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W. R. FAR. TERY CO-NORTHWESTERN AGENTS Telephone Ellion 1941 Hoss Etilling - Soutile, Wn.

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# CRANES

OF ALL TYPES—FOR EVERY SERVICE



CATALOG No. 82

#### WHITING FOUNDRY EQUIPMENT CO.

**Complete Foundry Equipments** 

GENERAL OFFICE AND WORKS: HARVEY, ILL., U. S. A.

(CHICAGO SUBURB)

CHICAGO OFFICE: 1547 MARQUETTE BUILDING



#### WHITING CRANES

WE SHOW in this catalog the major features of construction in Standard Whiting Cranes and present a few

views of typical installations.

It is our desire that this Supplementary Bulletin shall convey mainly the understanding that there is a Whiting Crane for every service. We have been building cranes for 20 years; our shops are ample, and well equipped for prompt and proper construction. Our location at Harvey, a suburb of Chicago, gives us the best of shipping facilities from a great commercial center.

We invite inquiries for crane equipment of any sort and will gladly submit proposals. Full statements of conditions and requirements should always be given, to facilitate preparation of accurate estimates. Blank inquiry forms will be furnished on request.

Attention is invited to catalogs covering our other lines of manufacture. We furnish and install complete equipments for foundry plants, and deliver to owners ready for operation.

#### WHITING FOUNDRY EQUIPMENT CO.

Harvey, III., U. S. A.
Cable Address, EQUIPMENT, HARVEY



#### Electric Travelers

INSTALLATION VIEWS, PAGES 22 TO 25.

LECTRIC Travelers are built in various types, according to the following natural classification:

THREE MOTOR. One Main Hoist. Motors for bridge travel, trolley travel and hoist. For simple shop and yard service. Capacities 3 to 100 tons. Installation views, pages 23 and 24.

FOUR MOTOR. Main and auxiliary hoists. Motors for bridge travel, trolley travel and two hoists. Usually for the higher capacities, with the auxiliary hoist for rapid handling of the lighter loads. Capacity rating is that of the main hoist—10 to 100 tons. Capacities of auxiliary hoists range from 3 to 10 tons. Installation views, pages 22, 28, 29 and 30.

DOUBLE TROLLEY—DUPLICATE TWO-MOTOR TROLLEYS. Two equal hoists. Five motors; for bridge travel, two trolleys and two hoists. Used in handling lengthy loads, as structural steel, locomotives, boilers, etc. Capacity rating is the combined capacity of the two hoists—10 to 150 tons. Installation view, page 22.

DOUBLE TROLLEY—MAIN AND AUXILIARY TROLLEYS. Main and auxiliary hoists on separate trolleys. Five motors; for bridge travel, two trolleys and two hoists. Useful as ladle cranes and for special purposes. Capacity rating is that of the main hoist—20 to 75 tons. Installation view, bottom of page 22.

DOUBLE TROLLEY—Two MAIN TROLLEYS, ONE HAVING AUXILIARY HOIST. Three hoists, two main and one auxiliary. Six motors; for bridge travel, two trolleys and three hoists. Useful for heavy, lengthy loads, with lighter secondary service. Capacity rating is the combined capacity of the two main hoists—10 to 150 tons. Auxiliary hoists, 3 to 10 tons. Installation view, top of page 22.

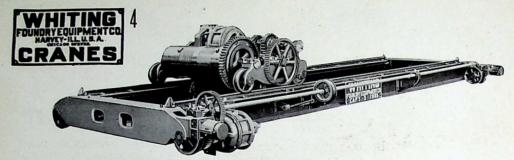
#### Design and Construction of Electric Travelers

ESIGN is standardized so far as possible throughout the entire range of types and capacities for electric and hand power cranes. Important details—bridges, truck ends, trolleys, etc.—are made in various designs, to suit all possible service conditions.

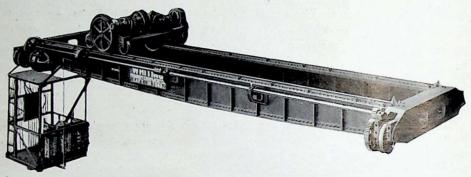
Certain standard types of important details are illustrated here. They cover the main features of standard cranes for usual service. Variations and elaborations of these are provided as conditions require.

**Bridges** 

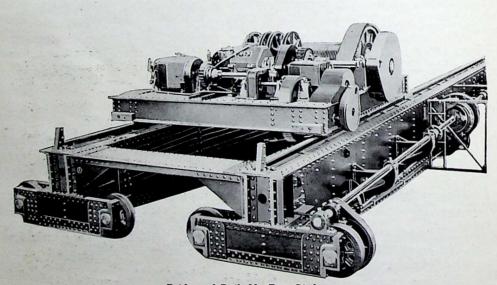
Bridge girders are built in various forms, the design used for a given case being governed by the requirements of the service, loads, span, etc. Within certain limits of capacity and span, two simple wide-flange rolled steel I-beams may be used. For heavier service and longer spans the girders are built up of structural plates and shapes,



Bridge of Wide Flange Rolled Steel I-Beams
With Cast Flush Trucks—Alternating Current Motors—Cage Removed

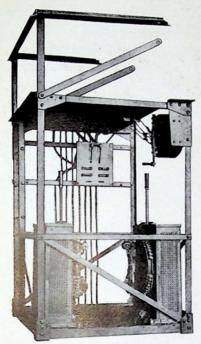


Bridge of Single-Web Built-Up Girders
With Cast Flush Trucks—Alternating Current Motors



Bridge of Built-Up Box Girders

With Flexible Steel Separator and Double "Bogie" Trucks of Structural Underbody Type
"M. C. B." Bearings
Three Motor Trolley, Direct Current—Gears Encased



Standard Operator's Cab For Indoor Service

either in single web, lattice or box girder construction.



#### Sidewalks

Platforms may be provided, along one or both sides of bridges, to afford easy access to all parts. Such platforms are not included in prices quoted unless specifically mentioned.

#### Operators' Cabs

Cabs have frames of structural steel, with ladders affording easy access to bridges above. Cabs for cranes to work in open weather are inclosed in metal or wooden housing, with windows as needed for proper handling.

#### Floor Operation

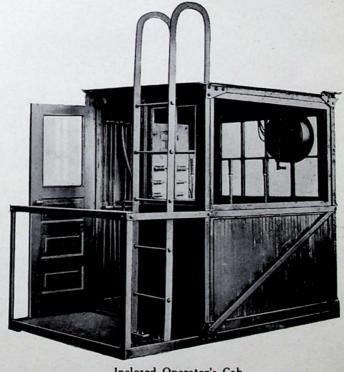
Cabs may be omitted entirely and the controllers attached to the bridge girders, with pendant cords for operating from the floor. See page 25.

#### Bridge Trucks

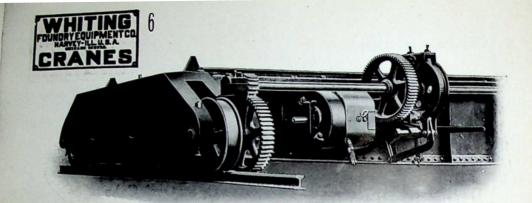
Trucks may be single castings, or built up of structural material. They are bolted against the bridge girder ends, or are placed beneath them, as head room or other conditions may determine.

