3000

CATALOG NO. 3107

VALUE 5000.00 — 21" SHOTGUN — N.R.A. CONDITION

Winchester (MANUFACTURED BY)	Tournament skeet (MODEL)	(TYPE)	12 Ga. (GAUGE)
Doubl (SINGLE OR REPEATER)	(MAGAZINE)	26" (BARREL LENGTH)	WS1 & WS2 (TYPE BARREL)
Beavertail Forearm (BORE & CONDITION)	(STOCK LENGTH)	(OVERALL LENGTH)	(WEIGHT)
Completed June 5, 1934 (DATE OF MANUFACTURE)	(TYPE FRONT SIGHT)	(TYPE REAR SIGHT)	
Wood checkered Butt (TYPE BUTT PLATE)	Blue	Solidly Engraved (FINISH)	- Special order -

REMARKS Non-Automatic Safety. 1" Pitch. single Trigger Selective Ejection, straight Grip 14" Pull - 2" drop at heel 1½" drop at comb
Leather cased "Abercrombie and Fitch New York" English ~~Lugg~~ case.
Case marked on outside " W. E. Umstattd, Canton, Ohio, in 3 lines. (He was Preside of Timken Roller-Bearin

(FORMER OWNERS)	(DATE)	(PRICE)	(DISPOSITION)	(DATE)	(PRICE)
Rex Breneman	Dec. 1, 1990	3000.00			

P.O. Box
(ADDRESS)
Coram, Mont.

THIS ITEM WAS: DONATED, LOANED, PURCHASED
(CIRCLE APPROPRIATE)

3107

WINCHESTER

Winchester Model 21 - Serial # 3107

The Factory completed this gun June 5, 1934.
A "Tournament Skeet" version in 12 Ga. - 26 inch choked Skeet #1 and #2. Single selective trigger. selective ejection. straight grip stock with 14" pull. 2 inch drop at heel, 1½" drop at comb. with 1 inch pitch. Beavertail forearm. checkered wood Butt. with the initials "W. E. U" and cased for the owner — W. E. Umstattd
President of Timber
Roller Bearing Co.
Canton, Ohio

Tournament Skeet Guns were produced for only a short period of time — 1933 - 1935

Lewis E. Yearout

Winchester Model 2I, I2 Gauge Tournament Skeet Grade.
Serial no.-3I07.

The factory letter reflects production on a special order as completed June 5, I934. The initials "W.E.U." are mentioned as engraved on the gun. The entire frame is engraved and in the style as pictured on the "Winchester Custom Built Shotguns -Rifles " and identified as a catalog about I930. That gun as pictured is serial no. 5437 not too far from the above gun.
I feel personally the overall engraving is Winchester factory, regardless of the letter, primarily because they do acknowledge the "W.E.U." portion.

The Tournament Skeet Grade gun Is probably one of the more scarcer Model versions as it was introduced in I933 and dropped in I935.
The gun is encased in a Winchester trunk type casing with this lettering on the lid outside:

W.E.Umstattd
President, Timken Roller Bearing Co.,
Canton,Ohio

Lewis E. Yearout

11104153
10 of 12

CODY FIREARMS MUSEUM
Serial Number Research Request

Request Received: Time: ______ Date: 9-10-99 By: JMH

Requestor: Lewis Yoreaut

Address

Phone

Category

Paid: ______ How: ______

Credit Card # ______ Expiration Date: ______

Information Requested:

Winchester 21 #2107 Marlin ______ L.C. Smith ______

Response Time Requested:

Tournament Grade

Response Data:

pitch - 7/8"
pull - 14"
7 pounds - 3 ounces
drop heel - 2"
drop comb - 1 1/2"

Date: 5/21/34

Type: Grade [illegible] W EU [illegible]

Caliber: 12 gauge

Barrel: 26" [illegible] 1 + 2

Trigger: Single

Stock: Straight grip "Select nice wood"

