

THE C. S. CARD IRON WORKS CO.

Established 1892

Designers and Manufacturers of
"Card" Mine Haulage and Handling Machinery
and Equipment

Catalog No. 30

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- Section "A"* - Mine Car Wheels and Trucks.
- Section "B"* - Coal Mine Cars and Parts.
- Section "C"* - Ore and Industrial Cars.
- Section "D"* - Rope Haulage Equipment, Rollers, Sheaves, Etc.
- Section "E"* - Tipple Equipment, Dumps, Cages, Screens, Etc.
- Section "F"* - Track Equipment, Frogs, Switches, Crossings, Etc.

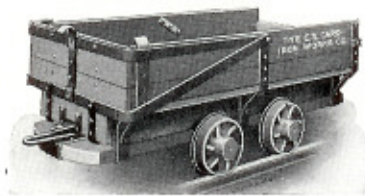
Cable and Radio Address:
"CARDIRON" DENVER

Main Office and Works
2501 WEST SIXTEENTH AVENUE, DENVER, COLORADO

Section "B"

CATALOG No. 30

Coal Mine Cars and Parts



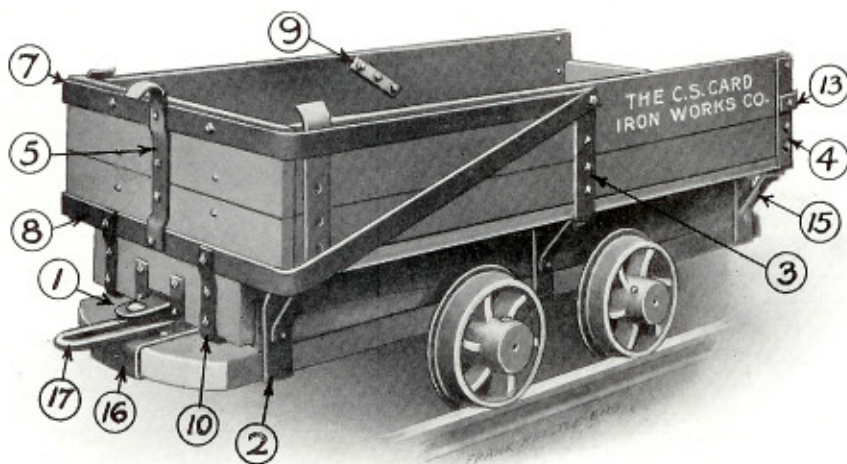
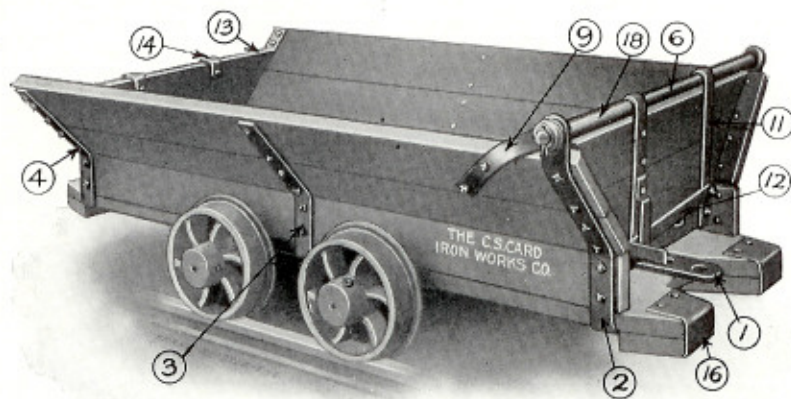
Coal Mine Cars Complete	- -	Pages 32 to 38 incl.
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THE C. S. CARD IRON WORKS CO.

DENVER

COLORADO

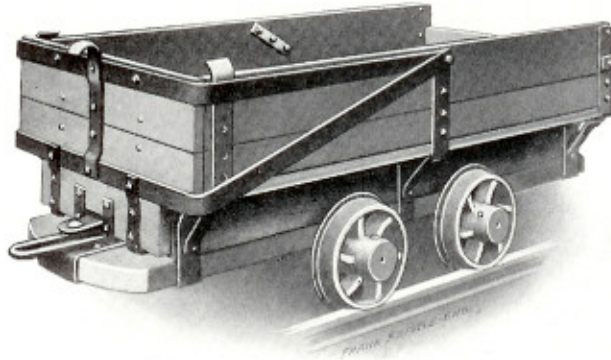
Car Iron Nomenclature



For your convenience in ordering and specifying car irons we have shown here two of the most common types of cars with the car irons indexed and shown below. The names applied to the parts have been used until they have come to be generally accepted by the manufacturers of coal mine cars and the trade.

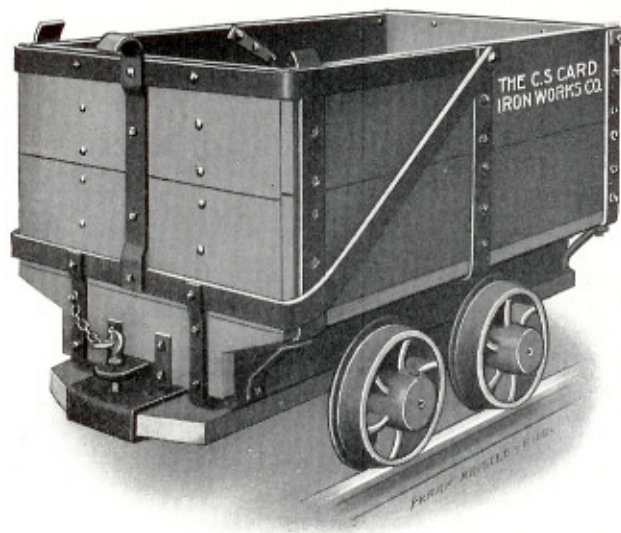
- | | |
|------------------------------|-------------------------------|
| 1—Drawbar | 10—Front Door Irons (Stirrup) |
| 2—Front Binder or Body Band | 11—Front Door Irons (Loop) |
| 3—Center Binder or Body Band | 12—Front Door Latch |
| 4—Rear Binder or Body Band | 13—Rear End Tie Bar |
| 5—Door Hook | 14—Rear End Irons (Uprights) |
| 6—Hinge Bar | 15—Binder Brace |
| 7—Upper Hinge Bar | 16—Bumper |
| 8—Lower Hinge Bar | 17—Hitching |
| 9—Hinge Bar Brace | 18—Pipe Spacer |