Usually a single twowheeled truck carries each end of the bridge, but in cranes of high capacity, a two-wheeled truck may carry each end of each girder, the girders being connected by a flexible separator, as shown on page 4.

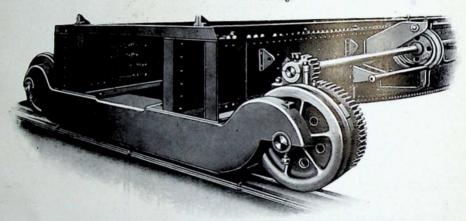
Truck wheels are



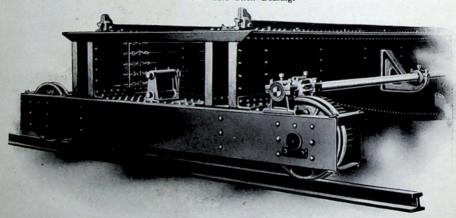
Inclosed Operator's Cab
For Use on Cranes Working in Open Weather



Cast Bridge Truck—Flush Type Removable Shell Bearings



Cast Bridge Truck—Underbody Type Removable Shell Bearings

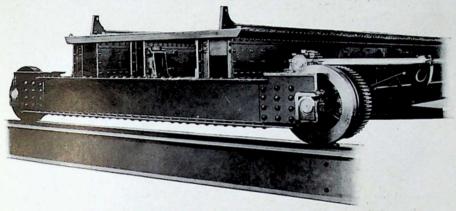


Structural Bridge Truck—Underbody Type Pin and Keeper Axles—Removable Bronze Bushings

double flanged—of cast iron with chilled treads ground to size, of cast iron or steel centers with turned steel tires, or all high-carbon cast steel with turned treads.



Truck wheel bearings are variously arranged, as conditions require. In all cases

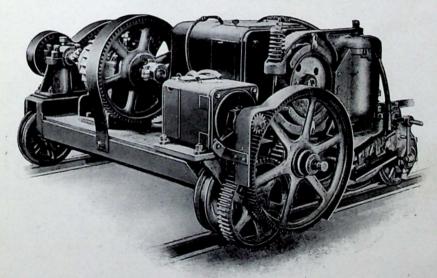


Combination Structural Bridge Truck-Underbody Type
"M. C. B." Bearings

the removal of wheels is made easy. Besides the standard "removable shell" type, there is the "pin and keeper" type and the "M. C. B."

#### Bridge Travel Gearing

The bridge travel motor is geared to a "squaring shaft" which extends full length of the bridge and drives axle gear at each truck, insuring equality of travel for

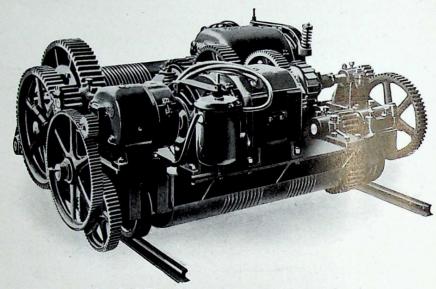


Standard Two-Motor Trolley-Direct Current
With Gear Guards

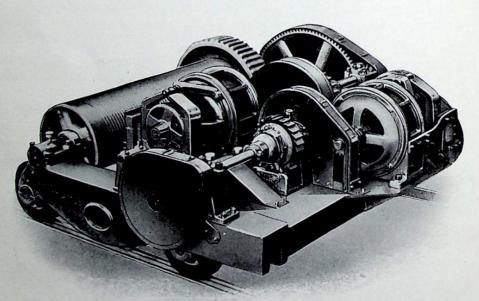


both ends of the bridge at all times. A band brake, operated by a foot lever in the cab, affords close control. On long spans the motor is placed midway of the bridge; otherwise, at

the cab end. On extreme spans, two motors may be used, one located at each end of the bridge.



Standard Three-Motor Trolley—Direct Current Main and Auxiliary Hoists



Three-Motor Trolley-Alternating Current All Gears Encased.

#### **Trolleys**

Trolleys are of numerous types and forms, as necessary for accommodating auxiliary hoists, magnet operation, alter-

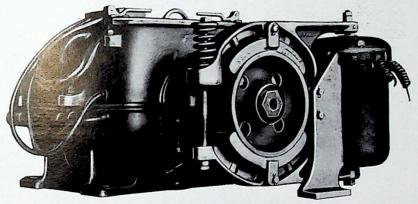


nating current, and other variable features. In all cases the sides or trucks are separated by a cross girder arranged to form a rigid and well fitted connection, with finished top surface, to which the working parts are bolted, and which also forms a platform of great convenience for the operator when working on the trolley.

Wheels are double-flanged, easily removable, with bronze bearings.

Housings are fitted, when required, on trolleys to operate in open weather.

Hoisting Mechanism uses spur gearing only—all machine cut except the drum gear and pinion, which also may be cut if desired. The drum is grooved, and is of sufficient



Automatic Electric Safety Brake Operated by a Powerful Solenoid

size to take, without overlapping, all the cable required for maximum height of lift. The drum gear is attached directly to one end of the drum, so no torsional strain comes on the drum shaft. Only best quality flexible steel wire hoisting rope is used.

Brakes, both electrical and mechanical, are provided, affording perfect control of the load at all times—in regular operation or in emergency. The electric brake sets automatically when the current is cut off *from any cause*. Through the mechanical brake the load is hoisted, and by release of its frictional discs the load is lowered, under perfect control against acceleration above proper speed.

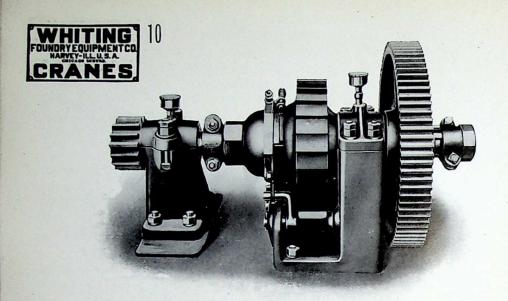
Dynamic braking may be arranged for when desired or advisable.

Lifting Magnets are operated by two-motor trolleys, with auxiliary winding drum for handling the twin conductor cable by which the magnet is actuated. See page 28.

Accessibility is made a matter of special attention. All parts are arranged for easy reach and independent removal.

#### **Electrical Equipment**

Either direct or alternating current may be used. Standard motors of approved types adapted to crane service are supplied. Controllers permit close regulation of



#### Automatic Mechanical Safety Brake Controls the Load at All Times

movements. All wiring and electrical fittings conform to Underwriters' Specifications and are complete, for the crane proper, to take current from the purchaser's runway wiring.

#### Special Features

Spur gearing only is used, with all reductions the fewest possible.

Bearings are ample—either bronze bushed, or with removable babbitted shells or plain babbitted—and arranged for proper lubrication.

Materials throughout are the best for their several requirements and in conformity

to standard specifications.

Guards may be fitted to all exposed gearing, for protection of operatives as well

as the gears themselves.

Split cotter pins through the ends of overhung shafts, outside the keys, make it impossible for any key to work out or any gear to become loose.

