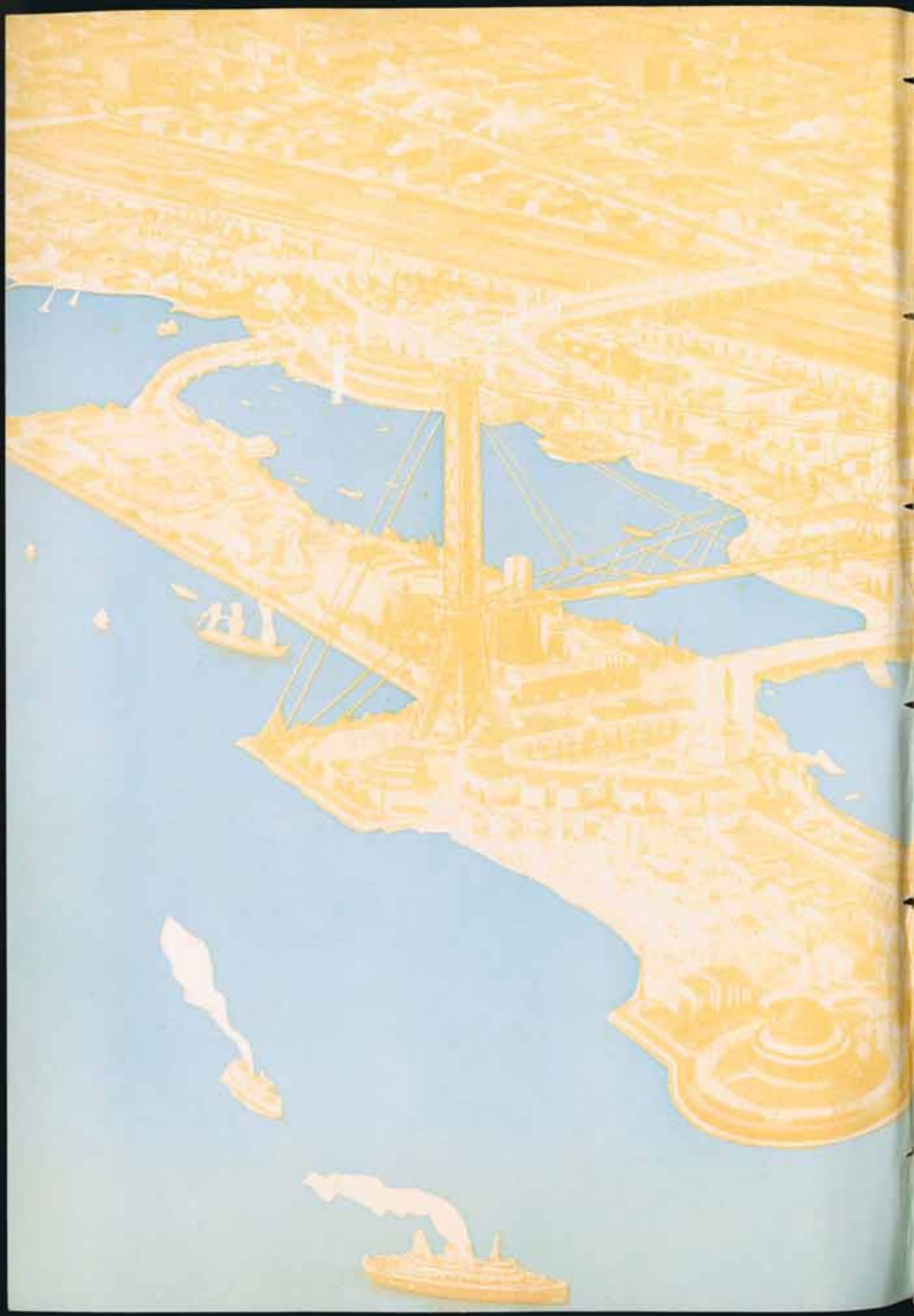


CHICAGO · 1933



LINK-BELT  
COMPANY



●

# SERVING INDUSTRY'S NEEDS

*in the Handling  
of Materials  
and the  
Positive Transmission  
of Power*

**BY LINK-BELT**



*Souvenir Book 1933 of the Link - Belt Exhibit at  
A Century of Progress,  
Chicago, 1933*

## LINK-BELT COMPANY

Leading Manufacturers of Equipment  
for Handling Materials Mechanically  
and Transmitting Power Positively

CHICAGO PLANT - - - - 300 West Pershing Road  
CHICAGO, CALDWELL - MOORE PLANT - 2410 W. 18th St.  
PHILADELPHIA PLANT - - - - 2045 W. Hunting Park Ave.  
INDIANAPOLIS, EWART PLANT - - - 220 S. Belmont Ave.  
INDIANAPOLIS, DODGE PLANT - - - 519 N. Holmes Ave.  
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Atlanta - - - -	511 Haas-Howell Bldg.	Los Angeles - - -	361-369 S. Anderson St.
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Dallas - - - - -	Mercantile Bldg.	Pittsburgh - - - R.	2125, 436 Seventh Ave.
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TORONTO WORKS - - - Eastern Ave. and Leslie St.  
MONTREAL - - - - - 934 Inspector Street  
VANCOUVER - - - - - 550 Beatty Street

# ILLUSTRATING THE GROWTH of an IDEA



One Sunday morning about 60 years ago, there came to William Dana Ewart, then a young implement dealer, the idea of a square detachable chain link.

Mr. Ewart appreciated the great need of a detachable chain drive—one that could be repaired in the field; and from this idea the Link-Belt organization of today has grown normally and steadily in much the same way as nature evolves the tall, sturdy oak from a little acorn.

Today, Link-Belt products embrace every industry, and encompass the world. They are varied, and include practically everything for handling materials mechanically and for the efficient transmission of power from one shaft to another.

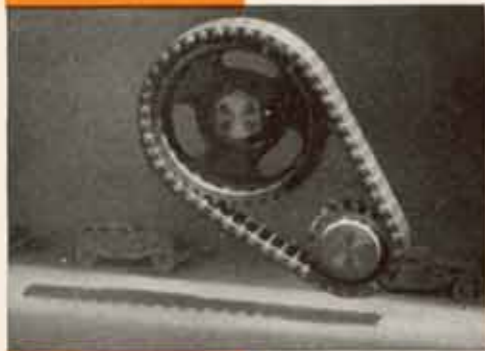
A general catalog of considerably over a thousand pages is required to illustrate and describe these products adequately; showing that Mr. Ewart's simple little idea, in the hands of Link-Belt Company's founders and their successors down to the present day, has indeed had a very inspiring growth.

On the succeeding pages you will find what may be called a bird's-eye-view of many of the things that Link-Belt makes besides conveying and power transmitting chains. Many special catalogs and folders are available to those desiring further information. Tell our nearest office which subject interests you, and literature covering it will be sent to you promptly.



### Silent Chain Drive

In every industry, on practically every type of machine, the Link-Belt Silent Chain Drive continues to prove that it is the nearest thing to perfection in smooth, positive, unailing power transmission. "The most efficient and economical drive we could use" are the words of a user making the first replacement after 16 years of continuous operation.



### Automotive Timing Chain

Quiet, durable and dependable are the Link-Belt Timing Chain Drives which builders of automobiles in every price class have adopted as standard factory equipment. Link-Belt distributors can supply a genuine Link-Belt chain from stock, to replace the timing chain on any chain-equipped front end.



### Roller Chain Drive

For moderately high speed power transmission, as on intermediary drives in steel mills, saw mills, grain elevators, etc., and where the duty imposes severe, jerky and racking strains, as on trucks, tractors and road machinery—there the durability and economy of the Link-Belt Silverlink Roller Chain Drive will be found outstanding. And there is extra value in the Link-Belt curled roller.



### Chain Drives for Every Use

For the many average classes of service, Link-Belt has light and heavy duty drives employing chains made of steel, malleable iron or PROMAL, operating on cast tooth wheels. Having a chain for every service enables Link-Belt engineers to make impartial recommendations. Chains made of PROMAL, the stronger, longer-wearing cast ferrous metal, are especially popular.

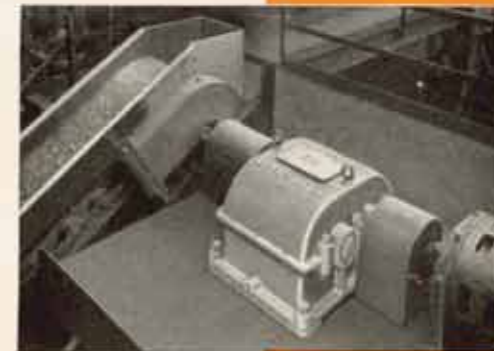
### P. I. V. Gear

Modern machine drives, more and more, need variable speed control. This the Link-Belt P. I. V. Gear furnishes at the simple turn of a handle. The P. I. V. Gear provides not only Infinitely Variable Speed Control but Positive Power Transmission from input to output shaft through a positive chain drive of unique design, without steps or dependence upon friction at any point.