Car No. 344



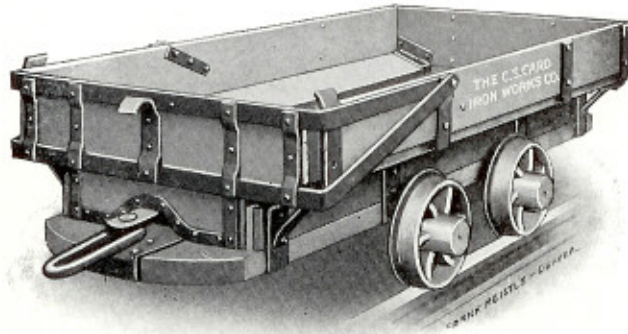
We call your attention to the simplicity of construction and substantial design of Car No. 344. It is well ironed and braced and is of the popular center bumper type with drop door. It can be used in either slope or shaft mines with plain or automatic cages. It is a very popular type with many operators.

Car No. 345



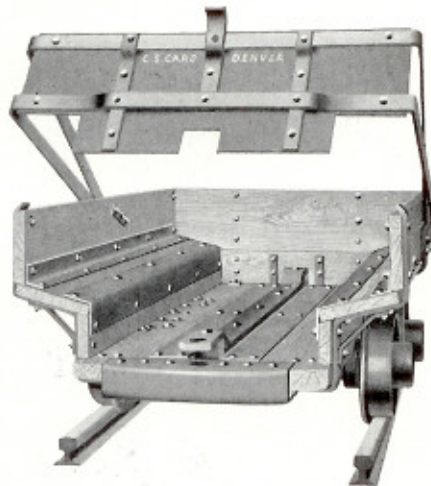
Car No. 345 is of the same general design as Car 344. It is shorter, and higher above the rail, being built this way to get as great a capacity as possible when used with automatic cages in a shaft mine.

Car No. 363



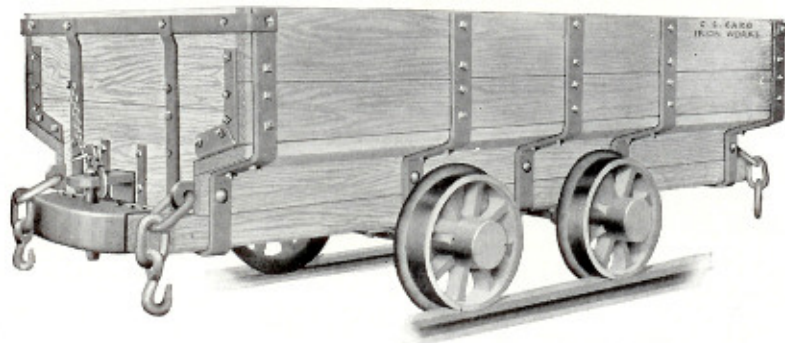
Car No. 363 is a large capacity, heavy pattern, low vein car of the center bumper, drop door type. The door is made of $\frac{1}{4}$ " plate heavily reinforced. Note the four binders. The car is simple in design and of rigid construction.

Car No. 1058



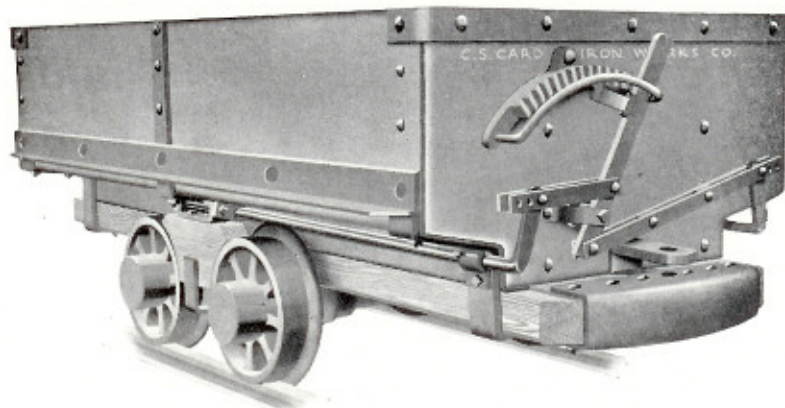
A popular type of an oak body, steel drop door car in which the cracks in the bottom and sides have been covered with steel strips to prevent fine coal sifting through to the haulage road. The strips also stiffen the body. This strip construction is also popular on the bottoms of composite oak bottom and steel side cars.