#### Locomotive and Coach Hoists

INSTALLATION VIEWS, PAGE 26.

SPECIAL HOISTS at railroad shops and terminals are coming to be considered essential for rapid work in lifting locomotives off their trucks and wheels. They involve two hoists, one for each end of the locomotive. These two hoists may be carried on independent structures—one or both movable to accommodate different lengths of locomotives—or they may be arranged on a single structure with one or two movable trolleys.

Various designs are available, to suit exactly the requirements of different situations. Similar hoists, usually longer and of lower capacity, are useful at coach shops for lifting car bodies off their trucks.



#### **Gantry Traveling Cranes**

INSTALLATION VIEWS, PAGES 27 AND 28.

ANTRY cranes are adapted to outdoor service, where overhead runways are not desirable. They may be made to serve areas outside their tracks by having the bridge ends extended as cantilevers and the legs open to permit passage of the suspended loads.

One leg may be omitted and the bridge end carried on a runway along a building wall, as per page 27.

Where mono-rail trolley systems are in use throughout the shops and yards of an industrial plant, a gantry with single girder bridge may operate as part of the trolley system, avoiding one principal limitation of the mono-rail trolley by enabling it to cover a large area of yard space. See top of page 28.

In general construction the gantry is similar to the electric overhead traveler, with its trucks on the ground and its travel mechanism operated from the squaring shaft along the bridge by miter geared down-shafts on the legs.

Gantries are usually free from any building restrictions, and their effective area is easily increased by simple extension of inexpensive tracks.

#### Transfer Cranes

INSTALLATION VIEWS, PAGE 29.

POR loading, unloading and transferring heavy freight in railroad yards, transfer cranes are essential. They may be all hand power, partly electric or completely electric. Hand power cranes may be geared for hoisting, or equipped with plain "rope drum" trolleys operated by pendant chains.

Standard electric travelers, on suitable runway structures, may advantageously be used in transfer work where the service is very active. Such an installation is shown at top of page 29.

#### Cranes with Clam Shell Buckets

INSTALLATION VIEWS, PAGES 27, 30 AND 34.

S TANDARD electric travels, gantries, transfer cranes or mono-rail trolleys may be arranged to operate clam shell buckets for handling a wide variety of bulk materials, as coal, ashes, crushed stone, cement clinker, granulated slag, sand, gravel, etc. Bucket capacities are 1 to 1½ yards.

Materials to be handled should be specified in inquiries.

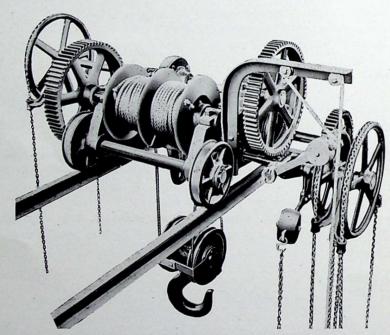
#### Hand Power Travelers

INSTALLATION VIEWS, PAGES 31, 32 AND 33.

THE VARIOUS standard types of Hand Power Traveling Cranes of our manufacture are briefly described as follows:

#### Operation by Pendant Chains

The "rope drum hoist" trolley, operated in all movements by pendant chains, is a simple, self-contained mechanism, with travel gearing, two speeds of hoist, and mechanical brake. A positive clutch, operated by pendant cord, changes the gears so that light loads may be handled rapidly by the fast hoist, or heavier loads at lower speed by the slow hoist. The drum is double, with capacity for all the rope necessary for



Standard Hand Power "Rope Drum" Trolley
Operated by Pendant Chains. Motor may be Attached for Hoisting

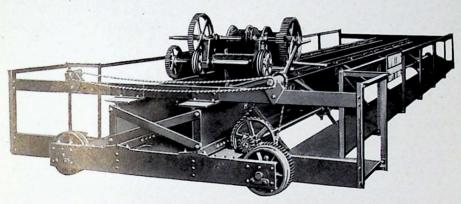
maximum lifts. Bridge travel also is operated by pendant chain, usually at one end of the bridge. Electric motors may be applied for hoist or bridge travel if desired.

Capacities, 2½ to 40 tons. Installation views, page 31.

#### Side Platform Operation

All movements-bridge travel and both speeds of hoistmay be operated by hand cranks, turned by one or more men standing on side platforms extending full length of the bridge. Operative view, page 32.





Side Platform Hand Traveler All Movements Operated by Hand Cranks

#### Cage Pendant

The operating gearing may be attached to the bridge at one end and operated by hand cranks or short pendant chains from a suspended cage, the hoisting rope passing over guide sheaves in a plain trolley racked across the bridge by chain gearing. This simple trolley permits operation in low head room. Capacities up to 20 tons. Operative view, page 32.

#### Floor Pendant

The hoist mechanism may be brought down on a pendant structural frame to convenient distance above the floor, for operation by hand cranks. Pendant chains then operate the bridge and trolley travel mechanisms. Capacities up to 20 tons. Installation view, page 32.

#### Chain Block and Air Hoist Travelers

Chain block hoists or cylinder hoists may be suspended from plain trolleys on bridges of simple construction. Trolleys may be free-running or operated by pendant chain. Bridge travel is operated by pendant chain, at midlength or one end of the bridge. Usually for low and medium capacities. Operative views, page 33.

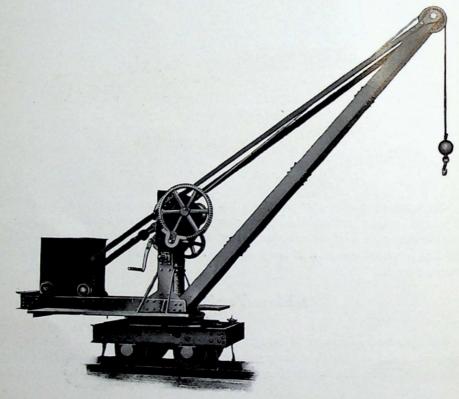


#### Locomotive and Truck Cranes

INSTALLATION VIEWS, PAGE 34.

A WIDE variety of cranes, from all electric to all hand power, are built to operate on standard or narrow gauge tracks, for yard service in handling light and moderate loads.

A simple truck crane is here shown. The truck may be clamped to the track rails when capacity requires. The boom is at fixed height; a rolling weight counterbalances the load; the hoist is operated by hand cranks and the swing is free through the full



Hand Power Truck Crane—2 Tons Capacity
Radius, 12 Feet—Fixed Boom—Movable Counterweight.

circle. Booms may be arranged to raise and lower, for working at different radii; air hoists may be applied for lifting loads, and other features are variable to suit conditions. Capacities from 1/2 to 5 tons.

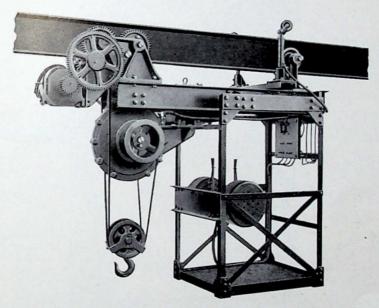
An all-electric locomotive crane is shown on page 34; also a pillar crane mounted on a motor flat car, making a very effective crane for street railway use.

#### Mono-Rail Trolleys

INSTALLATION VIEWS, PAGES 28 AND 34.