### Herringbone Speed Reducer

This quiet, efficient, compact, fully housed speed reducer has anti-friction bearings; is automatically lubricated, the gears running in oil; meets all safety laws; withstands severe shock; and is available in speed ratios as large as 300 to 1. High speed motors may be used. These cost less, are smaller, and maintain a better power factor.



### Worm Speed Reducer

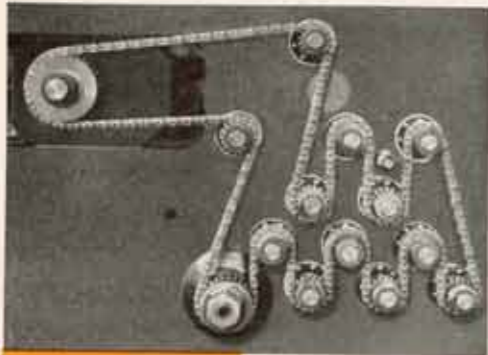
For general industrial transmissions, where a dependable, efficient, enclosed drive of the right angle type is wanted, Link-Belt has available a comprehensive line of standardized worm-gear reducers in sizes up to 30 H. P. The popular sizes are carried in stock. All are equipped with anti-friction bearings.



### Standardized Conveyor Drive

Complete, self-contained motorized conveyor-drive units, ready for immediate service, are made and carried in stock by Link-Belt's Caldwell-Moore plant, suitable for operating screw conveyors from 6 to 20 inches diameter, requiring up to 25 H. P.





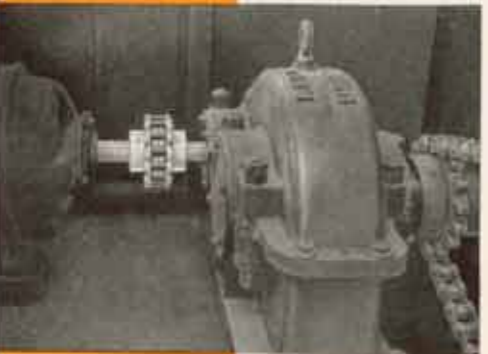
### A Midget Silent Chain

"Industry's biggest little silent chain drive"—a  $\frac{3}{16}$ " pitch silent chain, was perfected by Link-Belt to meet the growing demand for a positive, yet flexible drive for fractional horsepower units. There is no practical limit to the range of reductions, and intricate problems are easily solved. The 14-wheel drive illustrated, employs chain of the duplex type.



### Herringbone Gears

For heavy-duty continuous service, and where great strength and smooth, quiet operation are essential, the herringbone gear as made by Link-Belt and employed in its line of speed reducers, is particularly well suited. Large speed ratios for a given center distance. Used for driving elevators, agitators, drums, pumps, and machinery in steel plants, locomotive shops, etc.



### Shaft Couplings

Flanged, Compression, Universal, and several types of Flexible Couplings can be furnished for connecting shafting securely in line. The Link-Belt "RC" Silverlink Roller Chain Flexible Coupling here shown, has great flexibility of design for meeting special conditions. Stationary casings are available for all sizes; also revolving casings for the smaller sizes.

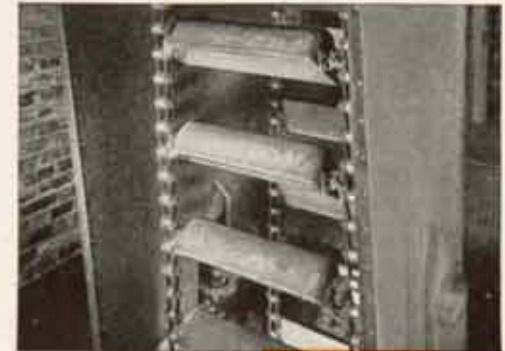


### Short-Center Belt Drive

Increasing the efficiency of short-center belt drives by increasing the arc of contact, and automatically maintaining proper belt tension—is the Meeseco Short-Center Drive's function. It decreases initial belt tension; belt pull; bearing pressure; slippage; and power consumption. High belt speeds, large ratios, and vertical drives, are practicable.

### Bucket Elevators

In back of Link-Belt's Bucket Elevators and Conveyors for handling loose materials in bulk, such as coal, ashes, sand, stone, grain, sugar, etc., is an engineering and manufacturing experience of over half a century. Centrifugal-Discharge, Perfect-Discharge, Continuous-Bucket, and Gravity-Discharge and Pivoted-Bucket Elevator-and-Conveyor types are furnished, depending upon which type best fills the requirements.



### Continuous-Bucket Elevator

High capacity at slow speed; buckets secured close together on one or two strands of chain, or on a belt, with the front of each bucket forming a chute for discharge of succeeding bucket; buckets fed direct through a feeding leg—these features fit the Continuous-Bucket Elevator well for handling crushed stone, ore, coal, and other bulky or gritty materials.



### Gravity-Discharge Elevator

The Gravity-Discharge Bucket Elevator-Conveyor, employing two strands of chain, with V-shaped buckets at intervals, is designed for the gentle handling and discharge of coal (or other friable, non-abrasive materials), as at retail coal pockets, locomotive coaling stations and power houses. The buckets push the material along upper-run trough to any desired discharge point.



### Peck Carrier

As the buckets of the Peck Carrier are pivotally suspended between two strands of chain, they are always upright, permitting a single carrier to transport material horizontally, vertically, and again horizontally, or in other vertical-plane paths. Slow moving, very efficient and economical . . . the Peck Carrier is popularly employed in power houses for handling both coal and ashes with one installation.





### Flight Conveyor

The Flight Conveyor is inexpensive in first cost, and was developed for conveying materials horizontally, or up inclines of not over approximately 45 degrees. The steel trough along which the flights push the materials, can be fitted with discharge openings and gates to suit specific needs. Often used as a coal distributing conveyor at the smaller power plants, and over retail coal pockets.



### Apron Conveyor

The Apron Conveyor, with overlapping steel pans attached to two strands of roller chain, operates slowly on tracks which are horizontal, or inclined at angles up to 26 degrees, and being so ruggedly constructed, has a low maintenance cost. The use of stationary retaining sides permits a greater depth of material (coal, crushed stone, etc.) to be carried.



### Drag Chain Conveyor

The Drag Chain Conveyor, much used for conveying sawdust, consists of one or more strands of wide-link chain sliding in a trough and carrying the material along. The chain is operated slowly, and may be of malleable iron, PROMAL or steel construction. A reversible cast-steel drag chain is often used in conveying hot or cold cement clinker—a very abrasive product.



### Power Hoe (Drag Scraper)

With the Power Hoe, which lends itself especially well to irregularly shaped property, one man can store or reclaim most bulk materials at any normal capacity per hour. The hoe, or scoop, is operated to and fro by means of an engine, a wire rope, and properly designed sheaves supported on posts or other form of anchorage.

### Belt Conveyor

Conveying large quantities of material at a low cost per ton is work to which the Belt Conveyor is ideally suited, because of its small power consumption, and the large capacity that results from the conveyor's continuous delivery of material . . . coal, coke, sand, dirt, chemicals, etc. . . . at a relatively high speed. The modern Belt Conveyor employs anti-friction supporting idlers.



### Conveyor Idlers

Why ruin a good conveying belt by using "cheap" idlers? Free-turning, accurately made idlers assure the belt conveyor a good roadbed for economical operation . . . minimum friction loads . . . and the lowest maintenance cost. Link-Belt makes a full line of anti-friction, pressure-lubricated idlers, as well as various types of plain bearing, grease cup idlers.



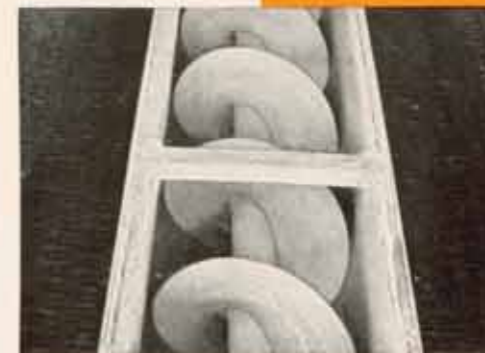
### Belt Conveyor Trippers

For discharging coal, sand or other loose materials at any point along horizontal travel of the belt conveyor, a Link-Belt Tripper of either the hand, self, or automatically propelled type can be furnished. The Link-Belt "Tank" Tripper, with its indestructible welded structural steel frame, combines lightness, strength and stability in its advanced design.



### Screw Conveyor

Consisting of a continuous spiral which "screws" the material ahead in a U-shaped trough, the Screw Conveyor is valuable for handling such small-sized material as grain, cement, cottonseed, pulverized coal, sand, etc. It discharges at end, or through openings in bottom of trough. Low first cost . . . simple construction . . . requires little headroom.





### Ribbon Conveyor

The Ribbon Conveyor has a continuous spiral steel "ribbon" with a clear space between it and the central pipe to which the ribbon is secured . . . and is peculiarly adapted for handling sticky materials, such as molasses, hot tar, asphalt, sugar, etc. Material of this character would build up on the flight of the solid-flight screw conveyor.



