rnd R	stl (19) 34	BS
2 1/2 × 1/4	rnd R	stl (19) 35	BS, GM&N
2 1/2 × 1/4	rnd R	stl (19) 36	BS, GM&N, Tr&Gu
2 1/2 × 1/4	rnd R	stl (19) 37	GM&N, MisCe
2 1/2 × 1/4	rnd R	stl (19) 37:b	Tr&Gu
2 1/2 × 1/4	rnd R	stl (19) 38	GM&N, Tr&Gu
2 1/2 × 1/4	rnd R	stl (19) 39	CB, TC, TPTNO(sh), Tr&Gu
2 1/2 × 1/4	rnd R	stl (19) 40	CB, TC
2 1/2 × 1/4	rnd R	stl (19) 41	L&N(p), TC
2 1/2 × 1/4	rnd R	stl (19) 42	L&N(p), TC
2 1/2 × 1/4	rnd R	stl (19) 43	Cl, TC
2 1/2 × 1/4	rnd R	stl (19) 43:b	TC
2 1/2 × 1/4	rnd R	stl (19) 44	Cl, TC
2 1/2 × 1/4	rnd R	stl (19) 45	TC
2 1/2 × 1/4	rnd R	stl (19) 46	CSS&SB(sh), NC&StL, P&N, RF&P(sh), TC
2 1/2 × 1/4	rnd R	stl (19) 47	CSS&SB(sh), NC&StL, TC
2 1/2 × 1/4	rnd R	stl (19) 48	TC
2 1/2 × 1/4	rnd R	stl (19) 50	TC
2 1/2 × 1/4	rnd R	stl (19) 51	BS, KCS, TC
2 1/2 × 1/4	rnd R	stl (19) 52	BS, TC
2 1/2 × 1/4	rnd R	stl (19) 53	BS, TC
2 1/2 × 1/4	rnd R	stl (19) 55	BS
2 1/2 × 1/4	rnd R	stl (19) 57	BS
2 1/2 × 1/4	rnd R	stl (19) 60	BS
2 1/2 × 1/4	rnd R	stl (19) 61	BS
2 1/2 × 1/4	rnd R	stl (19) 62	BS
2 1/2 × 1/4	rnd R	stl (19) 63	BS
2 1/2 × 1/4	rnd R	stl (19) 65	BS
2 1/2 × 1/4	rnd R	stl (19) 70	BS
2 × 1/4	rnd R	stl (19) 37	TC
2 × 1/4	rnd R	stl (19) 37:b	L&N
2 × 1/4	rnd R	stl (19) 38	A&StAB
2 × 1/4	rnd R	stl (19) 39	FEC, L&N, P&N
2 × 1/4	rnd R	stl (19) 39:b	D&S
2 × 1/4	rnd R	stl (19) 39:c	L&N
2 × 1/4	rnd R	stl (19) 40	D&S, L&N(p)
2 × 1/4	rnd R	stl (19) 41	D&S, L&N(p), P&N, Tr&Gu
2 × 1/4	rnd R	stl (19) 42	A&StAB, D&S, P&N, Tr&Gu
2 × 1/4	rnd R	stl (19) 43	A&StAB, Tr&Gu
2 × 1/4	rnd R	stl (19) 44	Tr&Gu
2 × 1/4	rnd R	stl (19) 45	Tr&Gu
2 × 1/4	rnd R	stl (19) 47	TC
2 × 1/4	rnd R	stl (19) 49	A&StAB, TC
2 × 1/4	rnd R	stl (19) 50	A&StAB
2 × 1/4	rnd R	stl (19) 51	A&StAB

2	$\times 1/4$	rnd R	stl (19) 52	A&StAB
2	$\times 1/4$	rnd R	stl (19) 53	A&StAB
1 3/4	$\times 1/4$	rnd R	stl (19) 54	BS
1 1/2	$\times 1/4$	rnd R	stl (19) 37	BS
1 1/2	$\times 1/4$	rnd R	stl (19) 37:b	BS
1 1/2	$\times 1/4$	rnd R	stl (19) 38	BS
1 1/2	$\times 1/4$	rnd R	stl (19) 39	B&C(sh), BS
1 1/2	$\times 1/4$	rnd R	stl (19) 40	BS
1 1/2	$\times 1/4$	rnd R	stl (19) 41	BS
1 1/2	$\times 1/4$	rnd R	stl (19) 42	BS
1 1/2	$\times 1/4$	rnd R	stl (19) 43	ACL, BS, GT
1 1/2	$\times 1/4$	rnd R	stl (19) 44	BS
1 1/2	$\times 1/4$	rnd R	stl (19) 45	BS
1 1/2	$\times 1/4$	rnd R	stl (19) 46	BS
1 1/2	$\times 1/4$	rnd R	stl (19) 47	BS
1 1/2	$\times 1/4$	rnd R	stl (19) 48	BS
1 1/2	$\times 1/4$	rnd R	stl (19) 48:b	BS
1 1/2	$\times 1/4$	rnd R	stl (19) 67	ACL, BS
2 1/2	$\times 1/5$	rnd R gm	stl (19) 47	SP-T
2 1/2	$\times 1/5$	rnd R gm	stl (19) 48	SP-T
2 1/2	$\times 1/4$	rnd I	stl (21) 40	LV, RV(sh)
2 1/2	$\times 1/4$	rnd I	stl (21) 41	LV, L&BR(sh), RV(sh)
2 1/2	$\times 1/4$	rnd I	stl (21) 42	LV, NYO&W(sh)
2 1/2	$\times 1/4$	rnd R	stl (21) 30	E&LS
2 1/2	$\times 1/4$	rnd R	stl (21) 35	L&WV
2 1/2	$\times 1/4$	rnd R	stl (21) 36	L&WV
2 1/2	$\times 1/4$	rnd R	stl (21) 37	L&WV
2	$\times 1/4$	rnd R	stl (21) 36	GB&W
1 1/2	$\times 1/4$	rnd R	stl (21) 35	D&M, GT
1 1/2	$\times 1/4$	rnd R	stl (21) 38	GB&W
1 1/2	$\times 1/4$	rnd R	stl (21) 39	GB&W
1 1/2	$\times 1/4$	rnd R	stl (21) 40	GB&W
1 1/2	$\times 1/4$	rnd R	stl (21) 41	GB&W
2 1/2	$\times 1/4$	rnd R	stl (22) 21	L&N
1 1/2	$\times 1/4$	rnd I	stl (23) 35	D&TSL
2 1/2	$\times 1/4$	rnd R	stl (23) 41	Soo
2	$\times 1/4$	rnd R	stl (23) 41	SMV
2	$\times 1/4$	rnd R	stl (23) 42	SMV
1 1/2	$\times 1/4$	rnd R	stl (23) 26	GT
1 1/2	$\times 1/4$	rnd R	stl (23) 33	GT
1 1/2	$\times 1/4$	rnd R	stl (23) 34	GT
1 1/2	$\times 1/4$	rnd R	stl (23) 34:b	GT
1 1/2	$\times 1/4$	rnd R	stl (23) 35	D&TSL
1 1/2	$\times 1/4$	rnd R	stl (23) 40	CV, StJ&LC(sh)
1 1/2	$\times 1/4$	rnd R	stl (23) 41	B&C, StJ&LC
1 1/2	$\times 1/4$	rnd R	stl (23) 42	B&C, StJ&LC
1 1/2	$\times 1/4$	rnd R	stl (23) 43	B&C, ChRi, StJ&LC
2 1/2	$\times 1/4$	rnd R	stl (24) 29	SP&S
2 1/2	$\times 1/4$	rnd R	stl (24) 31	SP&S
2 1/2	$\times 1/4$	rnd R	stl (24) 34	SB