ELECTRIC traveling I-beam trolleys are useful under certain conditions for transporting materials throughout the buildings and yards of industrial plants of various kinds. They are adapted only to light loads—2 to 6 tons.

Runways are inexpensively erected and indefinitely extensible, with all the facility of floor tracks...



Electric Mono-Rail Trolley Capacity, 3 Tons-Worm Geared Hoist

Mono-rail trolleys may operate clam shell buckets, as shown on page 34, or magnets for handling scrap, castings, etc., as per page 28.

The hoist mechanism in large sizes is all spur geared; in small sizes, worm gearing is used. Trucks are made rigid or swiveled, as the service may require. Travel may be by motor or by hand.

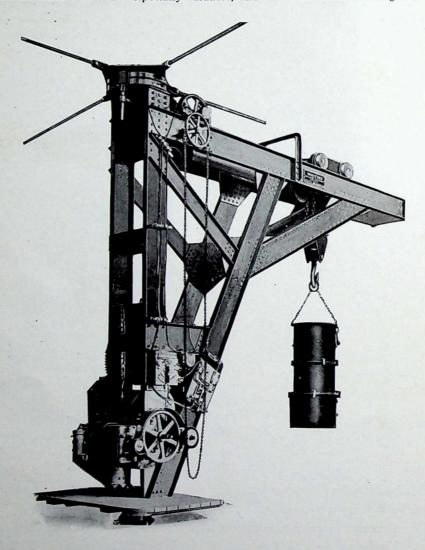


#### Jib Cranes

INSTALLATION VIEWS, PAGE 35.

S TANDARD jib cranes are built in three types, distinguished by the method of bracing for the jib.

TYPE A is for work where the jib length is moderate, where the space around the crane mast is not especially valuable, and where the maximum height of lift is



Electric Jib Crane—Type B Frame Capacity, 15 Tons—Radius, 22 Feet

FOUNDRY EQUIPMENT CO.

desired or the head room is limited. It is the simplest form, the most widely used and the least expensive for a given capacity and size.

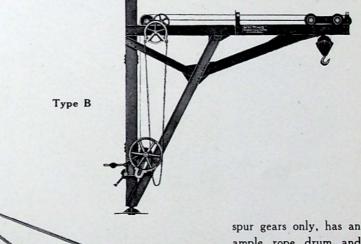
Type A

Type C

TYPE B has a triple-braced frame, adapted to heavy construction and long jibs. It gives maximum clearance and lift in a given head room and is fairly economical of space around the mast.

TYPE C is a top-braced construction, used largely in outdoor service, or indoors where ample head room is available. It is adapted to all capacities, to very long working radii, and gives perfectly clear space beneath the jib.

Crank handles are of an improved spool type. The hoist mechanism uses



spur gears only, has an ample rope drum and an automatic brake for sustaining the load at all times. Gear guards are provided. All bearings are babbitted. Trolley guide sheaves are roller bushed.

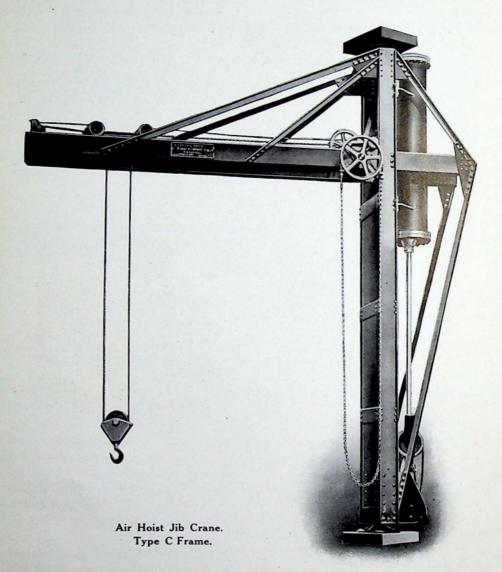
Any or all movements may be operated by electric motors. Compressed air cylinder may be used for hoisting.



#### Special Types

COLUMN JIBS. Any type of jib crane, hand power or electric, may be arranged to rotate around a building column,

swinging through the full circle, on special top and bottom mast castings, with roller bearings.



PORTABLE JIBS—hand power, air hoist, or electric—may be made in any type and capacity, for use wherever wanted in a shop to whose building columns, or other suitable supports, are attached the necessary pins for receiving the cranes, usually transferred from place to place by the overhead travelers. See page 36.

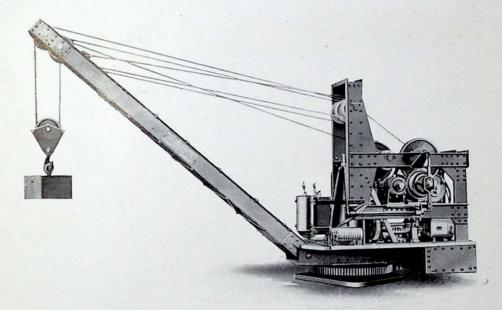
WALKING JIBS may serve long lines of machine tools, or long strips of floor space,

rolling on a track rail in the floor and being supported by suitable guide rails. Any or all movements—travel, hoist and swing—may be hand or power operated. See page 36.

TRAVELING WALL BRACKET CRANES, arranged to operate on suitable tracks along a wall or line of columns, indoors or outside, may be regarded as traveling jibs, very effective in such work as carrying riveters, handling flasks, serving machine tools, etc. Hand power or electric, for travel or hoist or both, controlled by pendant chains or cords. See pages 23 and 36.

#### Pillar Cranes

Pillar Cranes are built in numerous designs, for a great variety of service requirements. They are for general use, either indoors or outside, and wherever, for any



Three-Motor Electric Pillar Crane—5 Tons Capacity
Motors for Hoist, Swing, and Raising and Lowering Boom

reason, a top support for the mast of a jib crane cannot be arranged. Usually they afford the advantage of swinging through a complete circle, in addition to eliminating all overhead staying.

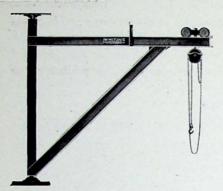
As shown by illustrations here and on pages 37 and 38, pillar cranes may take the form of self-supporting jibs, or may have fixed or movable booms instead of jibs and trolleys. Hand, air or electric power can be used.

Pillar cranes are used in yard and dock service, on loading or coaling platforms, on flat cars for street railway wrecking and construction work, handling ashes, etc.

Portable pillar cranes are useful in light service on shop floors, in handling small parts too heavy for manual labor. One type, a patented design, is shown in service on page 37.



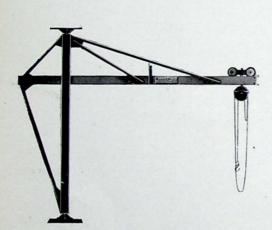
#### Service Jib Cranes

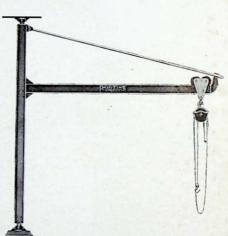


POLISE C. → C.