Car No. 1150



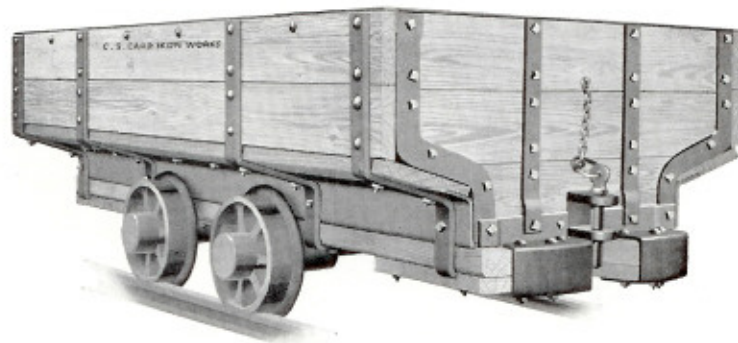
A substantially constructed, five binder, oak body, rotary dump car of large capacity. Note the safety chains, as the car is used on a heavy slope. The heavy center bumper covers practically the entire end.

Car No. 1128



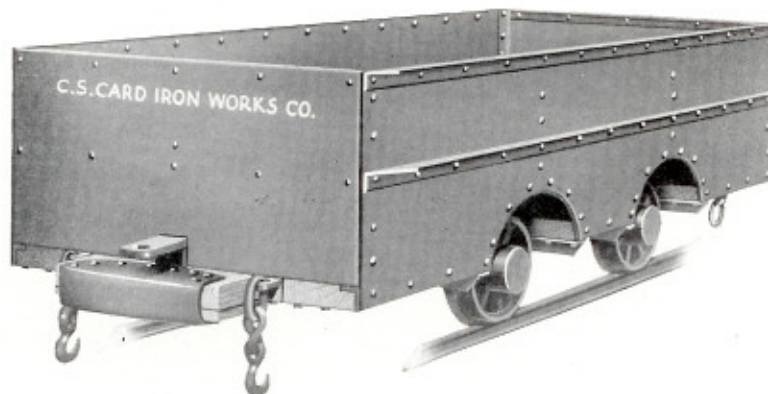
A composite, oak bottom, steel side car with brake, for use with rotary dump. The side angles stiffen the car and hold the car while dumping. Note the design of the brake which is very satisfactory.

Car No. 1256



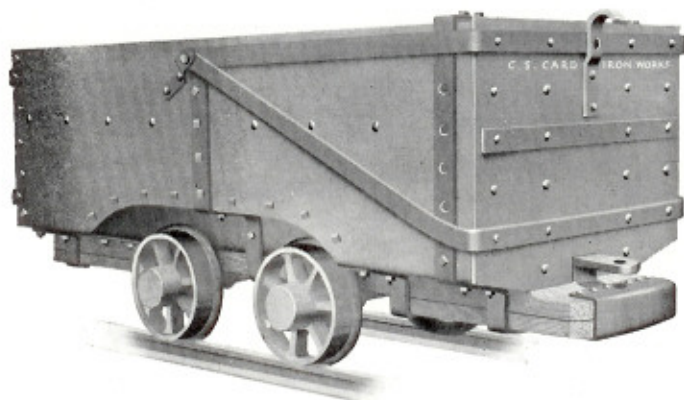
An oak body rotary dump car with double bumpers. Note the heavy formed plate which takes the place of the lower side board. This construction materially strengthens the car bottom and sides and is used frequently.

Car No. 1471



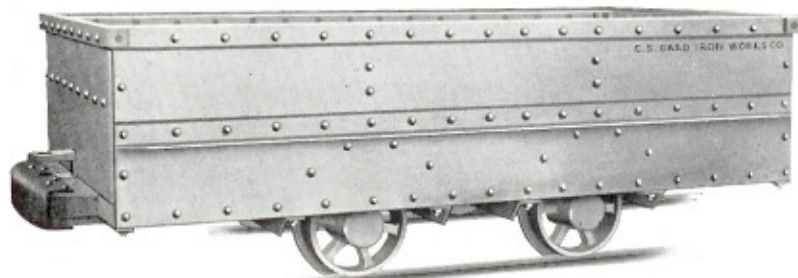
One of the newer designs of rotary dump cars with oak bottom and steel sides and ends, especially designed for mechanical loading. An exceptionally strong car that has been tested and proven satisfactory. By hooding the wheels, large capacity and low center of gravity are obtained.

Car No. 1481



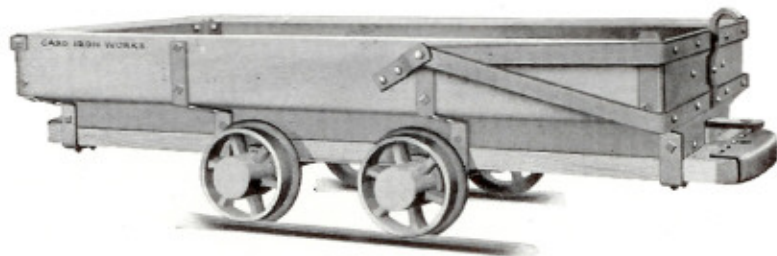
A large capacity composite car with drop door and hooded wheels, designed for mechanical loading. It has proven very satisfactory. Can be equipped with band brakes. The front binder is connected across the top by an angle, stiffening the door end.

Car No. 1556



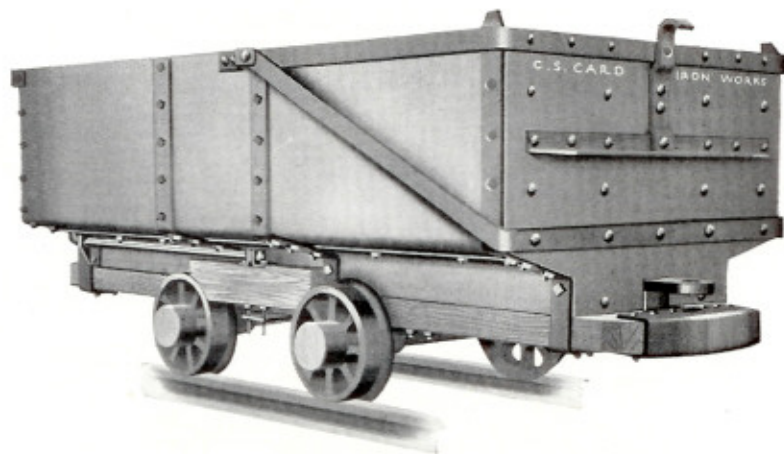
A rotary dump car with oak bottom and steel sides and of substantial and economical design. Can be used in low vein work and a good capacity obtained. Ample clearance is maintained for passing over track rope rollers.