2 1/2 × 1/4	rnd R	stl (24) 35	Soo, SB
2 1/2 × 1/4	rnd R	stl (24) 36	Soo, SB
2 1/2 × 1/4	rnd R	stl (24) 37	DT(sh), SB
2 1/2 × 1/4	rnd R	stl (24) 38	Soo, SB
2 1/2 × 1/4	rnd R	stl (24) 39	Soo, SB
2 1/2 × 1/4	rnd R	stl (24) 40	Soo
2 1/2 × 1/4	rnd R ss	stl (24) 30	Bo&Al, B&M(sh)
2 × 1/4	rnd R	stl (24) 36	Erie(sh)
1 1/2 × 1/4	rnd R	stl (24) 34	B&C, StJ&LC
1 1/2 × 1/4	rnd R	stl (24) 35	B&C, StJ&LC
1 1/2 × 1/4	rnd R	stl (24) 36	B&C, StJ&LC
1 1/2 × 1/4	rnd R	stl (24) 36:b	B&C, StJ&LC
1 1/2 × 1/4	rnd R	stl (24) 37	B&C, StJ&LC
1 1/2 × 1/4	rnd R	stl (24) 38	B&C, StJ&LC
1 1/2 × 1/4	rnd R	stl (24) 39	B&C, StJ&LC
1 1/2 × 1/4	rnd R	stl (24) 40	B&C, StJ&LC
1 1/2 × 1/4	rnd R cp	stl (24) 39	GT
2 1/2 × 1/5	rnd R gm	stl (24) 34	SP-T
2 1/2 × 1/4	sqr R	stl (24) 31	Big4(sh), Bo&Al, NYC(sh)
2 1/2 × 1/4	rnd R	stl (25) 27	IC
2 1/2 × 1/4	rnd R	stl (25) 28	IC
2 1/2 × 1/4	rnd R	stl (25) 29	IC
2 1/2 × 1/4	rnd R	stl (25) 31	IC
2 1/2 × 1/4	rnd R	stl (25) 32	IC
2 1/2 × 1/4	rnd R	stl (25) 33	IC
2 1/2 × 1/4	rnd R	stl (25) 34	IC
2 1/2 × 1/4	rnd R	stl (25) 35	IC
2 1/2 × 1/4	rnd R	stl (25) 36	IC
2 1/2 × 1/4	rnd R	stl (25) 37	IC
2 1/2 × 1/4	rnd R	stl (25) 38	IC
2 1/2 × 1/4	rnd R	stl (25) 39	IC
2 1/2 × 1/4	rnd R	stl (25) 40	IC
2 1/2 × 1/4	rnd R	stl (25) 41	IC
2 1/2 × 1/4	rnd R	stl (25) 42	IC
2 1/2 × 1/4	rnd R	stl (25) 43	IC, NYNH&H
2 1/2 × 1/4	rnd R	stl (25) 44	CSS&SB(sh), IC
2 1/2 × 1/4	rnd R	stl (25) 44:b	IC
2 1/2 × 1/4	rnd R	stl (25) 45	CSS&SB(sh), IC
2 1/2 × 1/4	rnd R	stl (25) 46	IC
2 1/2 × 1/4	rnd R	stl (25) 47	C&O, IC
2 1/2 × 1/4	rnd R	stl (25) 48	C&O, IC
2 1/2 × 1/4	rnd R	stl (25) 49	IC
2 1/2 × 1/4	rnd R	stl (25) 50	IC
2 1/2 × 1/4	rnd R	stl (25) 51	C&O, CSS&SB(sh)
2 1/2 × 1/4	rnd R	stl (25) 52	C&O
2 1/2 × 1/4	rnd R	stl (25) 53	C&O, Cli, C&G, E&LS, IC
2 1/2 × 1/4	rnd R	stl (25) 54	C&G
2 1/2 × 1/4	rnd R	stl (25) 55	C&G, E&LS, IC
2 1/2 × 1/4	rnd R	stl (25) 56	C&G, E&LS, IC
2 1/2 × 1/4	rnd R	stl (25) 56:b	C&G
2 1/2 × 1/4	rnd R	stl (25) 57	C&G, E&LS, IC
2 1/2 × 1/4	rnd R	stl (25) 58	C&G, IC, M&SV

$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (25) 59	CSS&SB(sh), C&G, IC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (25) 60	C&G, IC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (25) 61	IC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (25) 62	IC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (25) 63	IC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (25) 64	IC
$1\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (25) 37	DW&P, GT
$1\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (25) 50	Apac
$1\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (25) 59	CSS&SB(sh)
$1\frac{1}{2} \times \frac{1}{4}$	rnd R cp	stl (25) 38	DW&P, GT
$1\frac{3}{4} \times \frac{3}{16}$	rnd R gm	stl (25) 34	MilRd
$2\frac{1}{2} \times \frac{1}{4}$	irr R ss	stl (25) 41	NiPl
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (31) 58	MexPa
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (31) 59	S-BC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (31) 60	S-BC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (31) 61	S-BC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (31) 62	S-BC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (31) 62:b	S-BC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (31) 63	S-BC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (31) 65	S-BC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (31) 73	S-BC
$2\frac{1}{2} \times \frac{1}{4}$	rnd I	stl (32) 68	S-BC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (32) 66	Pac, S-BC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (32) 66:b	S-BC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (32) 68	Pac, S-BC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (32) 68:b	Pac, S-BC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (32) 69	Pac, S-BC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (32) 69:b	S-BC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (32) 70	Pac, S-BC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (32) 72	S-BC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (32) 72:b	S-BC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (32) 72:c	S-BC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (32) 72:d	S-BC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (32) 74	Pac, S-BC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (32) 74:b	Pac, S-BC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (32) 74:c	S-BC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (32) 76	Pac, S-BC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (32) 76:b	Pac, S-BC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (32) 76:c	S-BC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R ts	stl (37) 70	MeC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R ts	stl (37) 71	MeC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R ts	stl (37) 72	MeC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R ts	stl (37) 73	MeC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R ts	stl (37) 74	MeC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R ts	stl (37) 75	MeC
$2\frac{1}{2} \times \frac{1}{4}$	rnd R ts	stl (37) 76	MeC
$1\frac{1}{2} \times \frac{1}{4}$	rnd R ts	stl (37) 61	AC&HB, CN, DW&P, GT, GT(p), TH&B
$1\frac{1}{2} \times \frac{1}{4}$	rnd R ts	stl (37) 62	AC&HB, CN, DW&P, TH&B, Ver(sh)
$1\frac{1}{2} \times \frac{1}{4}$	rnd R ts	stl (37) 63	AC&HB, CN, DW&P
$1\frac{1}{2} \times \frac{1}{4}$	rnd R ts	stl (37) 64	AC&HB, B&M(sh), CN
$1\frac{1}{2} \times \frac{1}{4}$	rnd R ts	stl (37) 65	AC&HB, CN, DW&P