Type A

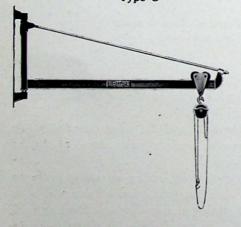
Type B

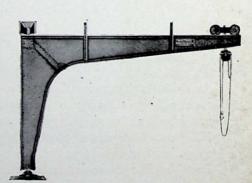




Type C

Type D





Type E

Type F

#### Service Jib Cranes

Service cranes take the several standard forms shown on the opposite page. The Types A, B and C are the same in framing as for regular geared iib cranes. Service cranes are of



the opposite page. The Types A, B and C are the same in framing as for regular geared jib cranes. Service cranes are of great value in the handling of material and work to and from large machine tools, steam hammers, etc.

The trolleys run free and carry chain blocks or air hoists. They are designed for rapid and easy manipulation by one man, the machine operator usually handling his own work.

Their design is standardized in the several types and they are produced in large lots, economically, on a manufacturing basis. They are very widely used, in every conceivable service.

Capacities 1/2 to 2 tons for usual service. Operative illustrations, pages 38 and 39.

#### Whiting Cranes at Work

N SUBSEQUENT pages are shown a few typical illustrations of Whiting Cranes of various kinds and capacities, in various sorts of service, for some of our many customers.

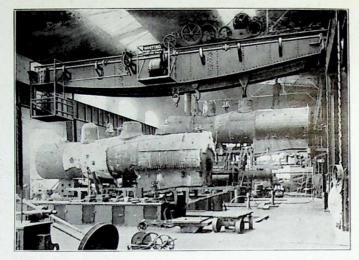
The arrangement of views is as follows:

The arrangement of views is as follows.	
	PAGES.
Standard Electric Travelers	22, 23, 24
Circular Runway Cranes	25
Floor-Operated Electric Cranes	25
Bridge Hoist Electric Cranes	25
Locomotive and Coach Hoists	26
Gantry Traveling Cranes	27, 28
Lifting Magnet Cranes	28
Transfer Cranes	29
Clam Shell Bucket Cranes	27, 30, 34
Hand Power Travelers	31, 32, 33
Electric Locomotive Cranes	34
Electric Mono-Rail Trolleys	28, 34
Jib Cranes	35, 36
Traveling Wall Bracket Cranes	23, 36
Pillar Cranes	37, 38
Service Cranes	38, 39

#### Double-Trolley Electric Traveler

120 Tons Capacity (60 Tons Each Trolley), with 5-Ton Auxiliary on One Trolley.

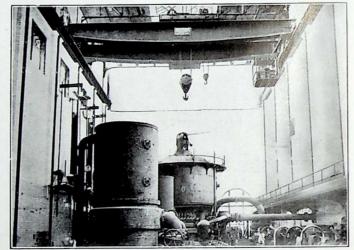
Southern Pacific Ry., Los Angeles, Cal.



#### Four-Motor Electric Traveler

90 Tons Capacity, with 7½-Ton Auxiliary Hoist.

Commonwealth-Edison Co., Chicago, Ill.

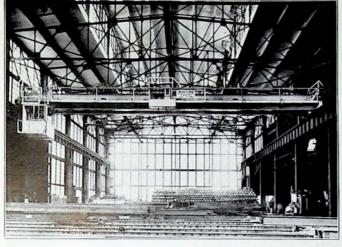


#### Two Double Trolley Electric Travelers

35 Tons Capacity, with 10-Ton Auxiliary Trolley.

American Steel Foundry, Granite City, Ill.

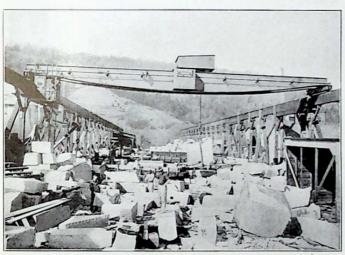




#### Double-Trolley Electric Traveler

Sidewalks on Bridge. 10 Tons Capacity (5 Tons Each Trolley.)

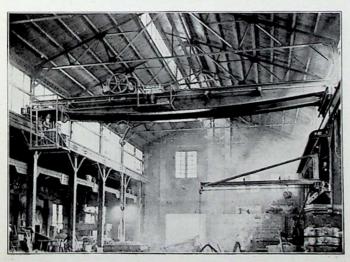
Illinois Steel Co., North Works, Chicago, Ill.



#### Three-Motor Electric Traveler

30 Tons Capacity. 75 Feet Span.

Woodbury Granite Co., Hardwicke, Vt.



#### Three-Motor Electric Traveler

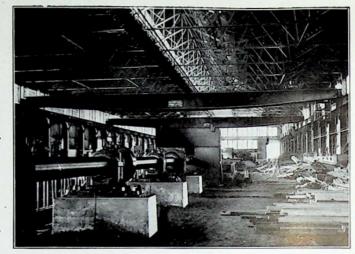
25 Tons Capacity. Also 2-Ton Traveling Wall Bracket Crane, with Chain Block Hoist.

Ferguson & Lange Foundry Co., Chicago, Ill.

#### Two Three-Motor Electric Travelers

15 Tons Each. 112 Feet Span.

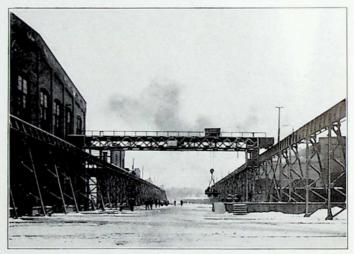
Wisconsin Steel Co., South Deering, Ill.



#### Three-Motor Electric Traveler

10 Tons Capacity, Lattice Girders.

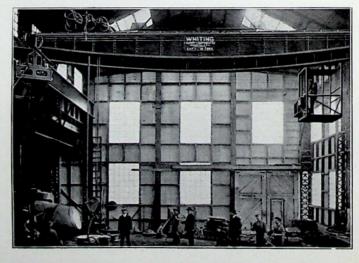
Canadian Pacific Ry., Montreal, Que.



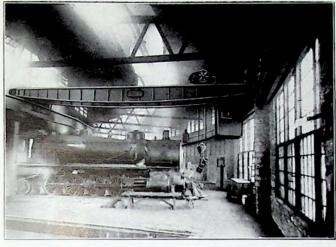
#### Three-Motor Electric Traveler

- 10 Tons Capacity.
- 40 Feet Span.

Vancouver Engineering Works, Vancouver, B. C.





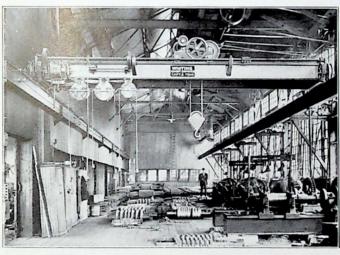


#### Circular Runway Electric Traveler

For Roundhouse Service.

7½ Tons Capacity.

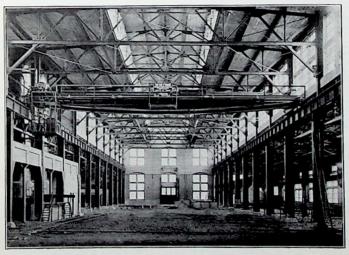
Atchison, Topeka & Santa Fe Ry., Needles, Cal.



#### Floor-Operated Electric Traveler

Controllers Operated by Pendant Cords. 5 Tons Capacity.