Car No. 1558



A composite, oak bottom, steel side car with drop door for low vein work. The development of the familiar oak body car, substituting steel plate sides to obtain greater capacity and strength. The tops of the side plates are stiffened by flanging.

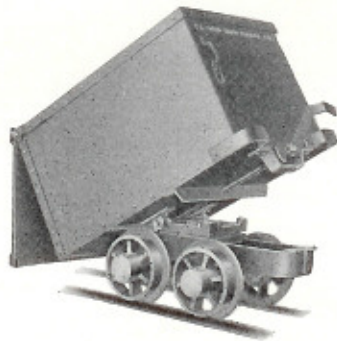
Car No. 1591



A composite car with brake, used for mechanical loading. A heavy "Z" bar runs the length of the car at the bottom sides, reinforcing both the bottom and the sides against sagging. Note the reinforcing angle on the door, used because the cars come up a steep slope with the load against the door.

Section "C"
CATALOG No. 30

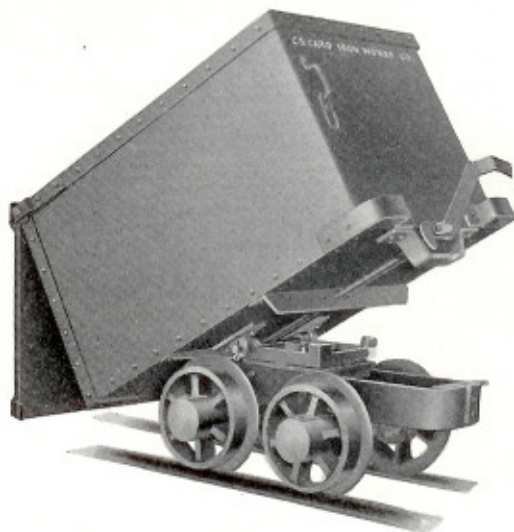
Industrial and Ore Cars



Car Specifications - - - - -	Page 46 and 50
Standard Type "Z" Ore Cars - - - - -	" 47 and 48
Standard Type "S" Ore Cars - - - - -	" 49
Scoop Cars - - - - -	" 51
Type "T" Ore Cars - - - - -	" 51
Rocker Dump Cars - - - - -	" 52 and 53
One-Way Side Dump Cars - - - - -	" 54 and 55
Gable Bottom Cars - - - - -	" 56
Rotary Dump Cars - - - - -	" 57
Hopper Bottom Cars - - - - -	" 57
Quarry Cars - - - - -	" 58
Boiler Room Wagons - - - - -	" 58
Incline Cars - - - - -	" 59
Flat Top or Platform Cars - - - - -	" 59
Skips - - - - -	" 60

THE C. S. CARD IRON WORKS CO.
DENVER COLORADO

“Card” Standard Ore Cars Type “Z”



This is our standard ore car and will meet practically all ordinary conditions where a car of this style is required.

The body is well braced and riveted, and nicely balanced on the truck frame. Two angles are used to reinforce the bottom. Cars of twenty cubic foot capacity and larger are regularly furnished with one reinforcing strap or band in the center of the body as shown on the bottom view on the next page.

Bumpers, which are used as handles when dumping, are located at the strongest part of the body. The door has a reinforcing strap at the bottom so that it is well protected when cars come together.

The door rod at the rear is forged down and bolted to the handle so the bolt is in shear. A strong construction and one easily and cheaply renewed.

The turntable is cast iron with a grease lubricated machined groove, which takes most of the load off the king pin, in turning, and is dirt proof.

The truck frame is in one piece without riveted corners to work loose or cause trouble. It is held rigid at the top by the turntable and at the bottom by the truck.

Type “Z” cars are regularly equipped with the “CARD” Standard Roller Bearing Truck shown on page 4, section “A”.

When used in heavy trains they can be specially equipped with “CARD” Patented Spring Drawbar Truck shown on page 8, section “A”.

For lighter haulage in trains these cars may be equipped with a solid drawbar with chain and hook, as shown on the following page.

Coupling chains and hooks on the side of the body can be furnished. Where possible, we recommend taking the pull on the truck rather than on the body or frame.

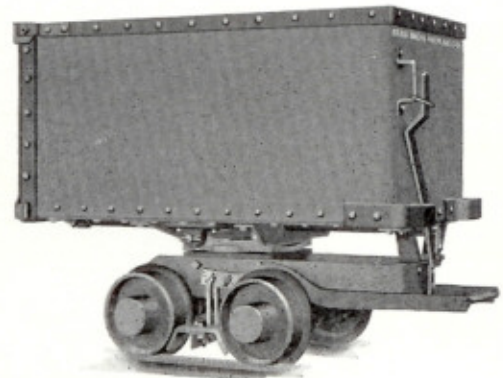
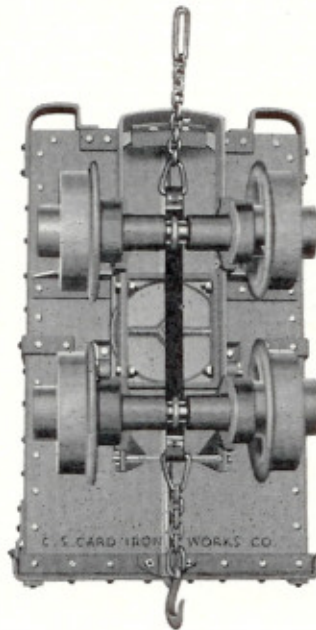
Brakes may be attached to any standard “Z” type car.