### Apron Feeder

The steel pan type feeder is used where delivery point is at a distance from hopper; will operate inclined; moves slowly; and can be built very substantial. The Link-Belt Heavy-Duty Manganese Steel Apron Feeder here shown, is especially well adapted to handling extremely heavy, large, lumpy and abrasive materials—stone, ores, coal, etc.



### Reciprocating Feeder

The Reciprocating Feeder assures a uniform flow of material from hopper to adjacent crusher or conveyor. Its reciprocating plate has high retaining sides, and forms the bottom of the hopper when plate is stationary. In operation, the material discharges over end of plate at a uniform rate as the plate recedes. It is an inexpensive and very efficient feeder.



### Crusher

For reducing run-of-mine coal to commercial or mechanical-stoker sizes, Link-Belt has Single-Roll and Two-Roll Crushers, and can furnish Bradford Breakers, and hammer or ring crushers, where they are better suited to the conditions. Link-Belt crushers are also used for crushing coke, cinders, gypsum, salt, foundry refuse, shales, etc.

### Skip Hoist

The Skip Hoist is especially well adapted for making high lifts, elevating abrasive or corrosive materials, and the handling of large lumps, as well as fines. It is popularly employed for handling coal, coke, ashes, sand and stone. Link-Belt Skips are economically applicable to large or small capacity—even to elevating but ten 20-cu. ft. buckets of ashes per hour.



### Automatic Loader

The periodic automatic filling of skip hoist buckets without overflowing, presents a problem that the Link-Belt Automatic Loader solves admirably. It assures automatic loading so long as there is material in the receiving hopper, and automatically cuts off the flow of material to bucket at the right time. Modern practice favors automatic loading wherever possible.

### Dump Hoppers and Gratings

The track dump hopper is often constructed of steel plate suitably stiffened, the railroad track being supported over it on girders of adequate strength for the span. The steel grating keeps out foreign materials, and lumps that are larger than the general run of lumps the discharging, crushing or conveying machinery is designed to handle.



### Elevator Casings

Bucket Elevators are usually enclosed in a steel or wood casing, to protect the elevating medium, and to return any spillage to the boot. Steel elevator casings are most generally used, and our facilities are unsurpassed for manufacturing these, in sections of convenient length, with flange angles for bolting them together securely.





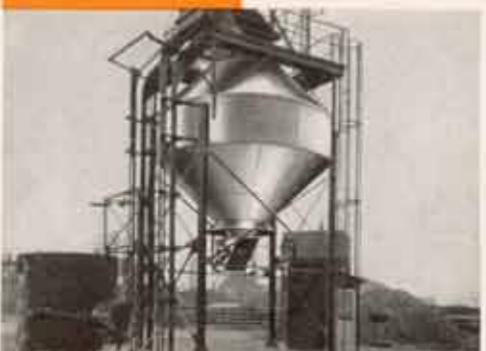
### Rotary R. R. Car Dumper

With the development of the rotary dumper, the economics of the lifting type of dumper have been brought within the economic reach of those whose unloading requirements are fairly low. The Link-Belt Rotary Railroad Car Dumper will unload any type of open-top railroad car from the smallest to the largest, completing the unloading cycle in 1½ minutes.



### Grain Car Unloader

Large grain elevators employ the Link-Belt automatic tilting type of Grain Car Unloader, which is capable of unloading any size car of wheat, oats, or corn in 6 or 7 minutes. Besides faster unloading, at reduced cost, this machine automatically removes the grain doors without destroying them, and permits their use over and over again.



### Bunkers and Bins

Steel bunkers of the catenary suspension, hoppers and other types are designed and built by Link-Belt for any capacity, for the boiler house or wherever bunkers and storage bins are required. Here illustrated is a circular bin of small capacity, used for loading lime, which is delivered to it by a Link-Belt skip hoist.



### Stoker Spouts

When the coal supply bunker in the boiler house is located above and in front of the boilers, the stokers are fed direct through circular, steel, swinging spouts attached to the bunker discharge gates, as illustrated. A traveling weigh larry is used when overhead bunker is located at end of boiler room, or away from the stokers, and for keeping a record of weight of coal consumed by the boilers.

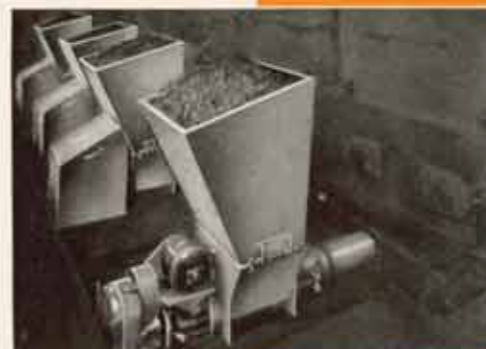
### Traveling Weigh Larry

When the traveling weigh larry is used for distributing coal to stokers, the overhead bunker may be located wherever it is most convenient; and coal is made available to any stoker hopper from any part of bunker. Weighing and recording the amount of coal delivered to each stoker is a check on boiler plant efficiency.



### Automatic Coal Stoker

The Link-Belt Automatic Underfeed Screw Stoker incorporates the Link-Belt Variable Speed Drive and Standardized Front-End Assembly Unit. It is made in a number of sizes for boiler capacities from 10 to 250 B. H. P., and assures all the present-day advantages of automatic stoker firing, plus unusual reliability.



### Silo Coal Storage

Boiler houses need only be large enough to house the boilers and auxiliary apparatus when the Link-Belt silo coal storage system is used. The upper part of silo has a live storage compartment into which the elevator discharges, and from which coal is withdrawn for the stokers. Reserve storage forms when the live storage hopper overflows into the silo proper.



### Industrial Cars

Drop-side coal charging cars; V-shaped side-dumping ashes cars; coke charging cars for gas plants; swiveling scoop cars dumping to either side or forward; electrically-propelled glass-batch mixing cars—all are within the scope of Link-Belt's engineering and manufacturing facilities.







### Retail Coal Pockets

The retail coal yard may employ either ground storage, with portable loaders for reclaiming coal to trucks; or overhead pockets with delivery chutes and gates; or both schemes. The pockets, now commonly of concrete silo type, are usually fed by a gravity-discharge bucket elevator and distributing flight conveyor; a pivoted bucket carrier, or a trolley-bucket conveyor system.



### The "Autoveyor"

The Link-Belt "Autoveyor" is a fully-automatic trolley-bucket system for unloading coal (or coke) from hopper-bottom cars direct to any point along top of storage piles of any height, at maximum speed, without transfer, and with minimum degradation. Bucket discharges itself upon contacting the storage pile, the discharge being a gentle flowing of material over pile.



### Discharge Gates

The Duplex Gates shown, which in this installation assure instantaneous delivery of prepared sand from overhead hoppers to molds, are but one of many types of discharge gates Link-Belt has for overhead bins, track hoppers, coaling stations, and conveyor troughs. These comprise the various styles of vertical and horizontal slide gates, and undercut gates for side or bottom discharge.



### Locomotive Coaling Stations

As in power plants, the Peck pivoted bucket carrier is popularly used on locomotive coaling station work, handling both the coal and the ashes. The gravity-discharge bucket elevator-conveyor and the skip hoist are two other commonly used types, the selection of the conveying medium depending upon the capacity desired, local conditions, and individual preferences.

EFFICIENT MATERIALS HANDLING **LINK-BELT** POSITIVE POWER TRANSMISSION

### Water-Intake Screen

A refuse-free condenser water supply is assured wherever the Link-Belt "Clean Water" Traveling Screen is installed in the intake, for collecting, elevating and disposing of grass, leaves, twigs, seaweed, fish, etc. Water sprays automatically clean the traveling screen and discharge the refuse into a sluiceway. Usually the screen is run a short time at infrequent intervals.



### Vibrating Screen

All materials, fine or coarse, light or heavy . . . clay, coke, sand, fertilizer, ores, stone, etc. . . seem to yield to the wizardry of the mechanically-vibrated, Link-Belt Vibrating Screen, and classify themselves in strict accordance with their size. Its uniform vibration keeps the meshes open, and makes the screen's entire screening surface 100% effective.



### Rotary Disc-Grizzly

The Rotary Disc-Grizzly is very efficient in the screening or "scalping" of large size materials, such as stone, coke, coal, etc. It handles the material gently, has large capacity, and in many instances is used where the cylindrical revolving screen would formerly have been employed. The disc shafts all operate in the same direction but at different and successively higher speeds.



### Revolving Screens

For screening coal, coke, sand, gravel, stone, etc., there is a Link-Belt revolving screen to meet every requirement where this type of screen is suitable. This comprises hexagonal, cylindrical and conical revolving screens of the through-shaft type, including conical sand and gravel washing screens (illustrated); and trunnion-type screens without through-shaft.