Wis'consin Steel Co. South Deering, Ill.



#### Bridge Hoist Electric Traveler

5 Tons Capacity. All Mechanism Fixed to Bridge at Cab End. Trolley Plain. For Pipe Foundry Work, Etc., where Heat Would Injure Electric Trolley.

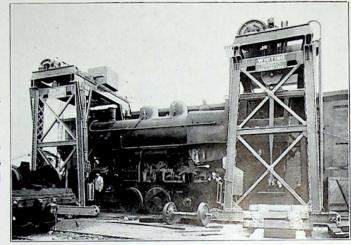
Delaware, Lackawanna & Western R. R., Scranton, Pa.

### 26

#### Two-Motor Locomotive Hoist

200 Tons Capacity in Four Hoists. Both Legs Movable by Hand Power.

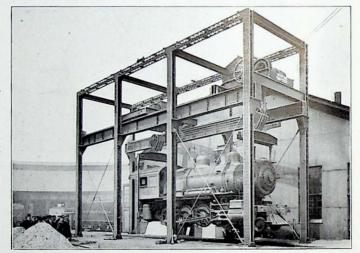
Three Installed for Northern Pacific Ry.



#### Two-Motor Locomotive Hoist

140 Tons Capacity in Two Hoists. One Movable Trolley Operated by Hand Chain.

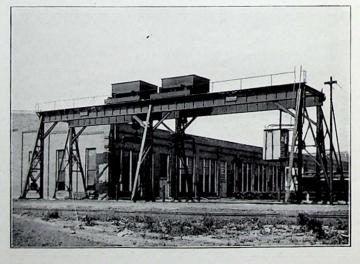
Pennsylvania Railroad Co., Pittsburg, Pa.

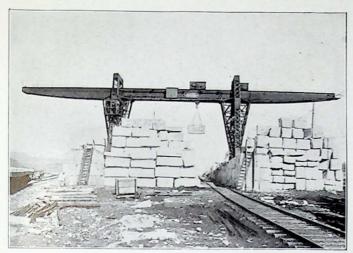


#### Four-Motor Coach Hoist

60 Tons Capacity in Two Hoists. Two Movable Trolleys. 85 Feet Bridge Length.

Union Pacific R. R., Omaha, Neb.





# WHITING FOUNDRY EQUIPMENT CO.

#### Double-Trolley Gantry Crane

50 Tons Capacity (25 Tons Each Trolley). 60 Feet Track Gauge. 160 Feet Bridge Length.

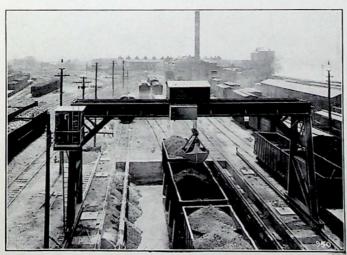
Vermont Marble Co., Rutland, Vt.



#### Three-Motor One Leg Gantry

15 Tons Capacity. 89 Ft. Bridge Length.

Illinois Steel Co., South Works, South Chicago, Ill.



#### Four-Motor Gantry Crane

With Clam Shell Bucket.

12 Tons Capacity.

Baltimore & Ohio R. R., Philadelphia, Pa.

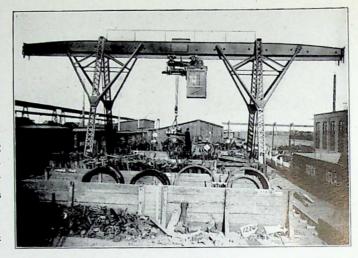
### WHITING FOUNDRY EQUIPMENT CO.

#### Three-Motor Gantry Crane

28

With 5 Ton Mono-Rail Trolley, Operating Lifting Magnet. Trolley may Leave Gantry to Follow Runways about the Plant.

Chicago, Rock Island & Pacific Ry., Silvis, Ill.

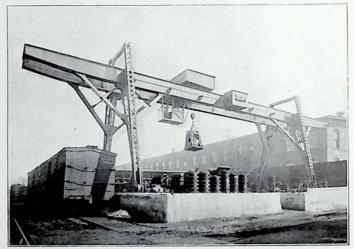


#### Three-Motor Gantry Crane

With Cage on Trolley Operating Lifting Magnet.

57 Feet Track Gauge. 97 Ft. Bridge Length.

St. Louis & San Francisco R. R., St. Louis Mo.

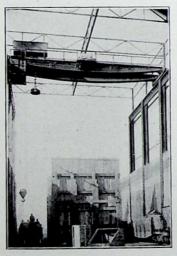


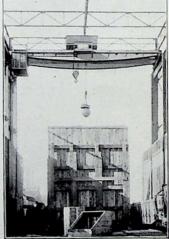
#### Four-Motor Electric Traveler

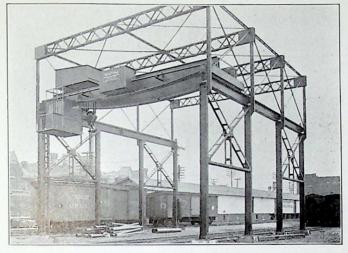
20-Ton Main Hoist. 10-Ton Magnet Auxiliary.

For Unloading and Breaking "Skulls" from Steel Mill Ladles.

Illinois Steel Co., Joliet, Ill.



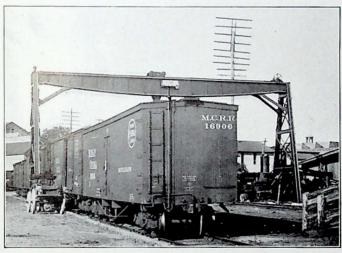




#### Four-Motor Electric Traveler

In Transfer Service. 25-Ton Main Hoist, with 5-Ton Auxiliary.

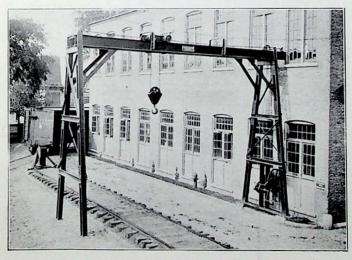
Central Railroad of New Jersey, Wilkesbarre, Pa.



#### Hand Power Transfer Crane

20 Tons Capacity.54 Feet Span.

New York Central & Hudson River R. R., Kingston, N. Y.



#### Hand Power Transfer Crane

7½ Tons Capacity.32 Feet Span.

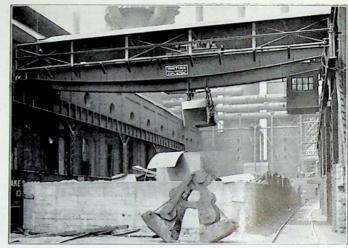
Eastman Kodak Co., Rochester, N. Y.

#### Four-Motor Electric Traveler

With Clam Shell Bucket.

10 Tons Capacity.

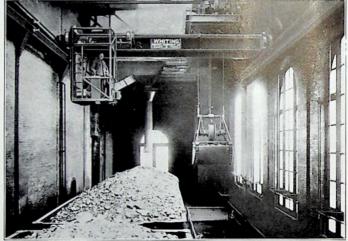
Illinois Steel Co., South Works, Chicago, Ill.