1 1/2 × 1/4	rnd R ts	stl (37) 66	AC&HB, CN, DW&P
1 1/2 × 1/4	rnd R ts	stl (37) 67	AC&HB, CN, DW&P
1 1/2 × 1/4	rnd R ts	stl (37) 68	AC&HB, CN, DW&P
1 1/2 × 1/4	rnd R ts	stl (37) 69	AC&HB
1 1/2 × 1/4	rnd R ts	stl (37) 70	AC&HB
1 1/2 × 1/4	rnd R ts	stl (37) 71	AC&HB
1 1/2 × 1/4	rnd R ts	stl (37) 72	AC&HB
1 1/2 × 1/4	rnd R ts	stl (37) 73	AC&HB
1 1/2 × 1/4	rnd R ts	stl (37) 74	AC&HB
1 1/2 × 1/4	rnd R ts	stl (37) 75	AC&HB
1 1/2 × 1/4	rnd R ts	stl (37) 76	AC&HB
1 1/2 × 1/4	rnd R ts	stl (37) 77	AC&HB
1 1/2 × 1/4	rnd R ts	stl (37) 78	AC&HB, ON
1 1/2 × 1/4	rnd R ts	stl (37) 79	AC&HB
1 1/2 × 1/4	rnd R ts	stl (37) 80	AC&HB, ON
1 1/2 × 1/4	rnd R ts	stl (37) 82	AC&HB, ON
1 1/2 × 1/5	rnd R ts	stl (37) 58	AC&HB, DW&P, TH&B, Ver(sh)
1 1/2 × 1/5	rnd R ts	stl (37) 59	AC&HB, CN, DW&P, TH&B, Ver(sh)
1 1/2 × 1/5	rnd R ts	stl (37) 60	AC&HB, CN, DW&P, TH&B
1 1/2 × 1/5	rnd R ts	stl (37) 61	AC&HB
2 1/2 × 1/4	rnd R os cp	stl (38) 26	CP, CP(p)
2 1/2 × 1/4	rnd R os cp	stl (38) 27	CP
2 1/2 × 1/4	rnd R os cp	stl (38) 28	CP
2 1/2 × 1/4	rnd R os cp	stl (38) 29	CP
2 1/2 × 1/4	rnd R os cp	stl (38) 30	CP, CP(p)
2 1/2 × 1/4	rnd R os cp	stl (38) 31	CP
2 1/2 × 1/4	rnd R os cp	stl (38) 35	CP
1 1/2 × 1/4	rnd R	stl (38) 25	CN
1 1/2 × 1/4	rnd R cp	stl (38) 49	TH&B
1 1/2 × 1/4	rnd R cp	stl (38) 50	AC&HB, TH&B
1 1/2 × 1/4	rnd R cp	stl (38) 51	AC&HB, TH&B, Ver(sh)
1 1/2 × 1/4	rnd R cp	stl (38) 52	AC&HB, TH&B
1 1/2 × 1/4	rnd R cp	stl (38) 53	AC&HB, TH&B
1 1/2 × 1/4	rnd R cp	stl (38) 54	AC&HB, TH&B, Ver(sh)
1 1/2 × 1/4	rnd R cp	stl (38) 55	AC&HB, TH&B, Ver(sh)
1 1/2 × 1/4	rnd R cp	stl (38) 56	AC&HB, TH&B, Ver(sh)
1 1/2 × 1/4	rnd R cp	stl (38) 57	AC&HB, TH&B, Ver(sh)
1 1/2 × 1/4	rnd R os cp	stl (38) 26	CN
1 1/2 × 1/4	rnd R os cp	stl (38) 27	CN, GT
1 1/2 × 1/4	rnd R os cp	stl (38) 28	CN
1 1/2 × 1/4	rnd R os cp	stl (38) 29	CN
1 1/2 × 1/4	rnd R os cp	stl (38) 30	CN, GT
1 1/2 × 1/4	rnd R os cp	stl (38) 31	CN
1 1/2 × 1/4	rnd R os cp	stl (38) 33	CN, TH&B(sh)
1 1/2 × 1/4	rnd R os cp	stl (38) 34	CN, TH&B(sh)
1 1/2 × 1/4	rnd R os cp	stl (38) 35	CN, GT, TH&B
1 1/2 × 1/4	rnd R os cp	stl (38) 36	CN, DW&P, GT, TH&B
1 1/2 × 1/4	rnd R os cp	stl (38) 37	CN, TH&B, Ver(sh)
1 1/2 × 1/4	rnd R os cp	stl (38) 38	B&M(sh), CN, CV, C&P(sh), GT, StJ&LC(sh), TH&B, Ver(sh)
1 1/2 × 1/4	rnd R os cp	stl (38) 39	CN, CP(p), GT, TH&B
1 1/2 × 1/4	rnd R os cp	stl (38) 40	CN, CP(p), TH&B, Ver(sh)

$1\frac{1}{2} \times \frac{1}{4}$	rnd R os cp	stl (38) 41	CN, CP(p), DW&P, TH&B, Ver(sh)
$1\frac{1}{2} \times \frac{1}{4}$	rnd R os cp	stl (38) 42	CN, CP(p), DW&P, GT
$1\frac{1}{2} \times \frac{1}{4}$	rnd R os cp	stl (38) 44	CN, DW&P
$1\frac{1}{2} \times \frac{1}{4}$	rnd R os cp	stl (38) 45	CN, CP(p), GT
$1\frac{1}{2} \times \frac{1}{4}$	rnd R os cp	stl (38) 46	CN, GT, TH&B
$1\frac{1}{2} \times \frac{1}{4}$	rnd R os cp	stl (38) 47	AC&HB, CN, CP(p), TH&B, Ver(sh)
$1\frac{1}{2} \times \frac{1}{4}$	rnd R os cp	stl (38) 48	AC&HB, CP(p), TH&B
$1\frac{1}{2} \times \frac{1}{4}$	rnd R os cp	stl (38) 49	AC&HB
$2\frac{1}{2} \times \frac{1}{4}$	rnd I	stl (39) 22	CP(p)
$2\frac{1}{2} \times \frac{1}{4}$	rnd I	stl (39) 23	CP(p)
$2 \times \frac{1}{4}$	rnd I	stl (39) 24	CN
$2 \times \frac{1}{4}$	rnd I	stl (39) 25	CP(p)
$1\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (39) 26	CN
$1\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (39) 34	CN
$1\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (39) 34:b	GT
$1\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (39) 34:c	GT
$1\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (39) 35	CN
$1\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (39) 36	CN
$1\frac{1}{2} \times \frac{1}{4}$	rnd R	stl (39) 37	CN
$1\frac{1}{2} \times \frac{1}{4}$	rnd R cp	stl (39) 38	CN
$1\frac{1}{2} \times \frac{1}{4}$	rnd R cp	stl (39) 39	CN
$1\frac{1}{2} \times \frac{1}{4}$	rnd R cp	stl (39) 40	CN
$1\frac{1}{2} \times \frac{1}{4}$	rnd R cp	stl (39) 41	CN
$1\frac{1}{2} \times \frac{1}{4}$	rnd R cp	stl (39) 44	CN
$1\frac{1}{2} \times \frac{1}{4}$	rnd R cp	stl (39) 45	CN
$1\frac{1}{2} \times \frac{1}{4}$	rnd R cp	stl (39) 46	CN
$1\frac{1}{2} \times \frac{1}{4}$	rnd R cp	stl (39) 46:b	CN
$1\frac{1}{2} \times \frac{1}{4}$	rnd R cp	stl (39) 47	CN, CP(p)
$1\frac{1}{2} \times \frac{1}{4}$	rnd R os cp	stl (39) 27	CN
$1\frac{1}{2} \times \frac{1}{4}$	rnd R os cp	stl (39) 28	CN
$1\frac{1}{2} \times \frac{1}{4}$	rnd R os cp	stl (39) 29	CN
$1\frac{1}{2} \times \frac{1}{4}$	rnd R os cp	stl (39) 30	CN
$1\frac{1}{2} \times \frac{1}{4}$	rnd R os cp	stl (39) 31	CN, CP(p)
$1\frac{1}{2} \times \frac{1}{4}$	rnd R os cp	stl (39) 32	CN
$1\frac{1}{2} \times \frac{1}{4}$	rnd R os cp	stl (39) 33	CN
$1\frac{1}{2} \times \frac{1}{4}$	rnd R os cp	stl (39) 33:b	CN
$1\frac{1}{2} \times \frac{1}{4}$	rnd R os cp	stl (39) 39	CP(p)
$1\frac{1}{2} \times \frac{1}{4}$	rnd R os cp	stl (39) 43	CP(p)
$1\frac{1}{2} \times \frac{1}{4}$	rnd R os cp	stl (39) 44:b	CP(p)
$1\frac{1}{2} \times \frac{1}{4}$	rnd R os cp	stl (39) 47	CP(p)
$1\frac{1}{2} \times \frac{1}{5}$	rnd R	stl (39) 42	TH&B, Ver(sh)
$1\frac{1}{2} \times \frac{1}{5}$	rnd R	stl (39) 43	TH&B, Ver(sh)
$1\frac{1}{2} \times \frac{1}{5}$	rnd R	stl (39) 44	TH&B, Ver(sh)
$1\frac{1}{2} \times \frac{1}{5}$	rnd R	stl (39) 45	TH&B, Ver(sh)
$1\frac{1}{2} \times \frac{1}{5}$	rnd R	stl (39) 46	TH&B
$1\frac{1}{4} \times \frac{1}{4}$	rnd I	cop (39) 23	TH&B
$1\frac{1}{4} \times \frac{1}{4}$	rnd I	cop (39) 24	TH&B
$1\frac{1}{4} \times \frac{1}{4}$	rnd I	cop (39) 25	TH&B
$1\frac{1}{4} \times \frac{1}{4}$	rnd I	cop (39) 26	TH&B
$1\frac{1}{4} \times \frac{3}{16}$	rnd I	cop (39) 34	TH&B
$2\frac{1}{2} \times \frac{1}{4}$	rnd I	stl (40) 17	NP
$2\frac{1}{2} \times \frac{1}{4}$	rnd I	stl (40) 17:b	NP