EFFICIENT MATERIALS HANDLING **LINK-BELT** POSITIVE POWER TRANSMISSION



### Sand and Gravel Washers

The Link-Belt Dewatering Screw has a scrubbing action on sand, and keeps the loam and other foreign matter in suspension to be carried away in the overflow, thus assuring a clean and dry sand for use where the specifications and inspection are rigid. Link-Belt has a complete line of washing and dewatering units, of the log, screw, flight, scrubber and screen types.



### Automatic Sand Separator

A good sand separator for automatically removing the impurities with the overflow water, is one of the most important operating units of a sand washing plant. Link-Belt was first to develop the automatic-discharge conical sand separator, and many of these efficient units have been in successful operation for 15 years or more.



### Shaw Sand Classifier

The Shaw Sand Classifier uses a combination of surface current and rising current classification principles, and produces the cleanest, dryest, and most accurately sized sand, of any form of sand separator made. It is the only sand separating device that entirely keeps dirty water from getting into the product. The construction is simple, and the regulation easy.



### Meat Slicers

The bacon that you had for breakfast this morning may have been sliced with a high-capacity, motor-driven Link-Belt Meat Slicer, of which several models are available, capable of slicing 150 pork chops, 285 slices of bacon, or 500 slices of dried beef per minute. The Link-Belt Slicer illustrated is slicing beef.

### Foundry Conveyors

As foundries must handle from 150 to 200 tons of material (pig iron, coke, limestone, scrap, molding sand, patterns, flasks, etc.) to produce one ton of castings, it is apparent that the industry has economic need for mechanical-handling equipment. Here shown is a mold conveyor, with prepared sand hoppers overhead, and vibrating screen shake-out in foreground.



### Foundry Sand "Revivifier"

Experienced foundrymen who have used the Link-Belt Revivifier say that it is unequalled for sand conditioning. It breaks up lumps and pellets, and thoroughly mixes all particles, thus assuring an evenly tempered reconditioned sand. The Revivifier also quickly brings about an appreciable reduction in temperature, if the sand is hot when delivered to the machine.



### Automatic Power Shovel

The Automatic Power Shovel will prove its economy in unloading almost any material which can be scooped up—grain, cement, cottonseed, fertilizer, fuller's earth, etc. The operator draws the scoop into box car and stops. Slack in rope serves to engage winding mechanism, wind up the rope, and pull loaded scoop to discharge point at car door.



### Bridge Tramway

The traveling Bridge Tramway finds its principal use at steel mills and water terminals, for the rapid unloading, storing, and reclaiming of coal and ore. The bridge extension over water is usually hinged, so it can be raised to clear ships' masts. Generally speaking, the bridge may be high enough to permit forming a storage pile 50-ft. deep.





### Coal Retarding Conveyors

Where coal mine openings are on mountainsides, the mine cars are brought to the surface, hauled to car dumper, and dumped into a hopper from which the run-of-mine coal is usually fed to a Retarding Conveyor for lowering it to the screening and preparation plant. Retarding Conveyors of apron, belt, and flight types are in use.



### Coal-Rescreening Tower

The high standing of Link-Belt built coal preparation plants has been attained by adhering to a policy of designing the plant to fit the conditions, to operate economically, and to prepare coal which will successfully meet selling competition. The Traveling Re-Screening Tower illustrated, preparing run-of-storage coal, is essentially a tippie on wheels.



### Mine Car Dumper

Link-Belt Power-Driven Rotary Mine Car Dumps are built to meet the requirements of the individual property. For the rapid dumping of small and medium sized cars, the Link-Belt Gravity Rotary Dump is well adapted. Cars are dumped by gravity under control of a brake; counterweights serve to restore the empty car to its upright position.



### Rock Car Dumper

Especially developed for mountainous regions, the Link-Belt Power-Driven Side-Tilting Rock Car Dump, here shown dumping coal mine refuse down mountain side, permits using mine refuse for grading and extending the yard. The dump is portable and can be placed anywhere along the outside track. Car can be placed, dumped and removed inside of three minutes.

### Chain Car Haul

Chain Car Hauls are employed for hauling and feeding loaded mine cars from mine entry to the car dump, and for returning the empty cars to the desired elevation. Link-Belt Car Haul chains, all of which are of rugged, dependable proportions, can be furnished with rigid, spring or gravity type car-engaging pushers, as desired.



### Coal Washeries

The difference in specific gravity of coal and refuse is utilized in the Link-Belt Simon-Carves Wash Box, illustrated, to effect a separation in the water by means of air pulsations. These pulsations lift the coal into the upper current, while the refuse drops on to the sieves and passes out through the refuse gates.



### For Dry-Cleaning Coal

Here shown is a Link-Belt Spiralizing Plant for the dry mechanical separation of bituminous coal and refuse. Pneumatic Concentrating Tables also are available for dry-cleaning. It matters not whether the coal is to be wet or dry cleaned for the market—Link-Belt's line of coal cleaning, dust extracting, sizing and handling equipment is complete.



### Shaking Screens

To produce clean and properly sized coal is the main function of the coal preparation plant. The sizing is done over screens, usually of the shaking and vibrating types. The flexible-support type of shaking screen, here shown in a coal tippie, has also been employed very effectively in the domestic coke preparation plant.





### Coal Loading Booms

The Coal Loading Boom usually is the hinged, discharge section of a combined picking table and loading boom conveyor, of apron or flight type, serving to deliver sized coal into open-top cars with practically no drop or breakage. The loading boom section is arranged to be raised or lowered by an overhead hoist, thus regulating the discharge height.



### Box Car Loader

(Manierre)

The stationary-mounted, pivoted, adjustable Manierre Box Car Loader does not throw the material it is loading, but conveys it without violence to the innermost ends of the car. The conveyor (a rubber-covered belt or a steel apron) can be swung into car and placed in loading position by one man in but a few seconds.



### Box Car Loader

(Portable)

A Link-Belt Pratt Box Car Loader, and one man to direct its discharge into any portion of car, can easily load a car with sand, salt, lump lime, ores, super-phosphate, etc., in an hour. It is an inexpensive self-contained, portable belt conveyor, which is readily wheeled inside the car to the loading position.



### Portable Flight Conveyor

Deep conveyor flights to handle large lumps; high steel trough sides; swiveling wheels and axles; a quick-acting, safe, power-operated raising and lowering mechanism—these features fit the "Bituminous type" Link-Belt Portable Flight Conveyor especially well for handling bituminous coal, coke, anthracite coal, etc. It will handle 90 tons of coal an hour if fed at this rate.

### Portable Belt Conveyor

If you unload materials from cars to pile, or load from pile to trucks or cars, the Link-Belt Portable Belt Conveyor will likely be found ideal, as it handles practically any loose material with economy, and is the sturdiest mechanical loader and unloader of its type. Portable Belt Conveyors are available in standard lengths of 21-ft. to 60-ft.



### "Grizzly" Crawler Loader

Here is a self-propelled, self-feeding, large capacity loader that crawls as it digs, as it loads—the Link-Belt "Grizzly" Crawler Bucket Loader for handling sand, crushed stone, coke, coal, etc. For cleaning domestic coke, taken from ground storage, it is equipped with a Link-Belt Vibrating Screen, which handles the coke gently to avoid degradation, and screens out the breeze.



### Hand-Propelled Bucket Loaders

The first portable loader for handling coal and similar materials into trucks, was of the bucket elevator type, and this type, modernized, is still used a great deal in the hand-propelled style. Within its capacity, the Link-Belt Type "A" Bucket Loader with shaking screen, has no superior for handling anthracite coal gently and screening it clean.



### Portable Bag Piler

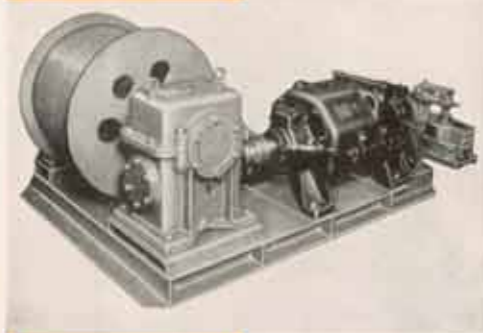
For storing heavy bags of raw sugar, etc., there is a Link-Belt Self-Propelled, Double-Boom Bag Piler with 25-ft. maximum lift, the discharge height of upper boom being adjustable to suit height of pile. A 15-ft. lift Single-Boom Bag Piler, hand-propelled over floor, is available for handling the lighter bags. Either piler can also convey the bags back to floor.





### Electric Car Spotter

Time and money can be saved in placing cars on the exact spot for loading or unloading—by using the Link-Belt Electric Car Spotter, instead of waiting for a switch engine or using laborious hand methods. It is always ready, pulls in any direction, consumes no power while idle, and can move from one to six loaded railroad cars.



### Large-Capacity Car Pullers

At large grain elevators or other plants where a great number of cars are handled each day, a Car Puller of the type here depicted is regularly employed. This machine can be furnished with either one or two winding drums of proper size for wire rope, and built throughout for the work to be done.



### Rope Car Haul

The cost of shifting cars with a power-driven Endless-Cable Haulage System is insignificant, compared to the expense of doing it with a locomotive. Rollers support the main haulage cable at intervals, the one end of car-attachment rope being provided with a hook, and the other end with a hand-controlled grip for engaging the moving cable.