# Four-Motor Electric Traveler With Clam Shell Bucket.

5 Tons Capacity.

Commonwealth - Edison Co., Chicago, Ill.

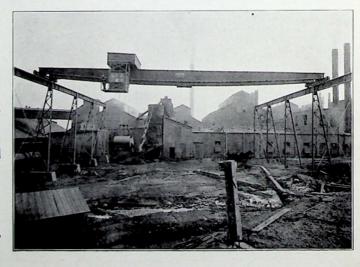


#### Four-Motor Electric Traveler

With Clam Shell Bucket.

8 Tons Capacity. 100 Feet Span.

Pennsylvania Cement Co., Bath, Pa.



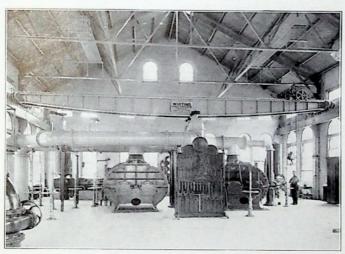




#### Hand Power Traveling Crane

With Electric Motor Drum Hoist. 2 Tons Capacity.

Whiting Foundry Equipment Co., Harvey, Ill.

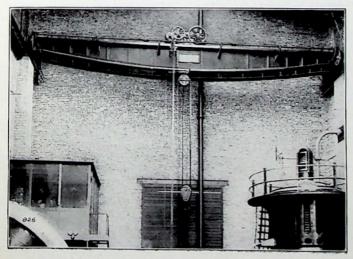


#### Hand Power Traveling Crane

Operated by Pendant Chains.

12 Tons Capacity.

Peoples Gas Light & Coke Co., Chicago, Ill.



#### Hand Power Traveling Crane

With Electric Motor Hoist.

25 Tons Capacity.

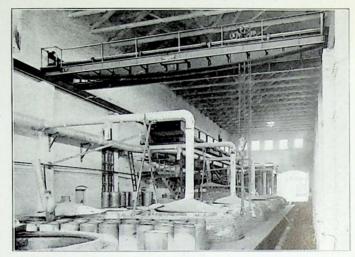
Illinois Construction Co., Peoria, Ill.

#### Side Platform Hand Traveler

Operated by Hand Cranks.

12 Tons Capacity.

Castner Electrolytic Alkali Co., Niagara Falls, N. Y.

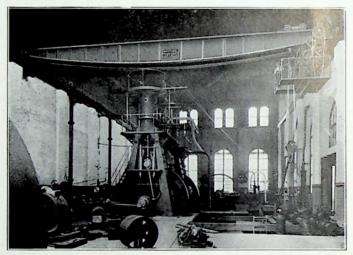


#### Cage Pendant Hand Traveler

All Mechanism at One End of Bridge.

20 Tons Capacity.

G. H. Hammond Co., Union Stock Yards, Chicago, Ill.

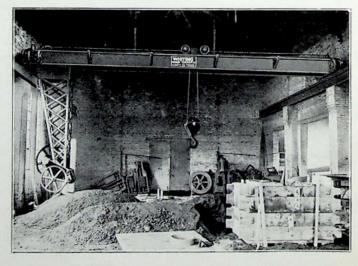


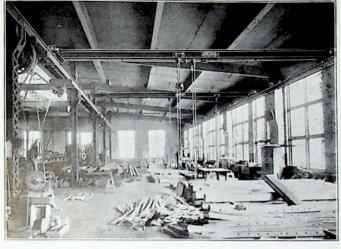
#### Floor Pendant Hand Traveler

Hoist Mechanism Brought Down on Structural Frame.

10 Tons Capacity.

Especially Useful in Foundry Service.



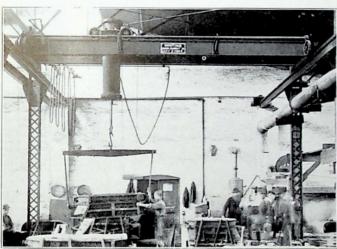


#### Chain Block Hand Travelers

With Free-Running Trolleys and Chain-Operated Bridge Travel.

2 Tons Capacity.

Canadian Pacific Ry., Montreal, Que.

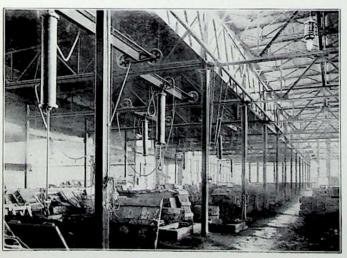


#### Air Hoist Hand Traveler

Trunnion-Supported Air Cylinder, in Plain Trolley, Racked by Pendant Chain.

5 Tons Capacity.

With Air Motor for Bridge Travel.



#### Air Hoist Hand Traveler

Hoists Suspended from Free - Running Trolleys. Chain Operated Bridge Travel.

2 Tons Capacity.

Manufacturers Foundry Co., Milwaukee, Wis.

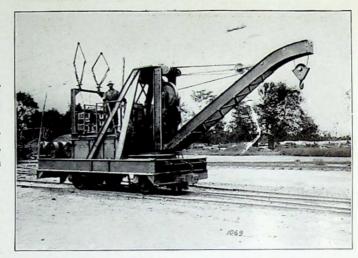
#### 34

#### Full Electric Locomotive Crane

Alternating Current. Motors for Travel, Hoist, Swing and Boom Raising.

4 Tons Capacity.

Union Carbide Company, Niagara Falls, N. Y.

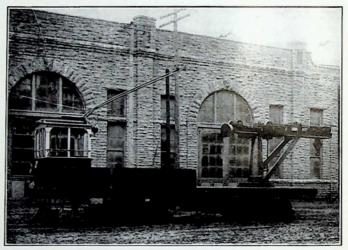


#### Full Electric Locomotive Crane Car

An Electric Pillar Crane on a Street Railway Flat Car, for Wrecking and Supply Service.

3 Tons Capacity.

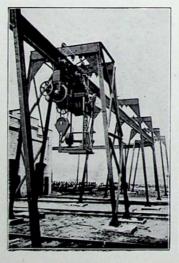
Cincinnati Traction Co., Cincinnati, Ohio

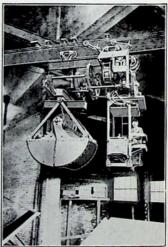


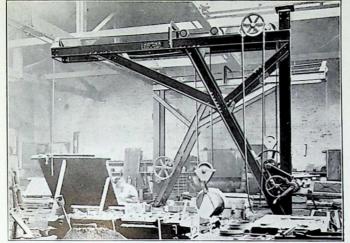
#### Electric Mono-Rail Trolleys

For Handling Materials of All Kinds on an Overhead Runway System, through Buildings and Yards.

Railroad Shops, Power Houses, Etc.





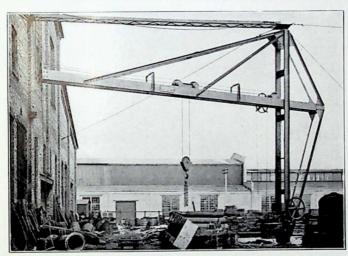


#### Hand Power Jibs, Type B Frames

Triple-Braced Jib, Long Radius, Good Clearance Around Mast.