2 1/2 × 1/4	rnd I	stl (40) 17:c	NP
2 1/2 × 1/4	rnd I	stl (40) 17:d	NP
2 1/2 × 1/4	rnd R	stl (47) 41	DM&IR
2 1/2 × 1/4	rnd R	stl (47) 44	DM&IR
2 1/2 × 1/4	rnd R	stl (47) 44:b	DM&IR
2 1/2 × 1/4	rnd R	stl (47) 44:c	DM&IR
2 1/2 × 1/4	rnd R	stl (47) 45	DM&IR
2 1/2 × 1/4	rnd R	stl (47) 45:b	LS&I, M&LS
2 1/2 × 1/4	rnd I	cop (60) 29	Int(sh), JW&NW(sh), M&StL(sh), PS&N, UV(sh)
1 3/4 × 3/16	rnd I	cop (60) 52:c	KCT
1 3/4 × 3/16	rnd I gm	cop (60) 52	AC&F
1 3/4 × 3/16	rnd I gm	cop (60) 54	AC&F
1 1/4 × 3/16	rnd I	cop (60) 23:b	Ver(sh)
1 1/4 × 3/16	rnd I	cop (60) 58	KCT
1 1/4 × 3/16	rnd I	cop (60) 59	KCT
1 1/4 × 3/16	rnd I	cop (60) 60	KCT, WP-E
1 1/4 × 3/16	rnd I	cop (60) 61	KCT
1 1/4 × 3/16	rnd I gm	cop (60) 19	LI
1 1/4 × 3/16	rnd I gm	cop (60) 20	LI, TH&B
1 1/4 × 3/16	rnd I gm	cop (60) 21	LI, TH&B
1 1/4 × 3/16	rnd I gm	cop (60) 21:b	TH&B
1 1/4 × 3/16	rnd I gm	cop (60) 22	DT&I, TH&B
1 1/4 × 3/16	rnd I gm	cop (60) 22:b	TH&B
1 1/4 × 3/16	rnd I gm	cop (60) 23	C&O, DT&I, LI
1 1/4 × 3/16	rnd I gm	cop (60) 23:b	B&H(sh), M&NJ(sh), NYO&W(sh), Ste(sh)
1 1/4 × 3/16	rnd I gm	cop (60) 24	B&H(sh), C&O, DT&I, LI, M&NJ(sh), NYO&W(sh), Ste(sh)
1 1/4 × 3/16	rnd I gm	cop (60) 25	C&O, DT&I, LI(pr)
1 1/4 × 3/16	rnd I gm	cop (60) 25:b	DT&I
1 1/4 × 3/16	rnd I gm	cop (60) 26	DT&I, Ma&Pa
1 1/4 × 3/16	rnd I gm	cop (60) 26:b	DT&I, JW&NW(sh), UV(sh)
1 1/4 × 3/16	rnd I gm	cop (60) 26:c	C&O
1 1/4 × 3/16	rnd I gm	cop (60) 27	DT&I, MilRd, TP&W, UV(sh)
1 1/4 × 3/16	rnd I gm	cop (60) 27:b	DT&I, Ma&Pa, MilRd
1 1/4 × 3/16	rnd I gm	cop (60) 28	A&BR, DT&I, KCT, Ma&Pa, MilRd, TP&W
1 1/4 × 3/16	rnd I gm	cop (60) 29	A&BR, DT&I, Ma&Pa, MilRd, MN&S, TP&W
1 1/4 × 3/16	rnd I gm	cop (60) 29:b	MilRd
1 1/4 × 3/16	rnd I gm	cop (60) 30	A&BR, FR, MilRd
1 1/4 × 3/16	rnd I gm	cop (60) 31	FR, MiCo
1 1/4 × 3/16	rnd I gm	cop (60) 32	Ma&Pa, MiCo
1 1/4 × 3/16	rnd I gm	cop (60) 33	MiCo
1 1/4 × 3/16	rnd I gm	cop (60) 34	G&U, Ma&Pa, MiCo
1 1/4 × 3/16	rnd I gm	cop (60) 35	G&U, MiCo
1 1/4 × 3/16	rnd I gm	cop (60) 36	G&U, MiCo, P&BR
1 1/4 × 3/16	rnd I gm	cop (60) 37	G&U, MiCo, P&BR
1 1/4 × 3/16	rnd I gm	cop (60) 38	G&U, MiCo
1 1/4 × 3/16	rnd I gm	cop (60) 39	G&U
1 1/4 × 3/16	rnd I gm	cop (60) 40	P&BR
1 1/4 × 3/16	rnd I gm	cop (60) 41	G&U, Ma&Pa, P&BR
1 1/4 × 3/16	rnd I gm	cop (60) 46	P&BR
1 1/4 × 3/16	rnd I gm	cop (60) 53	StJL, WP-E
1 1/4 × 3/16	rnd I gm	cop (60) 54	StJL

1 1/4 × 3/20	rnd I	cop (60)	49	Ma&Pa
1 1/4 × 3/16	sqr I	cop (60)	30	MiCo
1 1/4 × 3/16	sqr I rs gm	cop (60)	27	MilRd
1 1/4 × 3/16	sqr I rs gm	cop (60)	28	MilRd
1 1/4 × 3/16	sqr I rs gm	cop (60)	29	MilRd
1 1/4 × 3/16	sqr I rs gm	cop (60)	30	MilRd
1 1/4 × 1/5	rnd R gm	cop (60)	34	MilRd
1 3/4 × 3/16	rnd R gm	cop (60)	46	Ma&Pa
1 1/2 × 3/16	rnd R gm	cop (60)	49	G&U
1 1/2 × 3/16	rnd R gm	cop (60)	50	G&U
1 1/4 × 3/16	rnd R gm	cop (60)	34	G&U, MilRd
1 1/4 × 3/16	rnd R gm	cop (60)	34:b	MilRd, PH&D(sh)
1 1/4 × 3/16	rnd R gm	cop (60)	34:c	MilRd
1 1/4 × 3/16	rnd R gm	cop (60)	35	DT(sh), G&U, MilRd, PH&D(sh)
1 1/4 × 3/16	rnd R gm	cop (60)	35:b	MilRd
1 1/4 × 3/16	rnd R gm	cop (60)	35:c	MilRd, PH&D(sh)
1 1/4 × 3/16	rnd R gm	cop (60)	36	G&GE, G&U, Ma&Pa, MilRd
1 1/4 × 3/16	rnd R gm	cop (60)	36:b	CNS&M, MilRd, PH&D(sh)
1 1/4 × 3/16	rnd R gm	cop (60)	36:c	MilRd
1 1/4 × 3/16	rnd R gm	cop (60)	37	A&A(sh), CNS&M, Ma&Pa, MilRd, MilRd(sh), PH&D(sh)
1 1/4 × 3/16	rnd R gm	cop (60)	37:b	GB&W(sh), MilRd
1 1/4 × 3/16	rnd R gm	cop (60)	38	MilRd
1 1/4 × 3/16	rnd R gm	cop (60)	38:b	MilRd, PH&D(sh)
1 1/4 × 3/16	rnd R gm	cop (60)	38:c	CNS&M, MilRd
1 1/4 × 3/16	rnd R gm	cop (60)	39	GB&W(sh), MilRd, PH&D(sh)
1 1/4 × 3/16	rnd R gm	cop (60)	40	G&U, MilRd
1 1/4 × 3/16	rnd R gm	cop (60)	41	MilRd
1 1/4 × 3/16	rnd R gm	cop (60)	42	G&U, MilRd
1 1/4 × 3/16	rnd R gm	cop (60)	46	G&U, MilRd
1 1/4 × 3/16	rnd R gm	cop (60)	47	G&U, MilRd
1 1/4 × 3/16	rnd R gm	cop (60)	48	G&U, MilRd
1 1/4 × 3/16	rnd R gm	cop (60)	49	MilRd
1 1/4 × 3/16	rnd R gm	cop (60)	50	KCT, MilRd
1 1/4 × 3/16	rnd R gm	cop (60)	51	KCT, MilRd
1 1/4 × 3/16	rnd R C-rim	cop (60)	38	MilRd
1 1/4 × 3/16	rnd R C-rim	cop (60)	39	MilRd
1 1/4 × 3/16	rnd R C-rim	cop (60)	40	MilRd
1 1/4 × 3/16	rnd R C-rim	cop (60)	41	MilRd
1 1/4 × 3/16	rnd R C-rim	cop (60)	42	MilRd
1 1/4 × 3/16	rnd I	alm (60)	56	Ma&Pa
1 1/4 × 3/20	rnd I	alm (60)	47	Ma&Pa
1 1/4 × 3/20	rnd I	alm (60)	48	Ma&Pa
1 1/4 × 3/20	rnd I	alm (60)	50	Ma&Pa
1 1/4 × 3/20	rnd I	alm (60)	51	Ma&Pa
1 1/4 × 3/20	rnd I	alm (60)	52	Ma&Pa
1 1/4 × 3/20	rnd I	alm (60)	53	Ma&Pa
1 1/4 × 3/20	rnd I	alm (60)	54	Ma&Pa
1 1/4 × 3/20	rnd I	alm (60)	55	Ma&Pa
1 1/4 × 3/16	rnd I	cop (61)	63	SB
1 1/4 × 3/16	rnd R	cop (61)	52	KCT
1 1/4 × 3/16	rnd R	cop (61)	54	KCT
1 1/4 × 3/16	rnd R	cop (61)	55	KCT