### Truck Hauls

Many water terminals employ Link-Belt Freight Ramps and Truck Hauls for loading and unloading vessels. The carrier is hinged, counterweighted and adjustable to ship's deck level. It may be a traveling platform, or a conveyor chain with pushers for engaging the trucks. One carrier may convey loaded trucks, and another return the empties.

### Cane Car Dumper

The Link-Belt Cane Car Dumper, side-discharge type and hydraulically operated, has proved by actual performance over a period of many years, that it is the most efficient, simple, rugged, and economical means yet devised for dumping sugar cane. It requires very little attention in operation, and entails practically no expense for upkeep.



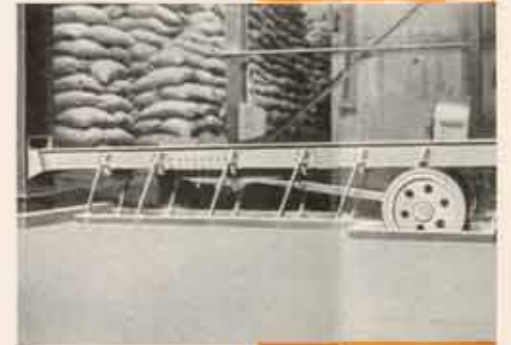
### Cane and Bagasse Carriers

Link-Belt double-overlapping steel apron conveyors, with slats accurately formed in dies, are usually employed for handling sugar cane from car dumper to crusher, and carrying the bagasse between mills. For conveying bagasse to furnaces in boiler room, or to storage pile, double-strand roller chain and all-steel flight conveyors are regularly used.



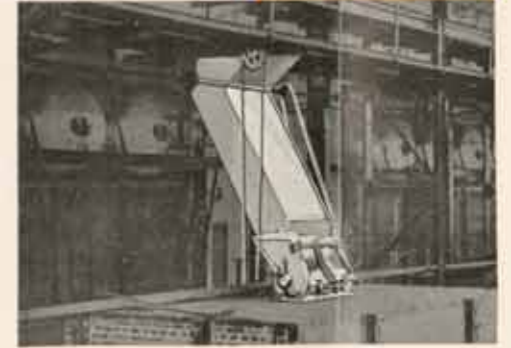
### Grasshopper Conveyor

Named after its hopping, reciprocating motion, the Grasshopper Conveyor is frequently used under the centrifugals, for handling sugar without crushing or grinding the crystals. The "jumpy" motion imparted to the conveyor's self-cleaning, large-capacity, flexibly-mounted steel trough, shakes down the intermittently-received batches and discharges the sugar in a continuous stream over the end.



### Bagasse Feeders

Link-Belt Bagasse Feeders are so constructed that the escape of sparks or hot air, and the entry of cold air into the furnace, are effectually prevented. The temperature cannot be lowered or combustion interfered with. The feed roller of the rotary type feeder delivers the bagasse to furnace—uniformly, without clogging.





MANUFACTURING  
PLANTS AND  
WAREHOUSES  
**LINK-BELT**  
COMPANY

A composite view of the 16 plants and warehouses that make Link-Belt service possible

Below are several views of the Link-Belt Exhibit at A Century of Progress Exposition, Chicago





### Canning-Plant Dump

From the smallest part to the complete installation . . . from wagon dump to cooling tank conveyor or packing room the Link-Belt line of conveying and power transmitting machinery for the canning plant is complete. Here illustrated is the Link-Belt Dump for tilting wagons or trucks of corn, peas, etc., endwise, and discharging the load to a conveyor.



### Peeling Table Conveyor

Everybody is busy in modern fruit and vegetable canning plants employing the Link-Belt Sanitary All-Steel Peeling Table for keeping the peelers supplied, and conveying away the peelings and refuse. Greater output; reduced payroll; a better, cleaner product; and sanitary working conditions result from the use of this rectangular-path continuous plate conveyor.



### Ice Crusher

As much ice can be crushed with the Link-Belt Ice Crusher in a few minutes, as can be broken by hand in an hour's time. Its smooth, continuous operation saves ice, time and labor, and avoids sloppy, wet conditions. Moreover, the product is uniform, clean, and free from wood splinters or other foreign materials.



### Portable Car Icer

Refrigerator cars must be iced promptly after being loaded with perishable produce, and frequently they have to be re-iced in transit. The Link-Belt Car Icer does this work very efficiently. It is furnished in trailer style, or mounted on truck chassis. The upper part folds down to clear trolley wires, bridges, etc., permitting Icer to go anywhere.



### Unloading Towers

Ordinarily, water-borne coal, arriving in vessels, is removed by clamshell buckets which are hoisted and dumped direct into storage, or into a hopper from whence the coal is conveyed to boiler-house. The Link-Belt Coal Unloading Tower here shown, equipped with two grab buckets, can unload either one or two barges of coal at a time.



### Traveling Direct Unloader

The electrically-operated traveling Direct Unloader, controlled by operators located on the structure in clear view of the work, is used at water terminals for the direct transfer of material from cars to ship, or vice versa, at a rapid rate. The Link-Belt Direct Unloader illustrated is equipped for both grab bucket and hook block service.



### Self-Unloading Ships

Conveyor-equipped Self-Unloading Ships, as used on the Great Lakes, can serve economically those docks which, through lack of adequate and fast enough unloading facilities, are unable to attract the large ships with low freight rates. Large quantities of raw materials, such as sand, gravel, cement, limestone, and coal are transported and discharged in this way.



### "The Dodge System"

A "Dodge System" plant for storing anthracite coal in large quantity may consist of a number of groups of two Trimmers with a central, pivoted Reloader for reclaiming coal from the side of pile under either Trimmer. As the Trimmer conveyor has a movable bottom, the coal is really laid on peak of pile, keeping degradation at its minimum.





### Coal Loading Piers

An interesting Link-Belt equipped marine loading plant is that here shown, which handles coal, gravel, stone, bulk pitch, etc., at a high rate of speed, from railroad cars direct to ship, without provision for intermediate storage. The handling equipment includes a rotary railroad car dumper and a ship-loading bucket elevator.



### "Telescoping" Ship-Loader

The "Telescoping Chute", Traveling Ship-Loader illustrated (designed and built by Link-Belt), handles briquettes from railroad cars direct to hold of ship, with practically no drop or breakage, the chute being lowered into ship. It is just another picture showing the adaptability of Link-Belt engineering experience, and the scope of the manufacturing facilities at your disposal.



### Coaling Barges

Both wooden and steel barges have been equipped with Link-Belt coal reclaiming machinery for coaling ships at sea. The equipment varies, but usually includes, besides tunnel reclaiming gates, a gravity-discharge bucket elevator with or without apron conveyor (s), and for the discharge of coal to ship—a telescopic chute or a pivoted belt conveyor.



### Log Stacker

The modern pulp mill must unload and reclaim thousands of cords of spruce logs annually, in the process of reducing them to pulp for paper-making. Among the handling equipment employed are Link-Belt Chain-type Conveyors, including Portable Stackers like the one illustrated; and the Link-Belt Crawler Crane with self-filling wood grapple.

### Overhead Conveyor

Flexible, adaptable, inexpensive, easily installed and altered, and economical of power and maintenance expense, the Overhead Conveyor permits straight-line production without costly rebuilding. The power-propelled conveying chain is suspended on edge from trolleys running on an overhead track, and has attachments for holding the articles individually or in containers. No floor space is used.



### Package Conveyors

"Handling things from where they are to where you want them" very often is work that a conveyor of the flat-top wood-slat apron type can do faster, in a more orderly way, and at less expense. Link-Belt Apron Conveyors are handling mail sacks, castings, machinery parts, crated stoves, barrels, boxes, baskets, etc.



### Rigid-Tray Elevator

The Rigid-Tray Elevator, consisting of metal carrying arms rigidly secured to two slow-moving elevating chains at suitable intervals, is one of the simplest and least expensive media of elevating barrels, kegs, boxes, etc., from one floor to another. Automatic pick-up is effected with the aid of stationary skids at the loading floor.



### Suspended-Tray Elevator

Elevating or lowering, the Double-Strand Centrally-and-Pivotally-Suspended Tray Elevator is ideal for handling barrels, boxes, rolls and bales between any two of a number of floors. The fingers of the carrying trays pass between the fingers of the loading and unloading skids, thus effecting automatic pick-up and discharge. Any of the skids may be hinged and thrown out of position.







### Assembly Conveyors

Many a workman would have to get along without a car if the automotive industry dispensed with Assembly Conveyors and its other highly mechanized cost-reducing, production-expediting methods of manufacture. Assembly Conveyors are also employed in the manufacture of such commodities as stoves, batteries, etc. They take various forms, being designed in each instance to suit the individual need.



### Ruf-Nek Oil Pump Unit

It is customary to use a lift pump to bring oil to the surface of a well, when the gas pressures are inadequate to raise it. Here the Link-Belt Ruf-Nek Pumping Unit, illustrated, finds frequent application. Its counterweights are quickly adjusted to balance the pumping load accurately for any and all conditions.