Sights: Bradley Red Bead 1/8" #148

Magazine:

Butt: no buttplate / Recoil Pad Checkered

Shipped: 6/5/34

Remarks: Selective ejection
Beavertail forearm / Non-Auto Safety
"Have [illegible] & stock & forearm on ticket 2019 27A Match as near as possible" "Engrave on trigger guard WEU (no periods)"

Type of Request: Telephone: ______ Walk-in: ______ Written: X

Other (Specify): ______

Answered by: Jen Date: 9/14/99 Res. Svc. Time: ______

This will confirm the information provided to you in your telephone call to the Historical Center. The foregoing information has been provided at your request as a courtesy furnished to our Cody Firearms or other special patrons interested in firearms. It is an abstract from the original Winchester/Marlin/L.C. Smith records housed in our Center. We make no representations concerning the accuracy of the records, the authenticity of the firearm, its value, or its present ownership. Our interpretation of the record we believe to be accurate but disclaim any responsibility for errors that may have occurred in our abstract of the record.

BUFFALO BILL HISTORICAL CENTER

U.S. Repeating Arms Company
275 Winchester Avenue
Post Office Box 30-300
New Haven, Connecticut 06511

(203) 789-5000 • TELECOPIER (203) 789-5071 • TELEX 5106007679

WINCHESTER
LICENSEE

April 24, 1990

Mr. Lewis E. Yearout
308 Riverview Drive East
Great Falls, MT 59404

Dear Lewis:

This is in reference to your recent letter requesting information on a Model 21 bearing serial #3107.

That gun was completed June 5, 1934 as a 12 gauge, 26" Tournament Skeet gun choked skeet 1 and skeet 2. Other features were a single trigger, selective ejection, straight grip stock with a 14" pull, a 2" drop at the heel, 1 1/2" drop at the comb, and 1" pitch. The gun also had a beavertail forearm, non-automatic safety and checkered wood butt. The initials "WEU" were engraved on the trigger guard.

I hope the enclosed information is of some help.

Sincerely,
U.S. REPEATING ARMS COMPANY

B.W. Pardee, Manager
Custom Shop

BWP:mms

Cover from the "Custom Built Shotguns . . . Rifles" catalogue.

ıester Model 21", published in the 1930's, dealt with the Model 21 in exhaustive detail. Gun number vas featured on the front cover, and also appeared on the "Custom Built Shotguns . . . Rifles" catalogue. ılv two pages of "Winchester Model 21" were devoted directly to engraved decoration. As one of the portions are reproduced here (the cover, and the two pages on engraving).

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FINAL INSPECTION REPORT
SPECIAL GUNS

MOD. [illegible] ORD. # [illegible]-27A Item #1 DATED May 31st 34

FOR W. E. [illegible] DATE PROMISED

DESCRIPTION OF GUNS AS ORDERED

12 ga. M. 21 [illegible] Single trigger [illegible] Double barrel shotgun Straight grip length of stock 14" Drop at heel 2" Drop at comb 1½" Pitch 1" Beavertail forearm non auto safety No butt plate wood checked Bradley [illegible] and 94 B Select nice wood and figure of the stock and forearm on ticket 2018-27A [illegible] 2019-27B match as near as possible engrave initials on trigger guard WEU (no periods)

ITEMS BELOW MUST BE FILLED IN OR CHECKED OFF BY SPECIAL INSPECTOR ASSIGNED.

SHOTGUN #. 3107 PATTERN AVE.% SINGLE BBL. — R.H.BBL. O.K. L.H.BBL. O.K.

AT TEMP. 72° ° BAROMETER ° LOAD 3 - 1 1/8 - 9c - [illegible]

ACCURACY SINGLE BBL. — R.H. Center L.H. Center SHOT BY V. Anderson

RIFLE # TARGETED WITH
RH - 20 Vel. and Kind of Load
LH - 30

AT YDS. FEET GROUP AVE.