1 1/4 × 3/16	rnd R		cop (61)	56	KCT
1 1/4 × 3/16	rnd R		cop (61)	57	KCT
2 × 1/4	rnd I		alm (61)	65	UC
2 × 1/4	rnd I		alm (61)	67	USG
2 × 1/4	rnd I		alm (61)	68	USG
1 1/2 × 1/4	rnd I		alm (61)	70	PST
2 × 3/16	rnd I		alm (61)	54	P&NW
2 × 3/16	rnd I		alm (61)	55	P&NW
2 × 3/16	rnd I		alm (61)	59	USG
2 × 3/16	rnd I		alm (61)	71	USG
2 × 3/16	rnd I		alm (61)	79	USG
2 × 3/16	rnd I		alm (61)	82	USG
2 × 3/16	rnd I		alm (61)	83	USG
2 × 3/16	rnd I		alm (61)	84	USG
2 × 3/16	rnd I		alm (61)	92	USG
2 × 3/16	rnd I		alm (61)	95	USG
2 × 3/16	rnd I		alm (61)	98	USG
2 × 3/16	rnd I		alm (61)	01	USG (BPB fencepost nail)
1 1/4 × 3/16	rnd I		alm (61)	64	USG
1 1/4 × 3/16	rnd I		alm (61)	66	SB
3/4 × 3/16	rnd I		alm (61)	64	USG
2 1/2 × 1/4	rnd R		alm (61)	72	USG
1 1/2 × 3/16	rnd I		cop (63)	30	LI(pr)
1 1/4 × 3/16	rnd I		cop (63)	31	LI(pr)
1 1/4 × 3/16	rnd I	gm	cop (63)	38	Ma&Pa
1 1/4 × 3/16	rnd I	gm	cop (63)	39	Ma&Pa
1 1/4 × 3/16	rnd I	gm	cop (63)	40	Ma&Pa
2 1/2 × 1/4	rnd I		stl (64)	18	FJ&G(sh), M&O(sh), M&NJ(sh), N&StL(sh), UV(sh)
2 1/2 × 1/4	rnd I		stl (64)	18:b	UV(sh)
2 1/2 × 1/4	rnd I		stl (64)	19	M&O(sh)
1 1/4 × 3/16	rnd I		cop (66)	25	LI
1 1/4 × 3/16	rnd I		cop (66)	26	LI
1 1/4 × 3/16	rnd I	gm	cop (66)	22	LI
2 × 5/16	rnd I		stl ()	1	SFe
2 × 5/16	rnd I		stl ()	1:b	SFe
2 × 5/16	rnd I		stl ()	1:c	SFe
2 1/2 × 1/4	rnd I		stl ()	00	CB&Q
2 1/2 × 1/4	rnd I		stl ()	00:b	C&EI
2 1/2 × 1/4	rnd I		stl ()	01	CB&Q
2 1/2 × 1/4	rnd I		stl ()	1	Big4, SFe
2 1/2 × 1/4	rnd I		stl ()	1:b	SFe
2 1/2 × 1/4	rnd I		stl ()	02	CB&Q
2 1/2 × 1/4	rnd I		stl ()	2	B&O, Big4, SFe
2 1/2 × 1/4	rnd I		stl ()	2:b	SFe
2 1/2 × 1/4	rnd I		stl ()	03	CB&Q
2 1/2 × 1/4	rnd I		stl ()	3	Big4, C&EI, MM&SE, SFe
2 1/2 × 1/4	rnd I		stl ()	3:b	SFe
2 1/2 × 1/4	rnd I		stl ()	4	MilRd, SFe, SP
2 1/2 × 1/4	rnd I		stl ()	4:b	SFe
2 1/2 × 1/4	rnd I		stl ()	4:c	SFe

2 1/2 × 1/4	rnd I	stl () 11	B&O
2 1/2 × 1/4	rnd I	stl () 11:b	B&O
2 1/2 × 1/4	rnd I	stl () 11:c	IC
2 1/2 × 1/4	rnd I	stl () 12	UP
2 1/2 × 1/4	rnd I	stl () 12:b	Bo&Al
2 1/2 × 1/4	rnd I	stl () 17	SLR, UP
2 1/2 × 1/4	sqr I rs	stl () 32	NP(p)
2 1/2 × 1/4	sqr I rs	stl () 33	NP(p)
2 1/2 × 1/4	rnd R	stl () 21	CB
2 1/2 × 1/4	rnd R	stl () 22	CB
2 1/2 × 1/4	rnd R	stl () 24	CB
2 1/2 × 1/4	rnd R	stl () 25	CB
2 1/2 × 1/4	rnd R	stl () 27	SP-M
2 × 1/4	rnd R	stl () 38	Erie(sh)
2 1/2 × 1/4-	rnd R	stl () 28	SP-M
2 1/2 × 1/4-	rnd R	stl () 30	SP-M
2 1/2 × 1/4-	rnd R	stl () 31	SP-M
2 1/2 × 1/4-	rnd R	stl () 32	SP-M
2 1/2 × 1/4-	rnd R	stl () 33	SP-M
2 1/2 × 1/4-	rnd R	stl () 33:b	SP-M
2 × 1/4-	rnd R	stl () 34	SP-M
2 × 1/4-	rnd R	stl () 35	SP-M
2 × 1/4-	rnd R	stl () 36	SP-M
1 1/4 × 1/5	rnd I	cop () 53	KCT
1 1/2 × 3/16	rnd I gm	cop () 13	P&LE
1 1/2 × 3/16	rnd I gm	cop () 14	P&LE
1 1/4 × 3/16	rnd I gm	cop () 07	IC
2 × 3/16	rnd I	alm () 94	CSX
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1 1/2 × 1/4	rnd R os cp	alm () 49	CP(p)
1 1/2 × 1/4	rnd R os cp	alm () 50	CP(p)
1 1/2 × 1/4	rnd R os cp	alm () 51	CP(p)
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1 1/2 × 1/4	rnd R os cp	alm () 53	CP(p)
1 1/2 × 1/4	rnd R os cp	alm () 54	CP(p)
1 1/2 × 1/4	rnd R os cp	alm () 55	CP(p)
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1 1/2 × 1/4	rnd R os cp	alm () 57	CP(p)
1 1/2 × 1/4	rnd R os cp	alm () 58	CP(p)
1 1/2 × 1/4	rnd R os cp	alm () 59	CP(p)
1 1/2 × 1/4	rnd R os cp	alm () 60	CP(p)
1 1/2 × 1/4	rnd R os cp	alm () 61	CP(p)
1 1/2 × 1/4	rnd R os cp	alm () 64	CP(p)
3 × 1/4	rnd I gm	brs () 56	UC
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3 × 1/4	rnd I gm	brs () 58	UC
3 × 1/4	rnd I gm	brs () 59	UC
3 × 1/4	rnd I gm	brs () 60	UC