### Locomotive Crane

Track-type Locomotive Cranes have been a Link-Belt product for 30 years, and are now made for either gasoline, Diesel, electric or steam operation. They can be operated with hook block, grab bucket, wood grapple, chain slings, lifting magnet, pile driver, or railroad ditching attachment. Cranes of 110-ft. radius, with 5 cu. yd. bucket, have been furnished.



### Crawler Shovel

For general excavating, digging from bank, and handling large, unyielding material that must literally be torn loose, the Link-Belt Crawler Shovel is the machine to use. Its ability to dig several feet below grade also makes this shovel the most practicable machine for many grading and stripping jobs. The capacities range from  $\frac{3}{4}$  to  $2\frac{1}{2}$  cu. yds.

### Crawler Dragline

The Crawler Dragline is ideally suited for drainage work, wide trenches, deep cutting, clean-out work, excavating under water, removing overburden, and where it is necessary or desirable to work from above the material. On Mississippi levee work, Link-Belt 3 cu. yd. K-55 Draglines have dug earth from borrow pit and loaded 261—12-yd. cars in 10 hours.



### Trench Hoe

For trench work up to 8 ft. wide at bottom, and depths up to about 20 ft., in soil of such nature as will stand up and not cave in with the sides of trench nearly vertical, the Link-Belt Trench Hoe will give the best results. Besides excavating and back-filling trenches, Link-Belt Trench Hoes will also lay pipe.



### Crawler Crane

The grab-bucket-equipped Crawler Crane is suited for unloading bulk materials from cars to stock pile, trucks, or overhead bins; re-loading from pile; back-filling; excavating in light and medium soil, or sand and gravel from natural deposits; clean-out work in pits and reservoirs; dredging; etc. For handling machinery, packages, etc., a hook block is used.



### Skimmer

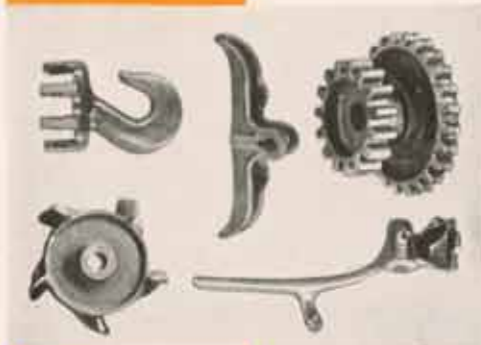
Here shown is a Link-Belt Crawler Crane equipped with Skimmer Scoop, excavating to a depth of about eight inches of lime rock. Link-Belt Crawlers are many machines in one—shovel, trench hoe, dragline, crane, skimmer scoop, etc., all without changing the body of the machine. This ease of convertability is a very valuable feature.





### Jak-Tung Truck

Truck, storage unit and trailer is the Jak-Tung Truck, which handles loose, bulk, package or heavy material up to 6,000 lbs., and is furnished with platform or various styles of bodies. The tongue is removable and raises the truck's front leg off floor when it is hooked in, transferring the forward weight to the jack-tongue wheel.



### Promal

PROMAL is a super-service metal which has outstanding qualities of strength and resistance to wear, surpassing those of malleable iron. Developed by Link-Belt several years ago, Promal is now used not only in the production of Link-Belt cast chains, but also for electrical hardware castings, and parts of lawn mowers, excavators, engines, hair clippers, etc.



### Castings

Malleable Iron, PROMAL, Gray Iron, Semi-Steel and Steel Castings can be furnished. Link-Belt maintains malleable foundries at its Ewart Works, Indianapolis; Promalizing furnaces at Indianapolis and Toronto; Iron Foundries in Philadelphia, Chicago, and Elmira, Ont.; and Steel Foundries in Chicago and Philadelphia. The Philadelphia subsidiary, Dodge Steel Company, produces electric steel castings.



### Screw Machine Work

Screw Machine Work and Special Gears constitute specialties of the company's Dodge Works in Indianapolis, where Link-Belt Silent Chain has been produced for many years. The Dodge Works is well equipped, with its battery of modern screw machines, punch and drill presses, milling machine grinders, etc., to do special work in quantity; also including case-hardening or heat-treating.

### Sewage Treatment Equipment

Link-Belt Sewage Treatment Equipment includes: Mechanically Cleaned Bar Screens; Mechanical Grit Chambers; Mieder Collectors for Primary Tanks; Mechanical Aerators; Elevated Diffusers for Aeration Tanks; Elevated Diffusers for Mixing Tanks; Fine Screens; Sludge Collectors for Final Tanks; Rotary and Reciprocating Distributors for Sewage; Sludge Bed Cleaners; Portable Belts for Sludge Handling; etc.



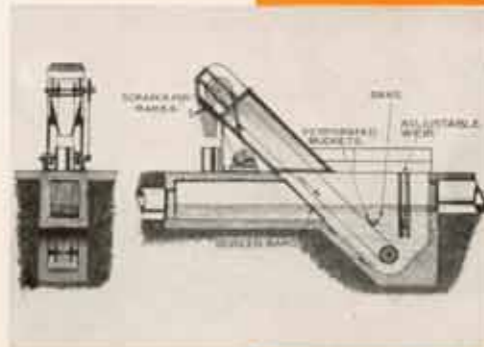
### Mechanical Bar Screens

Link-Belt Straightline Mechanically Cleaned Bar Screens have spaced parallel bars on which the larger floating solids in incoming sewage collect, and a mechanically operated rake for continuous removal of the accumulating solids, thus assuring an even flow of sewage through the channel. The machine may be set vertically or inclined, and used in small or large plants.



### Screen and Grit Collector

The Combined Type "C" Straightline Screen and Grit Collector is especially designed for economical use at small or medium size plants. Its main elements are a hopper; a bar screen; and a bucket elevator for removing grit from hopper, the buckets being perforated for drainage. On return run, rake teeth on buckets clean the screen. An adjustable weir regulates currents through hopper.



### Grit Collector and Washer

The Link-Belt Straightline Grit Collector and Washer was developed to collect the settled grit, and to wash it free from putrescible organic matter. This unit consists of a settling tank provided with a scraper-type collector; and an inclined washing and dewatering screw to which the collector conveys and discharges the grit at bottom of tank.





### Mieder Sludge Collector

The Mieder Collector, for primary settling tanks, consists of a traveling bridge with a deep hinged scraper for moving sludge along bottom of tank, toward influent end. On returning, the scraper is raised to skim oil and grease from the surface of liquor. The machine is semi-automatic in operation, and may be transferred from tank to tank.



### Mechanical Aerator

Each blade of the revolving paddle wheel of the Link-Belt Straightline Aerator, lifts a small sheet of water into the air, and produces surface waves, causing circulation of the mixed liquor throughout the tank. Operated at a speed suiting the characteristics of the sewage, this simple machine aerates every portion of the tank effectively.



### Elevated Diffusers

Link-Belt Elevated Diffusers, located about four feet below surface of sewage, require less air pressure and reduce the power consumption materially, compared with diffuser plates used in the bottom of tank. Aerator-Mixing Tanks for Water Treatment also have given excellent results. Aeration removes  $CO_2$ , while the thorough mixing action effects a substantial saving in chemicals.



### Fine Screens

For the fine-screening and clarification of municipal and industrial sewage, the Tark Sewage Screen, with its slowly-revolving drum and effective brushing mechanism, has no equal in efficiency in removing suspended solids, and in economy of first cost, operation or upkeep. Effective clarification is assured through the use of very fine apertures, and the elimination of clogging.

EFFICIENT MATERIALS HANDLING **Link-Belt** FOUNDED 1871 POSITIVE POWER TRANSMISSION

### Final Settling Tanks

The Link-Belt Straightline Collector, with its slow-moving scrapers, assures efficient, continuous removal of sludge from final settling tanks of rectangular form. The Link-Belt Sludge Collector for radial flow tanks, is pivoted at center of tank, and is traversed radially while the flights move the sludge to a central discharge point.



### Cement Plants

The cement industry has long recognized the value of labor-aiding mechanical handling equipment as a means toward assuring continuity of operation; rapid handling of materials; and lower production costs. Link-Belt conveyors; portable loaders; crawler and locomotive cranes; car spotters; bin gates; chain drives; power transmission parts; coal and ashes handling equipment, crushers, etc., are used.



### Clay Working

Crawler shovels; portable loaders; bucket elevators; vibrating screens; belt conveyors; pan conveyors; silent and roller chain drives; speed reducers; variable speed transmission; gears, bearings, chains, pulleys, clutches, etc., are among the many products Link-Belt supplies to the clay working industry. The Link-Belt vibrating screen is unexcelled for the difficult job of screening clay efficiently.



### Coal Mining

Whether the coal operator is looking for a complete tippie, a wet or dry cleaning plant, or some accessory to modernize existing equipment, Link-Belt engineers stand ready to assist him in arriving at the lowest-cost-way of accomplishing the desired results. And the company's replacement and repair parts service is backed by large stocks and long experience.