BARREL CONDITION INSIDE OK

BORE DIAM. OK RIFLING DIAM. LEADING

RING BORES OR SCRATCHES VISIBLE FROM FRONT END

RING BORES OR SCRATCHES VISIBLE FROM REAR END OK

CONE SMOOTH OK SHADE O.K.

SIGHTS - CONDITION - GEN. ALIGNMENT - RIB STRAIGHT OK

STOCK - FORE-END. CHECKING OK FINISH

SHAPE OK FIT OK GRADE WOOD 14

BUTT PLATE OK PITCH 7/8 LEN. PULL 14

DROP HEEL 2 DROP COMB 1 1/2 WIDTH COMB Tc

WEIGHT TRIG. PULL - SINGLE R.H. 4 2 L.H. 4 8

CREEP OK COCKING LATE O.K. EARLY EVEN OK

SELECTIVE EJECTION EQUALLY TIMED OK

STANDING BREECH - BBLS. FLUSH BOTH SIDES OK WATER TABLE FIT OK

FUNCTION OF ACTION OK TAKE DOWN OK

FINISH METAL PARTS OK

REMARKS: 7 3 Cy.

N 3107

SIGNED L D M
DATE 6-6-34

Winchester Model 2I Shotgun, Serial no. - 3I07. I2 Gauge. Marked as Style "TOURNAMENT SKEET".

The Winchester Factory data as compiled from the two attached reply forms from Winchesder Factory in New Haven and the Winchester Museum in Cody, Wyoming reflects as follows;

Serial number 3I07: is a "TOURNAMENT GRADE SKEET GUN" as engraved or stamped on the frame: I2 Gauge, 26 inch barrels choked Skeet No. I. and No. 2 ., with Bradley red Bead I/8th in. and 94 B . Single Trigger,selective, With selective Ejection. Non-Automatic Safety. One letter quotes from the records as requested by the client requesting the gun to be built: - "SELECT NICE WOOD,HAVE COLOR OF STOCK AND FOREARM AS ON TICKET NO. 2019-27-A (A). AND MATCH AS NEAR AS POSSIBLE. ENGRAVE "W E U" ON TRIGGER-GUARD BUT OMIT ANY PERIODS AFTER THE INITIALS". Apparently this request from the customer reflected a second gun was being constructed in the Factory at this same date and time. Records reflect this gun was made on Order G2I00B and the customers name was "W.E. UMSTAD. Apparently the date of May 3I, I934 reflects the Special Orders date of origination. With the date of June 5, I934 as the date the finished gun departed the Factory. Constructed with a straight grip stock, with beavertail forearm. Stock with pitch of 7/8 inch. Trigger Pull length of I4 inches. Drop at heel of 2 inches and drop of comb I½ inches. Instead of a rubber or steel buttplate, the stock wood area of the butt is checkered, as also is the wrist and forearm. But not mentioned in the letter as pertains to the wrist and forearm checking. Total weight is 7 pounds and 3 ozs. Although the letters fail to mention such the gun is overall fully Factory engraved on the frame, which is identical to the Factory Engraving depicted on the cover of the Specialty Catalog of Winchester Custom Built Shotguns and Rifles. The Catalog is not dated, yet it would be in the early I930's and the Model 2 I pictured on the cover is noted with serial no. 5437. 3I07 and 5437 are identical in appearance. The gun is also Factory Cased in a leather covered, and compartmented casing which bears the stamping "W.E.UMSTATTD -CANTON, OHIO" in 3 lines of lettering on the outside of the lockable case. Which measures in dimensions of 30 inches by 8 inches by 3 inches The casing is also reflected and described in the same catalog as available for anyone purchasing a Winchester Gun with the cases made special for that Model of gun ordered. Mr Umstattd was the President of Timken Roller Bearing Company with headquarters in Canton, Ohio.