Unless otherwise specified 18” gauge cars will be furnished.

Standard specifications and extras for these cars are listed on the following page.

“Card” Standard Ore Cars

Type “Z”



Standard “Z” car with standard plain solid drawbar with chains and hook.
 Price, \$4.00 per car extra.
 Weight, 23 lbs. per car extra.

Standard “Z” car with standard brake.
 Price, \$10.00 per car extra.
 Weight, 55 lbs. per car extra.

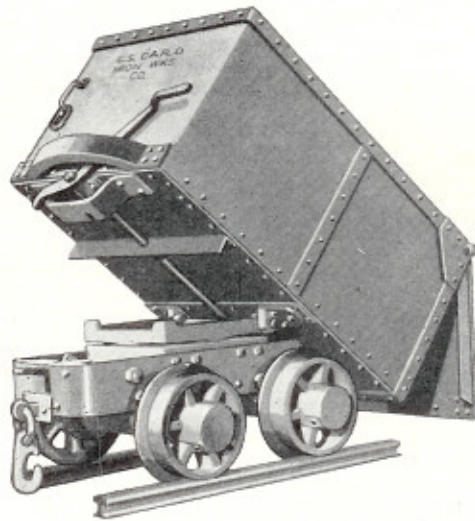
“CARD” STANDARD TYPE “Z” ORE CARS WITHOUT BRAKE OR DRAWBAR Specifications; Prices and Average Weights in Pounds, Each.

	Car No.	Capacity, Cubic Feet	Overall Dimensions			Inside Body Dimensions			Thickness of Steel		Truck			Weights			PRICE
			Length	Width	Height above Rail	Length	Width	Depth	Bottom	Sides and Door	Wheel Diam.	Axle Size	Wheel Base	Body and Frame	Truck	Car Complete	
18" Track Gauge	Z-12	11.7	46½"	27½"	36"	42"	24"	20"	¾"	No. 10	10"	1½"	16"	383	247	630	\$ 73.00
	Z-14	14.0	46½"	27½"	40"	42"	24"	24"	¾"	No. 10	10"	1½"	16"	413	247	660	76.00
	Z-16	15.9	48½"	29½"	40"	44"	26"	24"	¾"	No. 10	10"	1¾"	16"	444	286	730	81.75
	Z-18	18.3	48½"	33½"	40"	44"	30"	24"	¾"	No. 10	10"	1¾"	16"	494	286	780	86.50
	Z-20	20.0	52¾"	34"	42¼"	48"	30"	24"	¼"	No. 10	12"	2"	18"	595	410	1005	99.00
	Z-22	22.5	59"	34¼"	42¼"	54"	30"	24"	¼"	¾"	12"	2"	18"	665	410	1075	105.50
	Z-24	24.4	59"	34¼"	44¼"	54"	30"	26"	¼"	¾"	12"	2¼"	18"	689	461	1150	111.50
	Z-28	28.1	59"	34¼"	48¼"	54"	30"	30"	¼"	¾"	12"	2¼"	18"	739	461	1200	115.25
24" Track Gauge	Z-12	11.7	46½"	33"	36¾"	42"	24"	20"	¾"	No. 10	10"	1½"	16"	417	253	670	\$77.50
	Z-14	14.0	46½"	33"	40¾"	42"	24"	24"	¾"	No. 10	10"	1½"	16"	447	253	700	80.50
	Z-16	15.9	48½"	33½"	40¾"	44"	26"	24"	¾"	No. 10	10"	1¾"	16"	496	294	790	88.25
	Z-18	18.3	48½"	33½"	40¾"	44"	30"	24"	¾"	No. 10	10"	1¾"	16"	546	294	840	93.00
	Z-20	20.0	52¾"	34"	43"	48"	30"	24"	¼"	No. 10	12"	2"	18"	654	421	1075	105.75
	Z-22	22.5	59"	34¼"	43"	54"	30"	24"	¼"	¾"	12"	2"	18"	724	421	1145	112.25
	Z-24	24.4	59"	34¼"	45"	54"	30"	26"	¼"	¾"	12"	2¼"	18"	755	475	1230	119.00
	Z-28	28.1	59"	34¼"	49"	54"	30"	30"	¼"	¾"	12"	2¼"	18"	805	475	1280	122.75

Sizes in Bold Face Type carried in stock for immediate shipment.

"Card" Ore Cars

Type "S"



This car is built especially for motor haulage and is recommended for the most severe service.

The body is well riveted and braced and well balanced on the one-piece formed truck frame, which has no riveted corners to weaken it.

The frame is held solidly in line by the truck and the turntable, which has a grease lubricated machined groove and is dirt-proof. The groove takes part of the load from the king pin when turning the body.

Bumping is taken on rounded steel bumpers, located both front and rear of car.

A combination lever and foot treadle lock allows the car to be swung or rotated without lifting the body.

Type "S" cars are regularly equipped with "CARD" Patented Roller Bearing Spring Drawbar Truck shown on page 8, section "A".

Specifications; Prices and Average Weights in Pounds, Each.

