

# Nicholson Thermic SYPHONS



Tests made recently by the University of Illinois, Railway Engineering Department, on an Illinois Central Mikado Locomotive, before and after the installation of Thermic Syphons, showed the Syphons produced 8.58 per cent increased boiler efficiency. There was no lowering of superheat temperature.

**LOCOMOTIVE FIREBOX CO.**  
310 S. Michigan Ave. Chicago, U. S. A.

"The Heart  
of the  
Locomotive"



**CIRCULATION  
ECONOMY  
SAFETY**

## Crowe Coal Company

General Office: Dwight Bldg.  
KANSAS CITY, MISSOURI

—♦♦♦—

### Miners and Shippers

—♦♦♦—

Mines Located at Mulberry and Scammon, Kansas, and Henryetta, Oklahoma, on the line of the St. Louis-San Francisco Ry. Co.

## "HERCULES"

—Red Strand—  
**WIRE ROPE**

Made Only by  
**A. Leschen & Sons Rope Co.**  
ST. LOUIS

Tough  
Strong  
Safe  
Durable

Branches  
NEW YORK  
CHICAGO  
DENVER  
SAN  
FRANCISCO



**The Only Efficient Locomotive Cleaner**

—♦—

**The D. & M. Cleaning Process**

Railway Exchange  
CHICAGO, ILL.

### American Handle Company

Manufacturers of

High-grade Hickory, Axe, Adze,  
Pick, Sledge, Hatchet, Hammer  
and Railroad Tool Handles

JONESBORO - ARKANSAS

### Headlight Headquarters

Headlights  
and Turbo-generators  
Train Lighting Systems  
Train Control Turbo-generators  
Fittings and Wiring Appliances  
for Locomotive, Car and Shop  
Installations



## The Pyle - National Company

1334-1358 North Kostner Ave.  
Chicago, Ill., U. S. A.

CANADIAN AGENTS:  
The Holden Company, Ltd., Montreal,  
Winnipeg, Vancouver, Toronto

EXPORT DEPARTMENT:  
International Railway Supply Company,  
39 Church Street, New York City

BRANCH OFFICES:

3509 Grand Cen. Terminal, New York City  
815 Boatmen's Bank Bldg., St. Louis, Mo.  
311 Builders Ex. Bldg., St. Paul, Minn.

## GRIDER COAL SALES AGENCY

Mine Agents

OVER 3,000,000 TONS ANNUALLY  
BEST GRADES ALABAMA STEAM and DOMESTIC COALS

*Railroad Fuel a Specialty*

**1414-18 American Trust Bldg., Birmingham, Ala.**

## St. Louis Surfacers and Paint Company

RAILROAD PAINTS, VARNISHES  
ENAMELS

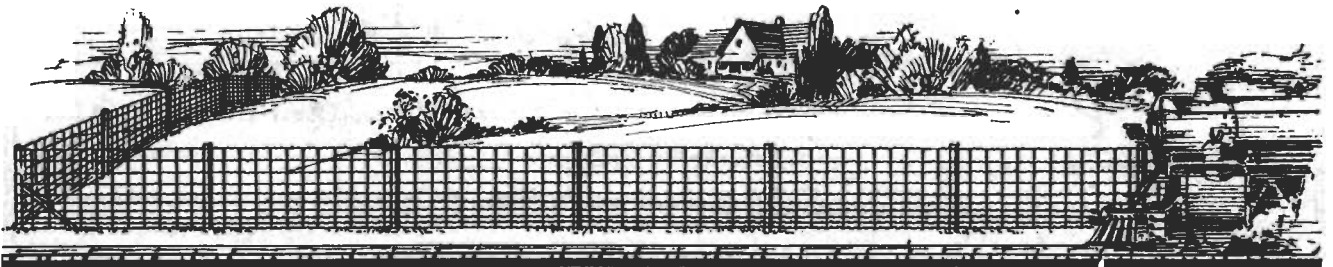
**Arlington Ave. and Terminal Belt Ry. ST. LOUIS, MO.**



# SERVING... GREAT RAILROAD SYSTEMS

Backed by 100 years of wire making experience, the wire products of this company have proved their ability to meet every railroad need—more efficiently—more economically. Providing these wire commodities are some of the functions of this company in its relation to great railroad systems.

*Woven Wire Fences*  
*Steel Posts*      *Steel Gates*  
*Wire Nails*  
*Wire Rope*      *Spikes*  
*Rail Bonds*  
*Electrical Wires and Cables*  
*Springs*  
*Telephone Wire*  
*Concrete Reinforcement*



## AMERICAN STEEL & WIRE COMPANY

Subsidiary of United States Steel Corporation

CHICAGO



NEW YORK

And All Principal Cities

*Pacific Coast Distributors:* COLUMBIA STEEL COMPANY  
 San Francisco " Los Angeles " Portland " Seattle " Honolulu

# REID AND LOWE

RAILROAD AND  
BRIDGE CONTRACTORS

Grading and Concrete Bridge Work

BIRMINGHAM, ALA.