TOURNAMENT GRADE Skeet Guns were only produced for possibly 4 years. I93I thru I934. The gun pictured on several Model 2I Catalogs as Serial no.5437 was also a special order gun reported by and made for Walter Chrysler at that time in I934 as President of Chrysler Corporation.

Serial no. 5437 is also the gun pictured on the front cover of the book entitled, "WINCHESTERS FINEST-THE MODEL 2I" by Ned Schwing.

Timken VS. everyone else

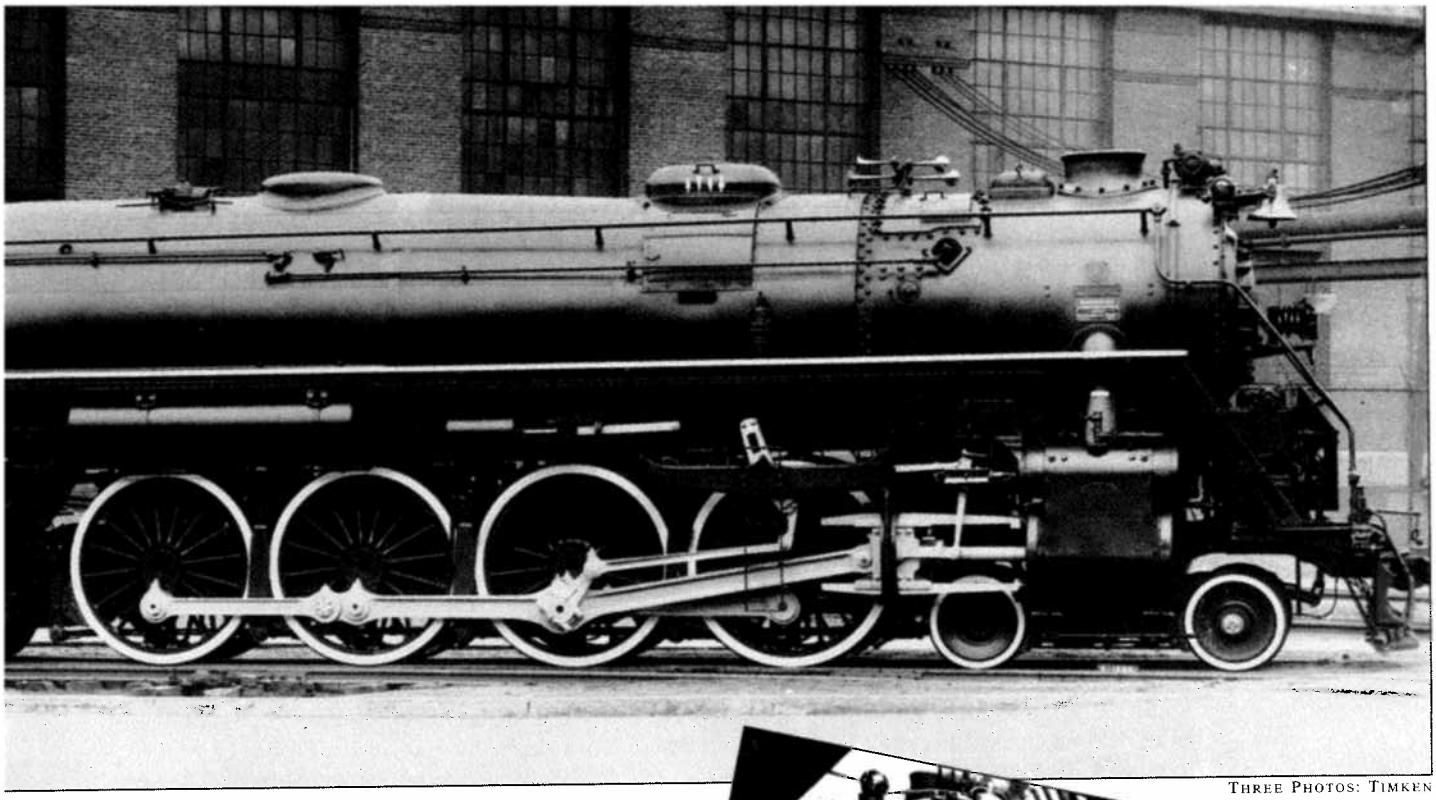
In the final decades of steam, why did some railroads embrace the roller-bearing revolution while others ignored it?