Car No.	Capacity, Cubic Feet	Overall Dimensions			Inside Body Dimensions			Thickness of Steel		Truck			Weights (Lbs.)		
		Length	Width	Height above Rail	Length	Width	Depth	Bottom	Sides and Door	Wheel Diam.	Axle Size	Wheel Base	Body and Frame	Truck	Car Complete
S-20	20.0	57"	34½"	42½"	48"	30"	24"	¼"	No. 10	12"	2"	18"	665	490	1155
S-25	25.3	63"	34½"	45½"	54"	30"	27"	¼"	⅝"	12"	2¼"	20"	845	545	1390
S-28	28.1	63"	34½"	48½"	54"	30"	30"	⅝"	⅝"	12"	2¼"	20"	935	545	1480
S-20	20.0	57"	34½"	43"	48"	30"	24"	¼"	No. 10	12"	2"	18"	725	525	1250
S-25	25.3	63"	34½"	46"	54"	30"	27"	¼"	⅝"	12"	2¼"	20"	915	585	1500
S-28	28.1	63"	34½"	49¼"	54"	30"	30"	⅝"	⅝"	12"	2¼"	20"	1005	585	1590

24" Ga.

24" Ga.

“Card” Scoop Cars

This is the familiar scoop car used by mines, industrial plants and contractors. It can be used to advantage in handling wet materials such as concrete.

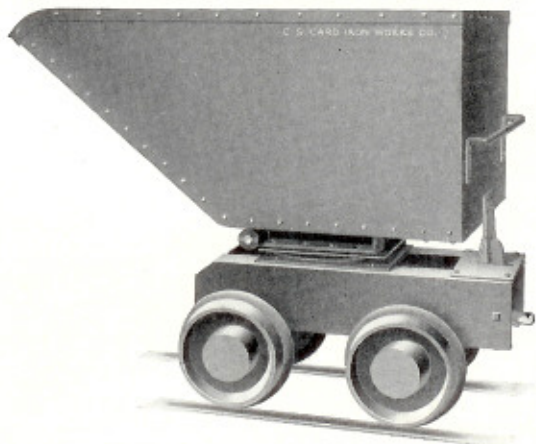
The body is mounted on a turntable, allowing the car to be dumped at the end or either side. It is locked by a treadle catch at the rear end.

The truck frame is steel, securely braced. This design can also be furnished without turntable, to dump forward only.

If the sizes listed do not fill your requirements they can be built special to suit.

Regularly equipped with “CARD” Standard Roller Bearing Truck shown on page 4, Section “A”.

Regularly furnished for 18” gauge, unless otherwise specified.

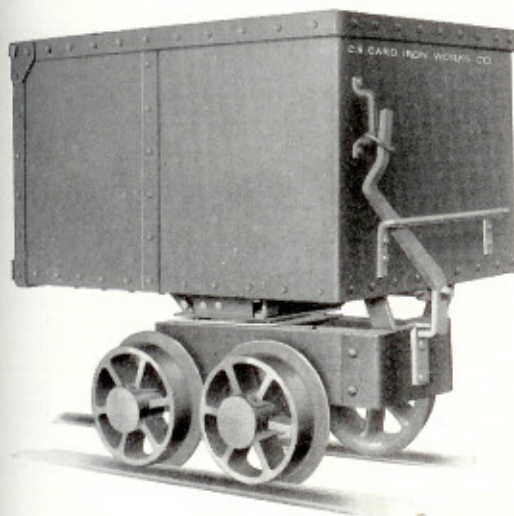


Specifications; Prices and Average Weights in Pounds, Each 18” Track Gauge Car.

Car No.	Capacity, Cubic Feet	Overall Dimensions			Inside Body Dimensions			Thickness of Steel		Truck			PRICE	Weight
		Length	Width	Height above Rail	Length	Width	Depth	Bottom	Sides	Wheel Diam.	Axle Size	Wheel Base		
K-12	12	55"	26½"	38"	48"	24"	21"	¾"	No. 10	10"	1½"	16"	\$67.00	535
K-18	18	60"	32½"	43"	53"	30"	24"	¼"	No. 10	12"	1¾"	16"	\$91.00	830

“Card” Ore Cars

Type “T”



The style shown is familiarly known as the “Leadville Type” and is but one of many special ore cars we have made on special order.

Note the well braced body and steel turntable.

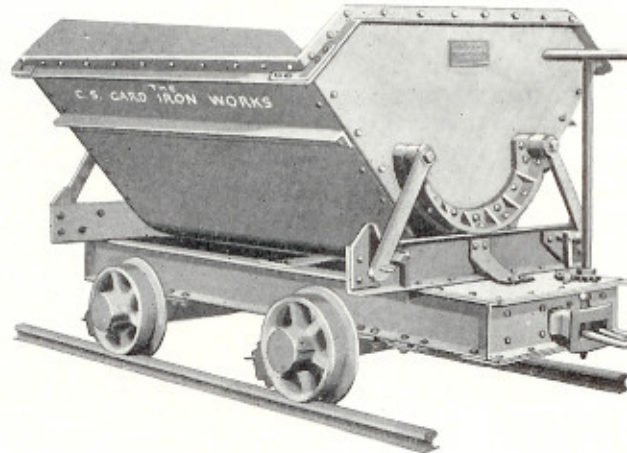
The truck frame is of oak, well ironed and braced. The oak acts as a cushion between the body and load, and the running gear.

Regularly equipped with “CARD” Roller Bearing Truck shown on page 4, Section “A”.

Can be equipped with bumpers, brakes, drawbars, coupling chains and hooks or other features.

Prices and specifications quoted on receipt of your requirements. See pages 46 and 50.

Rocker Dump Cars



This type of car is used to advantage in gravel and clay pits, by contractors for handling dirt and bulky materials, in stone quarries and in mines.

The body, being solid, has no loose parts to get out of repair. It is easy to dump and is self-cleaning. It has automatic body fasteners at all corners for keeping the body in an upright position, and for keeping it rigid and without play on the frame. This feature saves labor and prevents dumping while in transit.