EFFICIENT MATERIALS HANDLING **Link-Belt** FOUNDED 1871 POSITIVE POWER TRANSMISSION



### Foundries

Link-Belt foundry engineers have accurate knowledge of mold, sand and castings handling, based on years of experience in applying mechanical handling and sand conditioning equipment to a variety of foundries. They will be glad to assist in placing your foundry on a better paying basis. Practical mechanization can cut costs. Let Link-Belt help you.



### Glass Works

Power shovels for unloading box cars; stationary and traveling elevators to storage bins; crushers; batch mixing cars;lehr conveyors; conveyors for batch, molten glass, cullet, finished ware, coal, ashes; screens; portable loaders; power transmission equipment; crawler and locomotive cranes—are among the cost-reducing, production-expediting machinery Link-Belt has furnished the modern glass factory.



### Grain Elevators

Grain Elevators use Link-Belt power shovels or the Link-Belt Grain Car Unloader for unloading box cars; car pullers; screw conveyors; anti-friction belt conveyor idlers and machinery; bucket elevators; silent and roller chain drives; herringbone and worm gear speed reducers; distributing and loading spouts; etc. Both terminal and country elevators have profited thereby.



### Gas Plants

Link-Belt belt conveyors; pivoted bucket carriers; drag chain conveyors; rotary disc grizzlies; vibrating screens; portable loaders; crawler and locomotive cranes, and skip hoists are among the equipment used by gas plants. The belt conveyor is an ideal coke conveying unit. At the water-gas plant, the skip hoist is popular for unloading coke to storage bin.

EFFICIENT MATERIALS HANDLING **LINK-BELT** FOUNDED 1879 POSITIVE POWER TRANSMISSION

### Oil Well Drilling

Notable among the Link-Belt equipment this industry employs, are rotary sprocket chains; silent chain drives; speed reducers; the Ruf-Nek pumping unit; finished-steel roller chain drives; oil well countershafts; and vibrating screens for salvaging rotary mud. Many oil field parts are now made of Link-Belt PROMAL castings.



### Oil Refining

Fuller's earth, used in large quantities in filtering oil, is handled by Link-Belt power shovels; apron feeders; bucket elevators; and belt, flight and screw conveyors. Petroleum coke is frequently handled on portable conveyors, Link-Belt barrel conveyors, driving machinery, etc., also are used by the industry. Book 1217 covers Fuller's Earth Conveyors.



### Cotton Oil Mills

Screw conveyor, the vertical screw lift, anti-friction belt conveyors, bucket elevators and drag elevators are used extensively in the cottonseed crushing industry. Cars are placed with the Link-Belt car spotter. Seed is unloaded with power shovels. Caldwell boll reels remove the boll and sand. Many chain drives and speed reducers are used.



### Stone and Lime

Link-Belt pioneered in the application of elevating and conveying machinery to the handling of stone and lime. Among the Link-Belt equipment used are crawler shovels and cranes; portable loaders; skip hoists; bucket elevators; belt, apron and screw conveyors; disc grizzly, vibrating and cylindrical screens; chain drives; speed reducers; car spotters, etc.



EFFICIENT MATERIALS HANDLING **LINK-BELT** FOUNDED 1879 POSITIVE POWER TRANSMISSION



### Power Plants

If you are building for the future, use Link-Belt coal and ashes handling and condenser water screening equipment, as you will find it to be the most economical "in the long run". Many of our power plant installations of 20 and 25 years ago are still operating economically. We equip both large and small plants.



### Sand and Gravel

Sand and gravel pits and preparation plants offer abundant opportunity for the economical application of Link-Belt excavating, handling, washing, sizing and loading equipment. Each installation should be studied as an individual problem, and a type of conveyor or handling equipment chosen to meet the requirements at that particular location.



### Central Concrete Mixing Plants

Ready mixed concrete and dry batching plants use Link-Belt handling equipment for the low-cost production of high grade concrete. Bucket elevators, conveyors, unloading shovels, feeders, etc.—Link-Belt service includes everything for handling materials from cars or trucks to the batching; plus valuable experience in selecting the right equipment for the installation.



### Saw Mills

Saw mills are extensive users of mechanical conveyors as part of a carefully planned system of handling. Chain conveyors are especially popular. There are conveyors for the logs; lumber transfer and sorting table conveyors; and conveyors for sawdust and refuse wood. Link-Belt builds conveyors and driving machinery for every class of sawmill service.

### Paper Mills

Pulpwood conveyors and stackers; conveyors for chemicals, chips and refuse; power plant coal and ashes handling machinery; traveling water-intake screens; portable loaders; car spotters—all these are commonly used in pulp and paper mills. Link-Belt silent and roller chain drives, and speed reducers, are extensively employed for the efficient transmission of power.



### Railroads

Railroads use Link-Belt bucket conveyors and skip hoists at locomotive coaling stations; car spotters for "spotting" cars over track hopper; power plant equipment; unloading towers; car dumpers and conveyors at marine loading piers; grain car unloaders; ditching shovels; crawler and locomotive cranes; portable loaders; driving machinery, etc. The Link-Belt line is complete.



### Road and Levee Building

Building roads through the nation's scenic spots, with the help of Link-Belt crawler shovels, is constantly making vacationing by motor more and more enjoyable. And in constructing levees along the Mississippi, many Link-Belt crawler draglines and movable belt conveyors have been used. A levee building conveyor is shown in action.



### Municipalities

Municipalities use Link-Belt sewage and water treatment equipment; garbage conveyors; power plant coal and ashes handling machinery; portable loaders; crawler and locomotive cranes; power transmission machinery, etc. The water for the Buckingham Fountain, in Chicago, passes through a Link-Belt traveling, "Clean Water" Intake Screen, which automatically disposes of the refuse.





### Sugar Factories

From the unloading of the sugar beets—to the white sugar for your coffee. From the handling of sugar cane to the delivery of raw sugar to railroad car or ship—and again in the refinery. Link-Belt mechanical handling and power transmission machinery is used at every step of sugar manufacture.

### Canning

The operation of canning plants is confined to seasons of limited duration, and the work must proceed efficiently, without interruption. Cannerymen of corn, peas, tomatoes, fish, etc., all know the dependability of Link-Belt conveyors, conveyor chains, and transmission machinery. Efficient handling makes the canner's limited season more highly productive of both output and profits.



### Dairy and Bottling Plants

Link-Belt has had a long experience in the art of conveying bottles, and in adapting Link-Belt chains to bottling, labeling, capping, pasteurizing, bottle washing, and similar machines. Conveyors also handle cases, milk cans, power plant coal and ashes, and whatever else there is to be handled continuously and in bulk in these plants.



### Metal Mining

In the crushing, screening and preparation of iron, copper, nickel, gold and other ores, considerable heavy-duty apron feeder and belt conveyor equipment is employed. Carloads upon carloads of Link-Belt driving machinery and anti-friction belt conveyor idlers have been furnished to the gold mines in the "north country" of the Province of Ontario.



### Automotive Industry

Slow-moving, pace-setting, mechanical conveyors are the very back bone of the automobile production plant—the means for the orderly assembly and production of automobiles en masse. Link-Belt chains, chain conveyors, apron conveyors, and overhead trolley-type conveyors, are used in practically every process of automobile manufacture and assembly.



### Steel Mills

Bucket elevators, skip hoists, apron conveyors and belt conveyors are used in handling coal, coke, ore, stone and ashes at the steel mill. Traveling water intake screens automatically clean the intake water. Link-Belt conveyor and drive chains are especially popular on draw bench, roll conveyor, cooling rack, and normalizing furnace work.



### Meat Packers

The meat packing industry is numbered among the most extensive users of Link-Belt conveying and power transmitting equipment. This includes cutting conveyors, conveyors for carcasses, meats, sausage, cans, coal, ashes, etc. Link-Belt power-operated meat slicers are used by the foremost packers, for the rapid, economical slicing of bacon, beef and fresh cuts.



### All Industries

Machine tool builders, printing establishments, salt manufacturers, fruit packers, radio manufacturers, chemical producers, oyster packers, breweries, flour and feed mills, poultry producers, building supply yards, amusement parks—all are users of Link-Belt conveying and power transmitting machinery. Its use extends throughout the industries of the world; and Link-Belt's long experience in applying this equipment is ever at your disposal.





### Ewart Detachable Link-Belt

is the standard for the transmission of power where the strains are not too great, and the speeds not too high; also for conveyors and elevators of moderate capacities and lengths.



### Steel Link-Belt

is of detachable type, following general working dimensions of Ewart Link-Belt of corresponding numbers, but will not intercouple with it. Formed from strip steel and heat treated, it has great relative strength and durability.



### "400" Class Pintle Chain

was designed to operate on same sprocket wheels as Ewart Link-Belt, and furnish greater strength; or protect the joint from gritty materials, where the open hook would be objectionable. Furnished either riveted or detachable.