BY ROBERT A. LE MASSENA

INCREDIBLE THOUGH IT MAY SEEM TODAY, there was a time when railroads were reluctant to apply roller-bearings to the driving axles of steam locomotives. Railroad officials believed that such bearings would not withstand the loads and shocks encountered in railroad operations, despite the unqualified success of roller-bearings in huge steel-mill machinery. The Timken Roller Bearing Co. of Canton, Ohio, was unable to persuade any railroad to make a trial installation with the bearings provided free by Timken.

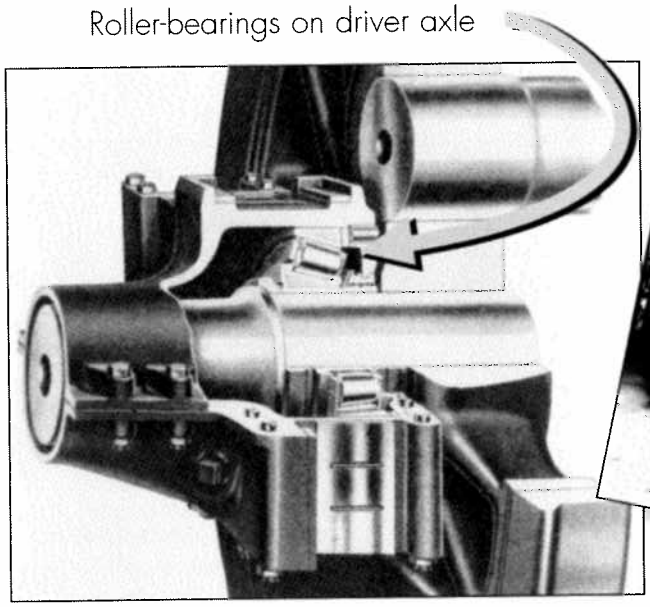
Finally, in 1929, the Wheeling & Lake Erie, whose main line passed through Canton, agreed to install Timken roller-bearings on five 0-6-0 switchers (Nos. 3951-55) which were being constructed in W&LE's Brewster Shops. This was the initial application of roller-bearings to the driving axles of steam locomotives in North America. Three more engines followed in 1930.