5 Tons Capacity.

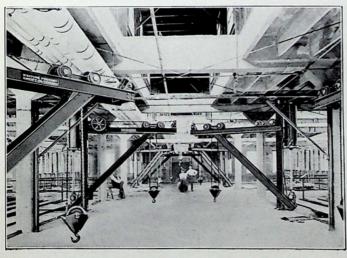
Widely Used in Foundry Service



#### Electric Hoist Jib, Type C Frame

In Yard Service.
5 Tons Capacity.
30 Feet Radius.

Whiting Foundry Equipment Co., Harvey, Ill.



#### Eight Air Hoist Jibs, Type A Frames

2 Tons Capacity.20 Feet Radius.Trolleys Racked by Pendant Chains.

Singer Manufacturing Co., Cairo, Ill.

## WHITING 36 FOUNDRY EQUIPMENT CO. MARKY HAME A. CRANES

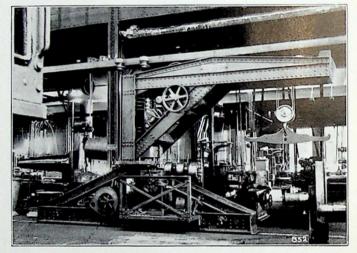
#### Five Portable Electric Jibs

Motors for Hoists Only. Transfers from Pillar to Pillar Made by the Electric Traveler.

5 Tons Capacity.

Delaware, Lackawanna, & Western Ry., Scranton, Pa.

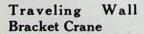




#### Full Electric Walking Jib

Motors for Travel, Swing, Rack and Hoist. 7½ Tons Capacity.

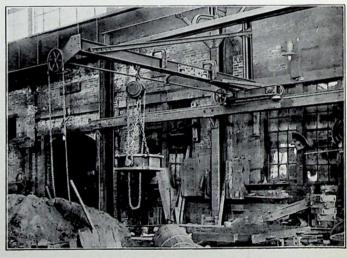
Illinois Central R. R., Burnside, Ill.

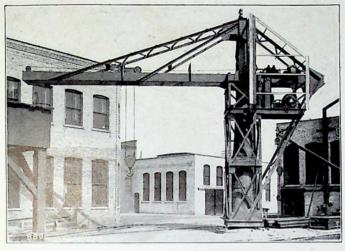


Chain Block Hoist; Free-Running Trolley; Pendant Chain for Travel Gearing.

2 Tons Capacity.

Ferguson & Lange Foundry Co., Chicago, Ill.

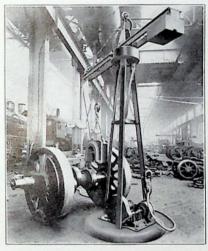




#### Electric Pillar Crane Type C Framing

Alternating Current.
10 Tons Capacity.
30 Feet Radius.

Ajax Forge Co., Chicago, Ill.

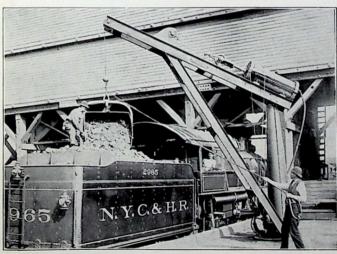


#### Portable Pillar Crane

Air Motor Hoist.

1 Ton Capacity.

Of Wide Utility in General Shop Service.



#### Air Hoist Pillar Crane

For Rapid Work in Coaling Locomotives.

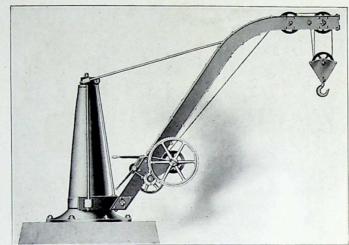
1½ Tons Capacity.

New York Central & Hudson River R. R.

#### Hand Power Pillar Crane

Fixed Boom. Double Geared Hoist. 5 to 15 Tons Capacity.

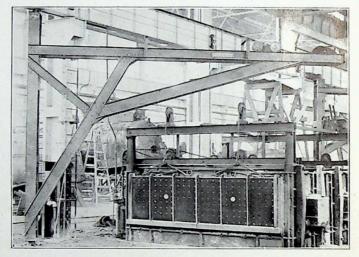
Useful in a Wide Variety of Service



#### Type B Service Crane

For Serving Furnace in Forge Shop. Long Effective Radius.

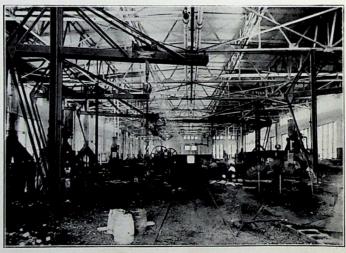
Cleveland, Cincinnati, Chicago & St. Louis R. R., Indianapolis, Ind.

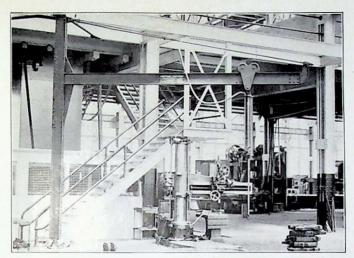


#### Type C Service Cranes

In Hammer Shop. With Chain Block Hoists. Perfect Clearance Around Masts.

St. Louis & San Francisco R. R., Springfield, Mo.





## WHITING FOUNDRY EQUIPMENT COMMANDER STATES

#### Type D Service Crane

For Handling Work at Machine Tools. Air Hoist Suspended from Trolley.

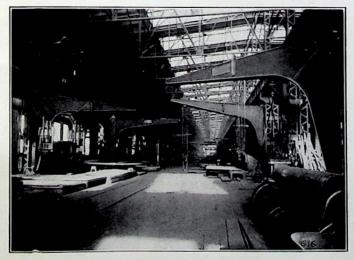
Cleveland, Cincinnati, Chicago & St. Louis R. R., Indianapolis, Ind.



#### Type E Service Cranes

With Chain Block and Air Hoists. Serving Machine Tools.

Cleveland, Cincinnati, Chicago & St. Louis R. R., Indianapolis, Ind.



#### Type F Service Cranes

Serving Boiler Shop Machinery. Air Hoists and Chain Blocks.

3 Tons Capacity.

Canadian Pacific Ry., Montreal, Que.





# A Select List of Some Whiting Crane Users

And the Number of Cranes They Have Purchased

United States Steel Corporation .		227	Cranes
Canadian Pacific Ry		165	"
Harriman Lines		109	"
New York Central Lines		65	."
General Electric Co		64	"
Great Northern Ry		30	"
Commonwealth-Edison Co		23	"
American Steel Foundry Co		22	"
International Harvester Co		20	"
International Steam Pump Co		20	"
Delaware, Lackawanna & Western R.	R.	18	"
Scully Steel & Iron Co		17	"
Pennsylvania Lines		15	"
Commonwealth Steel Co		13	"
Atchison, Topeka & Santa Fe Lines		12	"
Soo Lines		9	"
New York Edison Co		9	"
Canadian Northern Ry		8	"
Duluth, Missabe & Northern Ry		7	"
Missouri Pacific Ry. System . ,		6	"
Northern Pacific Ry		5	"

# FOUNDAY FOUNDAY. FOUNDAY FOUNDAY. FAMILIES SANGER FAMI