Index of abbreviations

A&A	Arcade & Attica
A&BB	Akron & Barberton Belt
A&BR	Arcadia & Betsey River
A&LM	Arkansas & Louisiana Missouri
A&S	Aliquippa & Southern
A&StAB	Atlanta & Saint Andrews Bay
AA	Ann Arbor
AC&F	American Car & Foundry
AC&HB	Algoma Central & Hudson Bay
AC&Y	Akron, Canton & Youngstown
ACL	Atlantic Coast Line
AD&N	Ashley, Drew & Northern
Alm	Almanor
Apac	Apache
B&C	Barre & Chelsea / Montpelier & Wells River
B&G	Bingham & Garfield
B&H	Bath & Hammondsport
B&LE	Bessemer & Lake Erie
B&M	Boston & Maine
B&ML	Belfast & Moosehead Lake
B&O	Baltimore & Ohio
Ba&Ar	Bangor & Aroostook
BA&P	Butte, Anaconda & Pacific
BC	Buffalo Creek
Big4	Big Four Route
Bo&Al	Boston & Albany
BR&P	Buffalo, Rochester & Pittsburgh
BS	Birmingham Southern
C&A	Chicago & Alton
C&EI	Chicago & Eastern Illinois
C&G	Columbus & Greenville
C&H	Cheswick & Harmar
C&IM	Chicago & Illinois Midland
C&NW	Chicago & North Western
C&O	Chesapeake & Ohio
C&P	Clarendon & Pittsford
C&S	Colorado & Southern
C&WI	Chicago & Western Indiana
CAM	Colorado Midland
CAM	Colorado Arizona Mine
CB	Cotton Belt Route
CB&Q	Chicago, Burlington & Quincy
CBE	Coal Belt Electric
CCT	Central California Traction
CGN	Cape Girardeau Northern
ChRi	Chestnut Ridge
Cli	Clinchfield
CN	Canadian National
CNS&M	Chicago North Shore & Milwaukee
Col	Colombia
CoRa	Copper Range

CP	Canadian Pacific
CRW	Copper River & Northwestern
CSS&SB	Chicago South Shore & South Bend
CSX	CSX Transportation
CV	Central Vermont
CW	Chesapeake Western
D&H	Delaware & Hudson
D&M	Detroit & Mackinac
D&MM	Dansville & Mount Morris
D&N	Delaware & Northern
D&RGW	Denver & Rio Grande Western
D&S	Durham & Southern
D&SL	Denver & Salt Lake
D&TSL	Detroit & Toledo Shore Line
D-GC	Dayton-Goose Creek
DL&W	Delaware, Lackawanna & Western
DM&CI	Des Moines & Central Iowa
DM&IR	Duluth, Missabe & Iron Range
DT	Detroit Terminal
DT&I	Detroit, Toledo & Ironton
DW&P	Duluth, Winnipeg & Pacific
E&LS	Escanaba & Lake Superior
EJ&E	Elgin, Joliet & Eastern
EJ&S	East Jordan & Southern
EP&SW	El Paso & Southwestern
Erie	Erie
EstL&S	East St. Louis & Suburban
F&C	Frankfort & Cincinnati
FDDM&S	Fort Dodge, Des Moines & Southern
FEC	Florida East Coast
FJ&G	Fonda, Johnstown & Gloversville
FR	Fore River
Frisco	Frisco Lines
FW&DC	Fort Worth & Denver City
G&GE	Galesburg & Great Eastern
G&J	Greenwich & Johnsonville
G&U	Grafton & Upton
GB&W	Green Bay & Western
GCS	General Crushed Stone
GM&N	Gulf, Mobile & Northern
GN	Great Northern
GR	Grasse River
GR&I	Grand Rapids & Indiana
GT	Grand Trunk
GVG&N	Gila Valley, Globe & Northern
GW	Great Western
H&NE	Hillsboro & Northeastern
IaT	Iowa Terminal
IC	Illinois Central
IHB	Indiana Harbor Belt
IIT	Illinois Terminal
Int	Interstate
IRCA	International Railways of Central America
IS	Illinois Southern

J&SC	Johnstown & Stony Creek
JW&NW	Jamestown, Westfield & Northwestern
KC	Kennecott Copper Co.
KCM&O	Kansas City, Mexico & Orient
KCS	Kansas City Southern
KCT	Kansas City Terminal
Key	Key System
KGJ&E	Kanawha, Glen Jean & Eastern
KO&G	Kansas, Oklahoma & Gulf
L&BR	Lowville & Beaver River
L&HR	Lehigh & Hudson River
L&M	Litchfield & Madison
L&N	Louisville & Nashville
L&NE	Lehigh & New England
L&WV	Lackawanna & Wyoming Valley
LAJ	Los Angeles Junction
LC&M	Lake Champlain & Moriah
LH&StL	Louisville, Henderson & St. Louis
LI	Long Island
LS&BC	La Salle & Bureau County
LS&I	Lake Superior & Ishpeming
LV	Lehigh Valley
M&GR	Manistee & Grand Rapids
M&LS	Manistique & Lake Superior
M&NE	Manistee & Northeastern
M&NJ	Middletown & New Jersey
M&O	Marcellus & Otisco
M&StL	Minneapolis & St. Louis
M&SV	Mississippi & Skuna Valley
Ma&Pa	Maryland & Pennsylvania
MBI	Mount Beacon Incline
MC&CL	Mason City & Clear Lake
MeC	Maine Central
MER&L	Milwaukee Electric Railway & Light
MexPa	Mexican Pacific
M-I	Missouri-Illinois
MiCe	Michigan Central
MiCo	Midland Continental
MilRd	Milwaukee Road
MisCe	Mississippi Central
MKT	Missouri-Kansas-Texas
MM&SE	Munising, Marquette & Southeastern
MN&S	Minneapolis, Northfield and Southern
Monon	Monon Route
MoPac	Missouri Pacific
MR	McCloud River
MR&BT	Mississippi River & Bonne Terre
MT	Minnesota Transfer
MV	Moshassuck Valley
N&StL	Norwood & St. Lawrence
N&W	Norfolk & Western
NaP	Narragansett Pier
NatMex	National Railways of Mexico

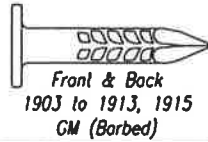
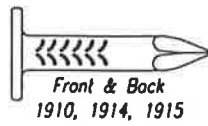
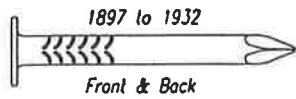
NC&StL.....	Nashville, Chattanooga & St. Louis
NiPl.....	Nickel Plate Road
NN.....	Nevada Northern
NP.....	Northern Pacific
NS.....	Norfolk Southern
NY&LB.....	New York & Long Branch
NYC.....	New York Central
NYCTA.....	New York City Transit Authority
NYNH&H.....	New York, New Haven & Hartford
NYO&W.....	New York, Ontario & Western
NYS&W.....	New York, Susquehanna & Western
O&NW.....	Oregon & Northwestern
ON.....	Ontario Northland
OP&E.....	Oregon, Pacific & Eastern
OSL.....	Oregon Short Line
P&BR.....	Patapsco & Back Rivers
P&LE.....	Pittsburgh & Lake Erie
P&N.....	Piedmont & Northern
P&NW.....	Prescott & Northwestern
P&PU.....	Peoria & Pekin Union
P&WV.....	Pittsburgh & West Virginia
Pac.....	Pacific
PD.....	Phelps Dodge
PH&D.....	Port Huron & Detroit
PM.....	Pere Marquette
Prat.....	Prattsburgh
PRR.....	Pennsylvania
PS&N.....	Pittsburg, Shawmut & Northern
PSC.....	Public Service Railway Company of New Jersey
PST.....	Philadelphia Suburban Transportation
PT.....	Port Townsend
RF&P.....	Richmond, Fredericksburg & Potomac
RI.....	Rock Island Lines
RSS.....	Rockdale, Sandow & Southern
Rut.....	Rutland
RV.....	Rahway Valley
SAL.....	Seaboard Air Line
SB.....	South Buffalo
S-BC.....	Sonora-Baja California
Sch.....	Schenectady
SFe.....	Santa Fe
SI.....	Spokane International
Sie.....	Sierra
SLG&W.....	Salt Lake, Garfield & Western
SLR.....	Salt Lake Route
SMV.....	Santa Maria Valley
SN.....	Sacramento Northern
Soo.....	Soo Line
SP.....	Southern Pacific
SP&S.....	Spokane, Portland & Seattle
SP-M.....	Southern Pacific of Mexico
SP-T.....	Southern Pacific, Texas & Louisiana Lines
SP-W.....	Southern Pacific, Western Lines
SSL.....	Skaneateles Short Line