*Unxld*  
*Railroad Fusees*

*INSURE SAFETY*  
*Best by Every Test*

UNEXCELLED MANUFACTURING  
COMPANY, Inc.

NEW YORK, N. Y.

# Indiana & Illinois Coal Corporation

MINERS and SHIPPERS of

## NOKOMIS COAL

*Mined in Montgomery County, Illinois*

OLD COLONY BUILDING

CHICAGO, ILLINOIS



# R. F. CARR LUMBER COMPANY

NOT INC.

SUCCESSORS TO

THE CARR-LOWRY LUMBER CO.

MANUFACTURERS & DEALERS

IN ALL KINDS OF LUMBER

SPECIALIZING IN

## RAILROAD BUILDING MATERIAL

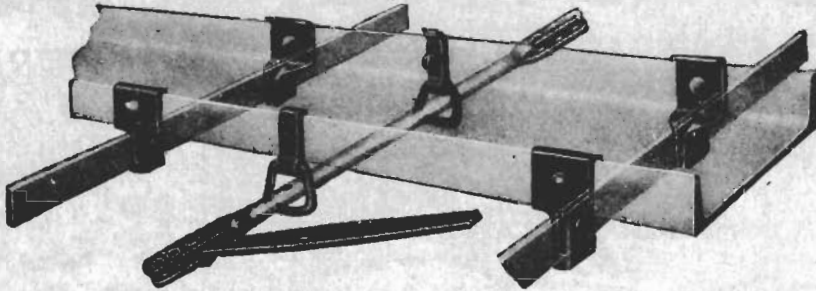
*Strong as Ever for the "Frisco"*

Exchange Building

MEMPHIS, TENN.

Phone 6-2312

**BUFFALO BRAKE BEAM COMPANY  
BRAKE BEAM AND BOTTOM ROD SUPPORTS**



NEW YORK

BUFFALO

**THE OHIO INJECTOR COMPANY**

1437 Monadnock Block

CHICAGO, ILLINOIS

Manufacturers of

OHIO LIFTING INJECTORS

CHICAGO NON-LIFTING INJECTORS

CHICAGO AUTOMATIC FLANGE OILERS, CHICAGO

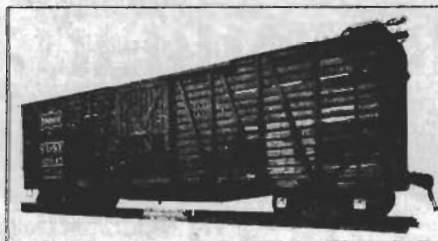
LUBRICATORS, OHIO LOW WATER ALARMS, CHICAGO AUTOMATIC

DRIFTING VALVES, LOCOMOTIVE BOILER ATTACHMENTS, OHIO CAB SQUIRTS

**The Mount Vernon  
Car Manufacturing Co.**

*Repair Shop,  
500' x 150'*

*Fully equipped with  
Cranes, Electric  
Riveters, etc., enabling  
us to work in all kinds  
of weather*



*Capacity Per Annum:*

*10,000 Freight Cars;*

*150,000 Chilled Tread  
Wheels;*

*20,000 Tons Forgings*

**BUILDERS OF FREIGHT CARS**

**OF ALL KINDS**

**MOUNT VERNON, ILLINOIS**

AN  
ORIGINAL  
LEE IDEA

# No Wonder...

..... when you stop to think of it, that railroad men are proud to wear their railroad's emblem in full official colors on bib or sleeve of genuine Lee Overalls and Jackets. When the "greatest railroad" and the "greatest overalls" get together then you've got something!

If you are a railroad man with the real "all wool and a yard wide" pride in your job and in your road, you too will like this new Lee plan. Remember—only Lee's are genuine railroad emblem overalls and jackets, that the idea is an original Lee idea, that while Lee's are America's largest selling work clothes only genuine railroad men can buy the Lee emblem garments.

Its a great idea, one spreading like wild-fire. That neat little badge is like an emblem of honor! Get yours today!

MAIL THIS COUPON

H. D. LEE MERCANTILE COMPANY . . . Kansas City  
Trenton . . Minneapolis . . South Bend . . San Francisco

Write me where I can get your Lee Emblem Overalls.

My overall size is \_\_\_\_\_ Jacket size \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_



"MADE OF GENUINE JELT DENIM"

UNION-MADE

# Lee RAILROAD EMBLEM OVERALLS

THE WORLD'S STANDARD  
.. with the World's Largest Sale

GUARANTEED... Better in EVERY Way or a New Pair Free!