The car is mounted on a reinforced structural steel frame and is equipped with combination cast steel spring bumper and drawbar. Automatic couplers furnished when required, at additional cost.

The cars listed below are regularly equipped with "CARD" Standard Roller Bearing Truck shown on page 4.

We recommend the use of a brake on the car, but it can be furnished without.

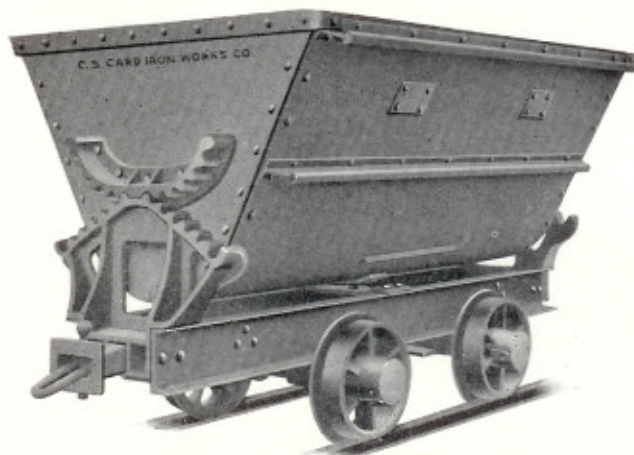
This style of car can be built to any track gauge, and to limiting dimensions in height, width and length, and to meet any requirements.

Standard Specifications for Cars Without Brakes

Capacity Cubic Yards	Overall Dimensions			Thickness of Steel		Truck			Weight (Lbs.), Each
	Length	Width	Weight	Ends	Sides	Gauge	Wheel Diam.	Axle Size	
1	7'-0"	4'-2"	3'-9"	$\frac{3}{8}$ "	$\frac{3}{8}$ "	24"	12"	2"	1525
1½	7'-6"	4'-8"	4'-2"	$\frac{1}{2}$ "	$\frac{5}{8}$ "	30"	14"	2¼"	1900
2	8'-0"	5'-2"	4'-6"	$\frac{1}{4}$ "	$\frac{1}{4}$ "	36"	14"	2½"	2235

Cars with brake increase the over-all length approximately six inches.

Rocker Dump Cars



This is another type of rocker dump car of which we have furnished large numbers to mines. The sturdy construction with few working parts and the simplicity of the design appeals to a large number of operators.

The car dumps and is righted easily. As it dumps to either side, it can be made into trains more readily than a one-way side dump car.

The body is well riveted and braced and is carried on cast steel rockers and rocker pedestals. The rocker pedestals are tightly fitted and well riveted to the structural steel frame. Any thrusts of the body and load are carried against the pedestals close to the frame.

The body is held at the bottom by a spring latch which locks automatically. It is unlocked for dumping by a foot treadle attachment. Two locks operated by one treadle are used on larger cars.

Usually equipped with combination spring bumper and drawhead of cast steel, link and pin type coupling. Can be equipped with automatic couplers, if desired, at slight increase in cost.

Cars are regularly equipped with "CARD" Standard Roller Bearing Truck shown on page 4, Section "A".

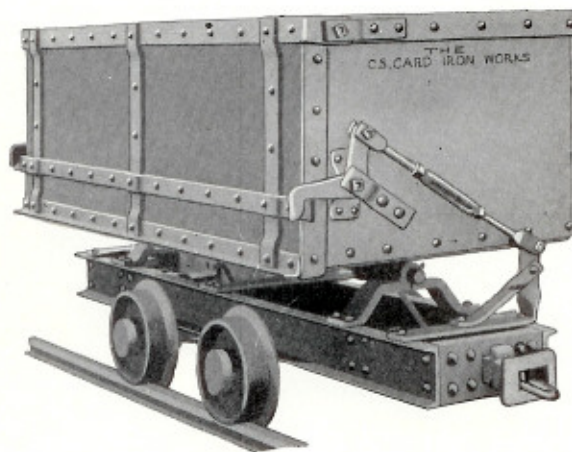
Can be built to meet your requirements if you furnish us the information requested on page 46.

Specifications and Average Weights in Pounds, Each.