Ste	Stewartstown
StFC	St. Francois County
StJ&LC	St. Johnsbury & Lamoille County
StJL	St. Joseph Lead
StLB&E	St. Louis & Belleville Electric
StLIM&S	St. Louis, Iron Mountain & Southern
StLRM&P	St. Louis, Rocky Mountain & Pacific
StPB&T	St. Paul Bridge & Terminal
T&P	Texas & Pacific
TASL	Terminal RR Association of St. Louis
TC	Tennessee Central
TC&GB	Tucson, Cornelia & Gila Bend
TH&B	Toronto, Hamilton & Buffalo
To&Go	Tonopah & Goldfield
TP&W	Toledo, Peoria & Western
TPTNO	Texas Pacific – Missouri Pacific Terminal RR of New Orleans
Tr	Trona
Tr&Gu	Tremont & Gulf
TS	Tidewater Southern
TT	Toledo Terminal
UC	Union Carbide
UP	Union Pacific / OSL / SLR
URR	Union RR
USG	U.S. Government
Utah	Utah
UV	Unadilla Valley
Ver	Vermont
VRR	Virginian
WA&G	Wellsville, Addison & Galetton
Wab	Wabash
War	Warrenton
WJ&S	West Jersey & Seashore
WM	Western Maryland
WP-E	West Pittston-Exeter
WR&E	Washington Railway & Electric
W-SSB	Winston-Salem Southbound
YW	Yreka Western

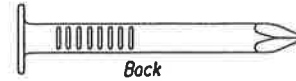
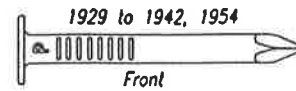
Quick guide to shank markings

by Jerry Penry

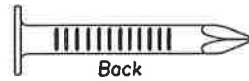
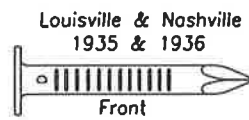
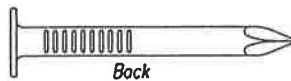
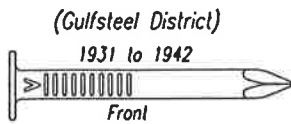
Type (01) Townsend Company



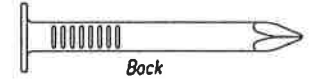
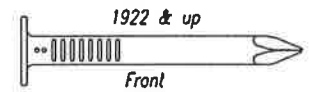
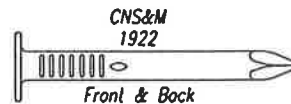
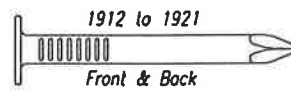
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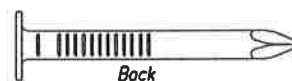
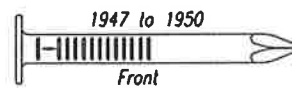
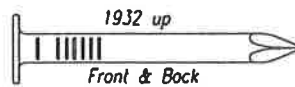
Type (04) Republic Steel Corp.



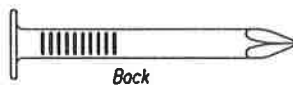
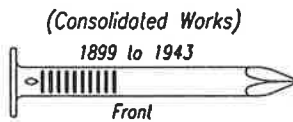
Type (05) Jones & Laughlin Steel Corp.



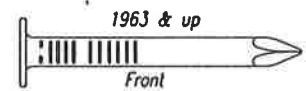
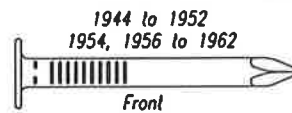
Type (06) American Steel & Wire Co. (Joliet Works)



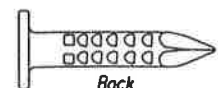
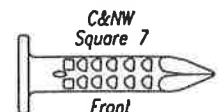
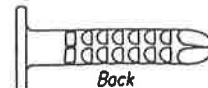
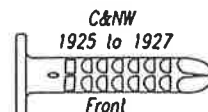
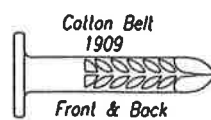
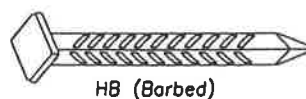
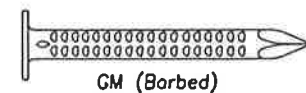
Type (07) American Steel & Wire Co.



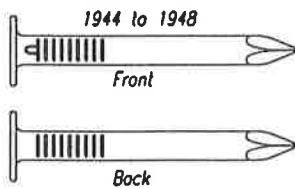
(Donora Works)



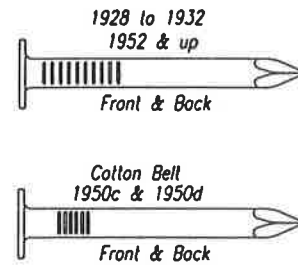
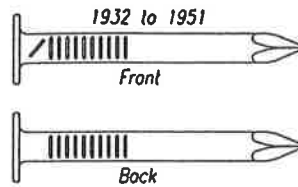
Stubbies GM (Barbed)



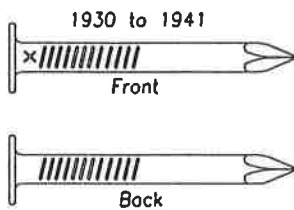
Type (08)
American Steel & Wire Co.
(Donora Works)



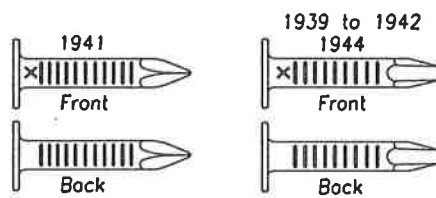
Type (09)
Keystone Steel & Wire Co.



Type (10)
Igoe Brothers (?)

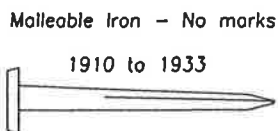


Slanted Anchors

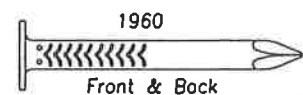
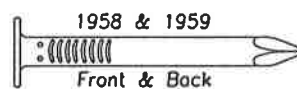


Straight Anchors

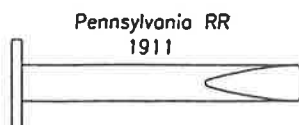
Type (11)
American Casting & Mfg. Corp.



Type (12)
Columbia - Geneva Steel Division
of U.S. Steel (?)



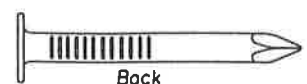
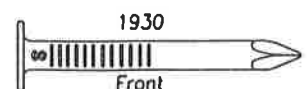
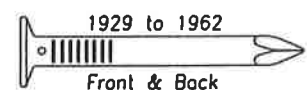
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John Milliken & Company
Malleable Iron - No Marks



Type (14)
Jones & Laughlin Steel Corp.



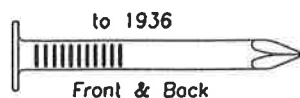
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Sheffield Steel Corp.



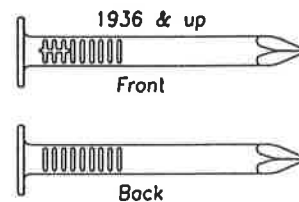
Type (18A)
Colorado Fuel & Iron Corp.