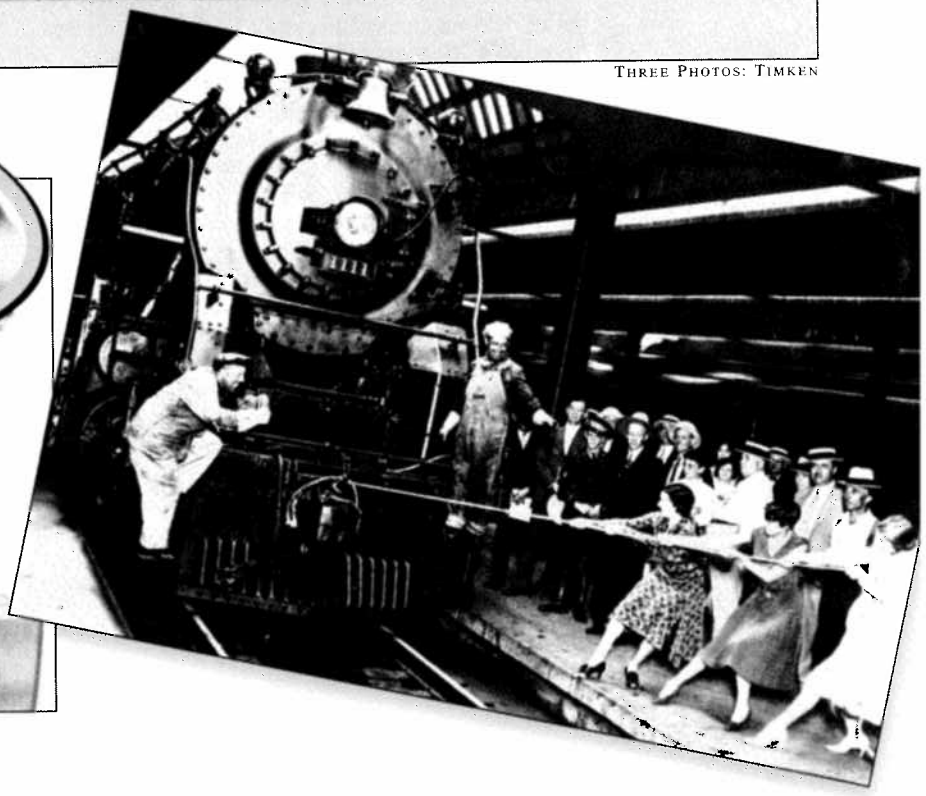
Determined to convince management of the practicality and reliability of its bearings in over-the-road service, Timken commissioned the American Locomotive Co. to design and build a dual-service locomotive equipped with roller-bearings on all engine and tender axles. Completed in April 1930, this 4-8-4, numbered 1111 and known as the "Four Aces," was capable of operating over most Class 1 railroads, and would be available to them at no charge. The engine



THREE PHOTOS: TIMKEN

Roller-bearings on driver axle





weighed 712,000 pounds and was based on the design of Delaware, Lackawanna & Western's passenger and freight locomotives erected by Alco in 1927 and 1929. In a little less than two years it was tested without difficulty by 13 railroads, covering more than 100,000 miles. It ran nearly 19,000 miles in passenger and freight service on the Pennsylvania Railroad, and 16,000 miles in passenger service on the Lackawanna.

Up to this point Timken had received orders for only five sets of bearings: Delaware & Hudson 4-6-2 No. 653 and New York Central 4-6-4's Nos. 5343-44 in 1931, and Lackawanna 4-8-4's Nos. 1629-30 in 1932. One reason, of course, was the Depression of the early 1930's, during which very few railroads acquired new locomotives. Another was the general reluctance to buy a more expensive bearing whose cost advantages were largely unknown. Unfortunately, the operating test program came to an end in early 1933, when the Northern Pacific purchased the engine after a firebox mishap. Later that year Alco built a pair of high-speed 4-4-2's (Nos. 1 and 2) equipped with Timken bearings for the Milwaukee Road's *Hiawatha* trains.

Finally, in 1934, Timken's efforts bore fruit. Northern Pacific had been plagued with overheated driving-axle bearings on its dozen 4-8-4's constructed by Alco in 1926-1927; hence, when it purchased 10 more 4-8-4's from Baldwin,

Trailblazing "Four Aces" cut a handsome figure, whether posing in a builder's portrait at Alco or being pulled by three female PRR employees in a 1930 publicity stunt at Chicago Union Station.

The roller advantage

Railroad	Locomotive	A	B	C	
CMStP&P	4-4-2	-	31,000	34,000	C
NYC	4-6-4	50,000	58,000	58,000	C
NYC&StL	2-8-4	64,000	64,000	70,000	C
Timken	4-8-4	-	64,000	70,000	C
DL&W	4-8-4	72,000	72,000	80,000	C
AT&SF	2-10-4	-	93,000	105,000	T
N&W	2-6-6-4	-	105,000	116,000	T
D&RGW	2-6-6-4	-	105,000	115,000	T
DM&IR	2-8-8-4	-	140,000	153,000	C

Column A - Tractive effort in pounds, calculated from rating formula adopted by the railroad industry in 1924. Locomotive with plain bearings.