### "H" Class Saw Mill Pintle Chain

is of similar joint construction to "400" Class Chain, but provided with ample wearing shoes for protection against the effects of dragging or sliding in troughs, or on floors and runways, in conveyors and transfers.



### "GL" Class Pintle Chain

similar to "H" Class Pintle, but each end of barrel has a shoulder interlocking with recessed side bar of adjacent link. Furnished with Safe-T-Head Rivet, or with bolted joint.

### "H" Class Refuse Chain

is similar to "H" Class Pintle Chain, but broader, for conveying general mill refuse in quantity, slabs, saw-dust, etc. Front of barrel is shaped to act as pusher.



### "GL" Class Refuse Chain

is similar to "H" Class Refuse Chain, but each end of barrel has a shoulder interlocking with recessed side bar of adjacent link. Furnished with Safe-T-Head Rivets. Used for handling refuse.



### Steel Refuse Chain

An inexpensive chain for handling saw mill refuse, and similar bulky materials. Made in pitches from 6" to 10", and widths from 7" to 19 1/2". Furnished in five different styles, with a liberal assortment of wheel sizes.



### Transfer Chain

Links assembled with Safe-T-Head Rivets; adapted to slide in runways and carry lumber, boxes, bar iron, etc., on top of parallel strands of chain. Made in "Roof Top" construction, or with flat tops, broad or narrow.





### "C" Class "Combination" Chain

A combination of alternate cast block links (Malleable Iron, PROMAL, or Cast Steel), and outside bar steel side bars, connected by steel pins or rivets.



### "700" Class Chain

is similar to "400" Class Pintle Chain, but of heavier design and longer pitch. Assembled with Safe-T-Head Pins. A strong serviceable chain for heavy elevator, conveyor and power transmission work.



### "800" Class Ley Bushed Chain

Has renewable hardened steel bushings which are exposed to the wheel, to resist wear between chain and wheel, besides resisting wear between links and pins.



### "900" Class Chain

similar to "400" and "700" Class, but provided with renewable case-hardened steel pins and bushings. Used principally for heavy power transmissions.



### "1100" Class Roller Chain

Side bars cast with projections at one end which telescope, forming rigid barrel over which roller turns freely. A substantial and durable roller chain.

### "MR" Class Roller Chain

has rollers turning on barrels formed by abutting instead of telescoping end bar projections from side bars. Used for power transmissions, and elevator and conveyor installations.



### "GL" Class Roller Chain

is similar to "MR" Class Roller Chain, but each end of barrel has a shoulder interlocking with recessed side bar of adjacent link. Used for elevating and conveying work.



### Rivetless Chain

A drop forged steel chain (not "SS" Class) which has a wide range of profitable applications for heavy duty conveyor and elevator service.



### Ice Chain

("SS" Class). Low priced, simple and strong chain for elevators and conveyors handling ice, coal, or packing house products, etc.



### "SS" Class Steel Chain

The short pitches for drives; made with offset or straight side bars; with or without bushing or rollers, to meet conditions requiring extra strength, ruggedness and durability.



### "SS" Class Steel Chain

Long pitch chains for engineering work; made with plain carbon steels, or special alloys, special heat treatments, etc., for varied conditions of service.





## Link-Belt Books and Folders

- |  |  |
|--|--|
| 125 Silent Chain Drive Data Book                       | 776 Peeling Table Conveyors                              |
| 725 Silent Chain Drives from Stock                     | Link-Belt Modern Methods for Green Vegetable Packers     |
| 625 Silent Chain Drives for Textile Mills              | 1217 Fuller's Earth Conveyors                            |
| 1145 Automotive Silent Chain Engineering Data          | 640 Plants for Washing Sand and Gravel                   |
| 1177 Silent Chain Drives for Cotton Ginners            |  |
| 1220 Silent Chain Drives for Paper Mills               | 1228A Power Plant Materials Handling Tools               |
| 831 Silent Chain Drives for Grain Elevators            | 666 Power Hoe (Drag Scraper)                             |
| 1003 Silent Chain Drives for Printing Presses          | 946 Skip Hoists  |
| 1093 Silent Chain Drives for Public Buildings          | 1102 Coal Crushers                                       |
| 1260 Midget Silent Chain Drives, $\frac{3}{8}$ " Pitch | 1252 Traveling Water Intake Screens                      |
| 1274 P.I.V. Gear—Variable Speed Transmission           | 1319 Automatic Coal Stoker                               |
| 1215 Herringbone-Gear Speed Reducers                   | 1314 Variable Speed Stoker Drives                        |
| 1219 Herringbone Gears                                 | 994 Retail Coal Pockets                                  |
|  | 555 Handling and Preparing Coal at Mine                  |
| 1457 Silverlink Roller Chain for Driving and Conveying | 1121 Link-Belt Simon-Carves Coal Washeries               |
| 1341 Roller Chain Flexible Coupling                    | 1321 Cleaning the World's Coal                           |
| 1192 Steel Chains for Conveying and Driving            | 1031A Jax Face Conveyor                                  |
| 1050A Promal Chains Last Longer                        | 835 Spring Canyon Coal Tipple                            |
| 765 Chains for Bottlers, Canners, Packers              | 999 Small Coal—A Drug on the Market                      |
| 1166 Roller-Top Sorting Table Chain for Saw Mills      | 1087 Coal That Meets the Test                            |
| 864 Amusement Park Chains                              |  |
| 1355 Sugar Mill Chains                                 | 1248 Portable Belt Conveyor—Channel type                 |
| 1261 Hyper Drop Forged Rotary Chain                    | 1312 Improved "Cub" Portable Conveyor                    |
| 1329A Red-Hed Rotary Chain                             | 1074 Portable Belt Conveyor—Truss type                   |
|  | 1076 Portable Bucket Loaders—C, CA, A, CX, CS            |
|  | 1077 Portable Bagging Loaders and Hoppers                |
| 500 GENERAL CATALOG—1088 pages                         | 1194 Portable Flight Conveyor                            |
| 1359 Link-Belt Historical Leaflet                      | 1081 Bag Pilers, Fertilizer and Portable Box Car Loaders |
| 1933 A Century of Progress Souvenir Book               | 1256 "Grizzly" Crawler Bucket Loader                     |
| 927 Twyncone Clutches                                  | 1307 "Grizzly" Loader with Vibrating Screen              |
| 1235 Anti-Friction Pillow Blocks                       | 129 Jak-Tung Trucks                                      |
| 1267 Sprockets from stock                              |  |
| 1250 PROMAL, the stronger, longer-wearing metal        | 1292 Electric Car Spotter                                |
| 1299 Relative Wear of Metals Due to Abrasion           | 1004 Rotary Railroad Car Dumper                          |
|  | 1094 Grain Car Unloader                                  |
| 1289 Helicoid and Sectional-Flight Screw Conveyor      | 1095 Cranes—Shovels—Draglines                            |
| 1351 Heavy-Duty Apron Feeders                          | 1295 K-48 Crawler Shovel—Crane—Dragline                  |
| 575 Elevators and Conveyors—Packages                   |  |
| 1229 Overhead Trolley Conveyors (Foundries)            | 1362 Vibrating Screens                                   |
| 1615 Belt Conveyor Data Book                           | 1372 Reclaiming Rotary Mud (Vibrating Screen)            |
| 1208 Conveyor Belts, and Training Belts on Conveyors   | 780 Ruf-Nek Oil Well Pumping Unit                        |
|  | 1259 Keeping Pace with the Oil Industry                  |
| 1090 Material Handling in Foundries                    | B 15 Beef Chippers and Bacon Slicers                     |
| 1288 Waste Motion Eliminated in ConveyORIZED Foundry   | 1231 Type "D" Meat Slicers                               |
| 1291 Well Planned Foundries                            | 1232 Type "E" Meat Slicers                               |
| 481 Conveyors for Glass Works                          |  |
| 655 Conveyors for Sugar Factories                      | 642 Sewage Treatment Plant Equipment                     |
| 665 Conveyors for Cannors                              | 1287 Mechanical Bar Screen (Sewage)                      |
|  | 1294 Mechanical Aerator                                  |

### Shouldered Pin Chains

("SS" Class) are well proportioned, accurately made, and have high tensile properties. Used principally on special machinery, and for relatively slow speed transmissions, and operating mechanisms.



### "Leaf" or "Balance" Chains

("SS" Class). These chains are well designed and proportioned for use as balance or counterweight chains, wrench chains, hoisting and mechanical operating chains.



### Block Type and Draw Bench Chains

("SS" Class). Slow speed chains of high tensile strengths, for metal drawing, steel transfer, and car haul service. Usually furnished riveted.



### Link-Belt Silent Chain

The most efficient and durable medium for the transmission of power at high speeds. Used for driving machines in every industry; also in very wide use for front end drives on motor cars.



### "RC" Class Roller Chain

is a high grade Bushed Roller Chain, accurately made of special steels, to close tolerances, and run on cut tooth wheels.



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EFFICIENT MATERIALS HANDLING **LINK-BELT** POSITIVE POWER TRANSMISSION  
FOUNDED 1875