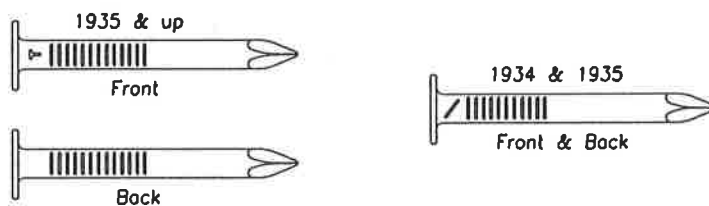
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Colorado Fuel & Iron Corp.



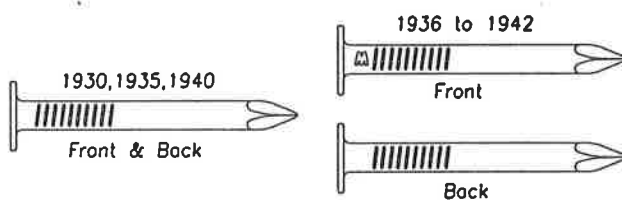
Type (18C)
Colorado Fuel & Iron Corp.



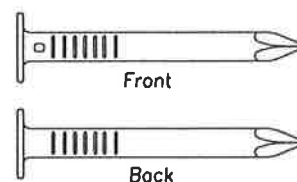
Type (19)
Tennessee Coal Iron & Railroad Co.



Type (21)
Wheeling Steel Corp.



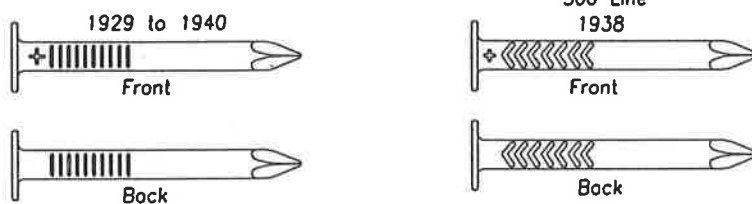
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Unknown Company



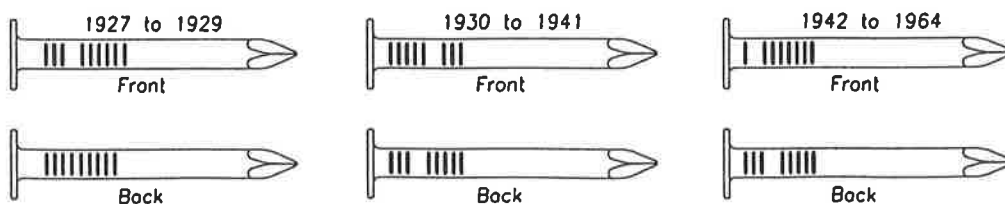
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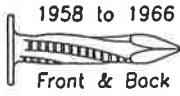
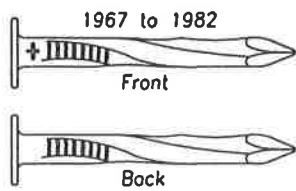



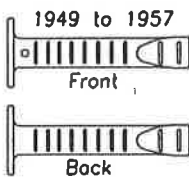
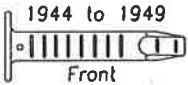
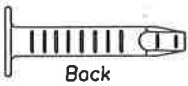
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Bethlehem Steel Co.

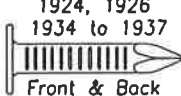
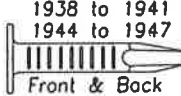
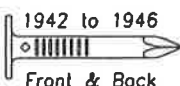


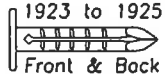
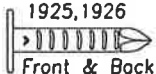


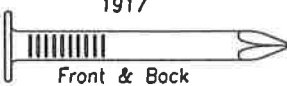
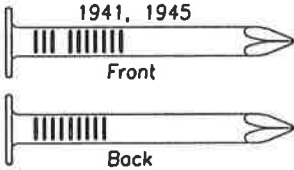
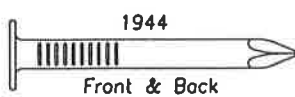
Type (25)
Continental Steel Corp.

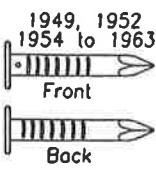
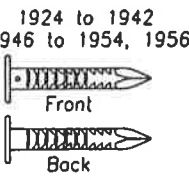
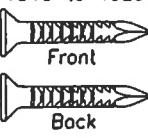
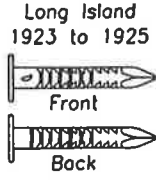
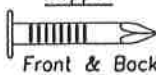
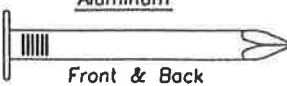


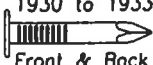
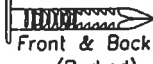
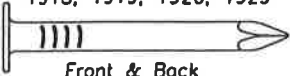

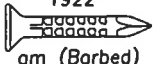

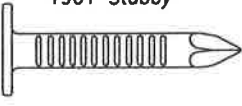
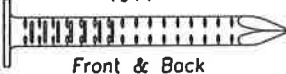

<p>Type (31) Unknown Mexican Co.</p>  <p>Front & Back</p>	<p>Type (32) Unknown Mexican Co.</p>  <p>Front & Back</p>	<p>Type (37) The Steel Company of Canada, Ltd. Twisted Shank</p> <div>  <p>1958 to 1966 Front & Back</p>  <p>1967 to 1982 Front Back</p> </div> <p>Some Nails Past 1967 Do Not Have The \div Mark.</p>
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<p>Type (38) The Steel Company of Canada, Ltd.</p>		
<p><u>Round Shanks</u></p> <div>  <p>1925 Front & Back</p>  <p>1949 to 1957 Front Back</p> </div>	<p><u>Oval Shanks</u></p> <div>  <p>1926 to 1942 1944 to 1949 Front</p>  <p>Back</p> </div>	

<p>Type (39) Unknown Canadian Co.</p>		
<p><u>Round Shanks</u></p> <div>  <p>1924, 1926 1934 to 1937 Front & Back</p>  <p>1938 to 1941 1944 to 1947 Front & Back</p>  <p>1942 to 1946 Front & Back</p> </div>	<p><u>Oval Shanks</u></p> <div>  <p>1927 to 1937 Front & Back Oval Shank</p>  <p>1938 & 1939 Front & Back Oval Shank</p> </div>	<p><u>Copper</u> TH&B RR</p> <div>  <p>1923 to 1925 Front & Back</p>  <p>1925, 1926 Front & Back</p> </div>

<p>Type (40) Unknown Company</p> <p>Northern Pacific 1917</p>  <p>Front & Back</p>	<p>Type (47) American Steel & Wire Co. (Duluth Works)</p> <div>  <p>1941, 1945 Front Back</p>  <p>1944 Front & Back</p> </div>
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<p>Type (60) C. G. Hussey & Co. <u>Copper</u></p> <div>  <p>1949, 1952 1954 to 1963 Front Back</p>  <p>1924 to 1942 1946 to 1954, 1956 Front Back</p>  <p>1919 to 1923 Front Back gm (Barbed)</p>  <p>Long Island 1923 to 1925 Front Back gm (Barbed)</p> </div>	<p>Type (61) Hassall Company</p> <p><u>Copper</u></p>  <p>Front & Back</p> <p><u>Aluminum</u></p>  <p>Front & Back</p>
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<p>Type (63) Unknown Company <u>Copper</u></p> <p>1930 to 1933  Front & Back</p> <p>Maryland & Pennsylvania 1938 to 1940  Front & Back gm (Barbed)</p>	<p>Type (64) Unknown Company</p> <p>1918, 1919, 1926, 1929  Front & Back</p>	<p>Type (66) Unknown Company Long Island RR Copper <u>Cupped Head</u></p> <p>1925, 1926  1922  gm (Barbed)</p>
<p>Type (69) Unknown Company</p> <p>Aluminum</p> <p> Front & Back</p>	<p>Type () Unknown Company</p> <p>Santa Fe 1901 Stubby </p>	<p>Type () Unknown Company</p> <p>Baltimore & Ohio 1911  Front & Back</p>
<p>Cut Nail </p>		
<p>C:\ACL\TWIN\WESIS1.DWG J. Penry - August 5, 1998</p>		