Column B - Same as Column A, but locomotive has roller-bearings.

Column C - Figures from Column B adjusted for reduced friction of roller-bearings.

C - calculated figures
T - test figures

tions, and higher speeds without overheating. All of these benefits could be measured in dollars almost immediately to justify extra cost. But there was one important attribute which was never recognized in industry publications, though it appeared in every Timken advertisement in the *Locomotive Cyclopedia*: "Increased Draw-Bar Pull. The tremendous reduction in journal resistance effected by Timken bearings directly increases draw-bar pull. Fuel consumption is also reduced. This statement is based on the results of actual tests."

The drawbar pull or tractive effort of a steam locomotive was calculated from a standard formula which appeared in every edition of the *Locomotive Cyclopedia* between 1927 and 1950, and it was never modified to account for the effect of roller-bearings. Even railroads did not distinguish locomotives equipped with roller-bearings from those with plain bearings. Some railroads gave roller-bearing locomotives a "standard" tractive effort despite their own tests that showed they exerted considerably greater drawbar pull; approximately 9 percent more, because they had almost no rolling resistance (about 10 ounces per ton). Some typical examples are shown in the accompanying tabulation above. Note that the NYC, DL&W, and New York, Chicago & St. Louis (Nickel Plate) gave the same tractive effort rating to locomotives which differed only in their bearings. Other railroads that tested their locomotives—Santa Fe, N&W, and D&RGW—found that roller-bearing-equipped locomotives did exceed the rated tractive effort. However, for some unknown reason, they published the lower "standard" rating. It was ironic that *Railway Mechanical Engineer* magazine published Alco's tractive effort rating for the Timken locomotive as though it had ordinary bearings.

Although installations of roller-bearings in steam locomotives increased rapidly after 1936, their usage was not at all universal. Some railroads—Santa Fe, NYC, N&W, NP, and UP—used them successfully on their heaviest and most powerful locomotives. Yet a great many other roads—Baltimore & Ohio, Great Northern, Illinois Central, St. Louis-San Francisco, and SP—applied them to only a few locomotives.

One final irony in later editions of the *Locomotive Cyclopedia*: A reproduction of the detailed builder's erection drawing for an NYC 4-6-4 having roller-bearings on all axles. Some 315 parts are identified by name in the accompanying tabulation, but there is no mention of the 14 roller-bearings shown in the drawing!

Even though the industry did not officially recognize the superiority of roller-bearings on steam locomotives, thousands of operating employees were well aware of what those locomotives could accomplish. Roundhouse foremen knew that a roller-bearing locomotive possessed greater availability, and dispatchers knew they could handle additional tonnage and meet schedules more reliability. Engineers knew these engines could run faster without overheating the bearings, and maintenance personnel knew that en-route servicing was unnecessary.

The application of roller-bearings to steam locomotives improved the performance of the engine's machinery as did the use of superheaters in the boiler. Far from having been universally accepted, the application of roller-bearings displays many paradoxes: UP vs. SP; NP vs. GN; N&W vs. C&O. Wherever one looks—railroad vs. railroad, wheel arrangement vs. wheel arrangement, or even within a single railroad—one will find enigmatic inconsistencies for which there are no obvious explanations. No doubt, every decision to accept or reject roller-bearings was supported by some financial evaluation. In retrospect we might question those analyses, but whatever they were, they produced widely divergent conclusions during the final quarter-century of the steam era in North America. ■

ROBERT A. LE MASSENA lives in Denver, Colo. This is his 40th TRAINS byline since 1963.

A. W. JOHNSON

Milwaukee Road 4-4-2 No. 2 lays over at the Chicago Avenue roundhouse in Chicago on October 17, 1940. The fast Atlantic type and its sister No. 1 were among the first road engines equipped with Timken bearings.