Capacity, Cubic Feet	Overall Dimensions			Inside Body Dimensions			Thickness of Steel		Truck			Weight *	
	Length	Width	Height above Rail	Length	Width	Depth	Ends	Sides	Wheel Diam.	Axle Size	Wheel Base		
18" Gauge	18	6'-0 $\frac{1}{2}$ "	34"	42"	4'-0"	32"	27"	$\frac{1}{4}$ "	$\frac{3}{8}$ "	12"	2"	24"	1220
	20	5'-8"	40"	48"	3'-8"	38"	33"	$\frac{1}{4}$ "	$\frac{3}{8}$ "	12"	2"	24"	1250
	27	7'-0"	40"	47"	5'-0"	38"	30"	$\frac{1}{4}$ "	$\frac{3}{8}$ "	14"	2 $\frac{1}{4}$ "	36"	1500
	38	8'-0 $\frac{1}{4}$ "	44 $\frac{1}{4}$ "	51"	6'-0"	39"	33 $\frac{1}{2}$ "	$\frac{1}{4}$ "	$\frac{3}{8}$ "	14"	2 $\frac{1}{2}$ "	36"	1800
	44	9'-0 $\frac{1}{4}$ "	44 $\frac{1}{4}$ "	51"	7'-0"	39"	33 $\frac{1}{2}$ "	$\frac{1}{4}$ "	$\frac{3}{8}$ "	14"	2 $\frac{1}{2}$ "	42"	1950
24" Gauge	24	7'-0 $\frac{1}{4}$ "	39"	42"	5'-0"	37"	26 $\frac{3}{4}$ "	$\frac{1}{4}$ "	$\frac{1}{4}$ "	12"	2 $\frac{1}{4}$ "	30"	1600
	30	7'-0 $\frac{1}{4}$ "	44 $\frac{1}{2}$ "	49"	5'-0"	40"	31 $\frac{1}{2}$ "	$\frac{1}{4}$ "	$\frac{1}{4}$ "	14"	2 $\frac{1}{4}$ "	30"	1850
	36	8'-0 $\frac{1}{4}$ "	44 $\frac{1}{2}$ "	49"	6'-0"	40"	31 $\frac{1}{2}$ "	$\frac{1}{4}$ "	$\frac{1}{4}$ "	14"	2 $\frac{1}{2}$ "	36"	1950
	40	8'-0 $\frac{1}{4}$ "	52"	48 $\frac{3}{4}$ "	6'-0"	48"	31 $\frac{1}{2}$ "	$\frac{1}{4}$ "	$\frac{1}{4}$ "	14"	2 $\frac{1}{2}$ "	36"	2000
	47	9'-0 $\frac{1}{4}$ "	52"	48 $\frac{3}{4}$ "	7'-0"	48"	31 $\frac{1}{2}$ "	$\frac{1}{4}$ "	$\frac{1}{4}$ "	14"	2 $\frac{1}{2}$ "	42"	2150

*Liner Plates can be furnished. Weights listed do not include Liner Plates.

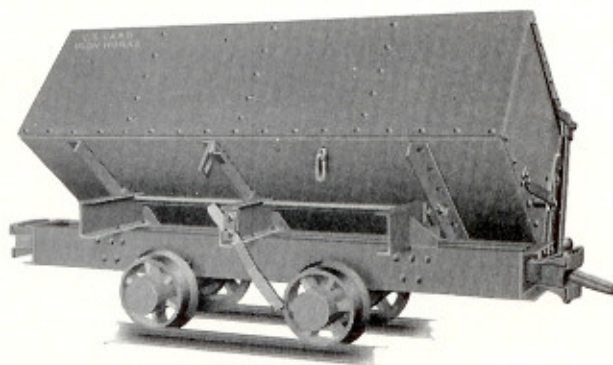
One-Way Side Dump Cars



We have built a number of cars of this type in different sizes and designs. The car illustrated here has an automatic door opening and locking device. The body is mounted on a structural steel frame and is equipped with combination spring bumper and drawhead of cast steel. The body is easily dumped and righted.

Built on special order to any required specifications. If furnished with the data requested on page 46 we can furnish a car which will meet your requirements.

Regularly equipped with "CARD" Standard Roller Bearing Truck shown on page 4, Section "A".



This is another type of one-way dump car we have built. Please note the different construction of the automatic door opening and locking device; also, the different construction used in supporting the body on the frame. The lever shown is used in dumping the body and also as a lock.

Car is equipped with combination spring bumper and drawhead of cast steel.

Built on special order to any required specifications. If furnished with the data requested on page 46 we can furnish a car which will meet your requirements.

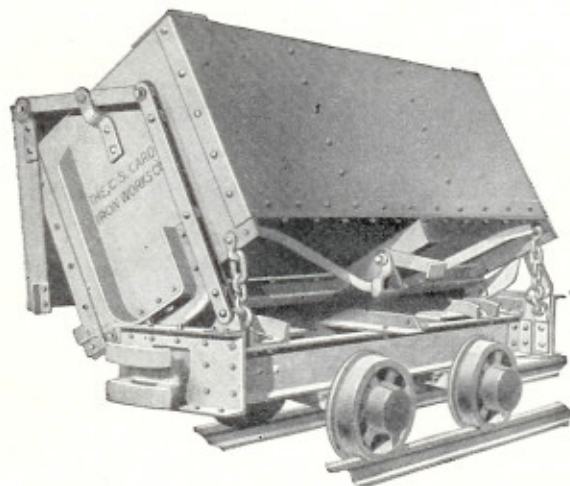
Regularly equipped with "CARD" Standard Roller Bearing Truck shown on page 4, Section "A".

One-Way Rocker Dump Car

This style car was used in driving the pioneer "MOFFAT TUNNEL" in Colorado and with which most tunnel contractors are familiar.

It is built rigidly with the bottom heavily reinforced to withstand machine loading.

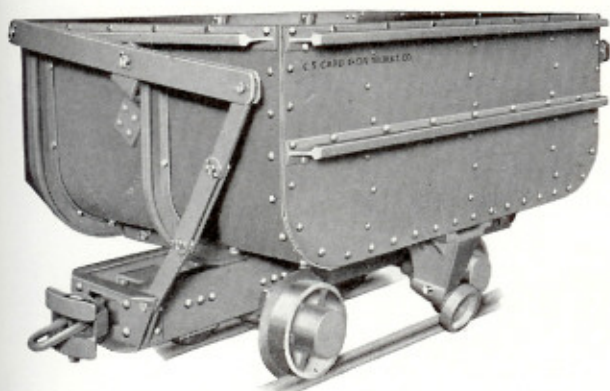
By means of the levers the door is held up and is free to swing, giving better clearance for the passage of the material when the car is dumped. The car and door are automatically locked when returned to upright position. The body is mounted on a structural frame equipped with a combination spring drawbar and bumper of cast steel.



Built on special order to any specifications required. See page 46. Regularly equipped with "CARD" Standard Roller Bearing Truck shown on page 4, Section "A".

One-Way Side Dump Cars

Granby Type



This car is familiarly known to the mining fraternity as the "Granby Type."

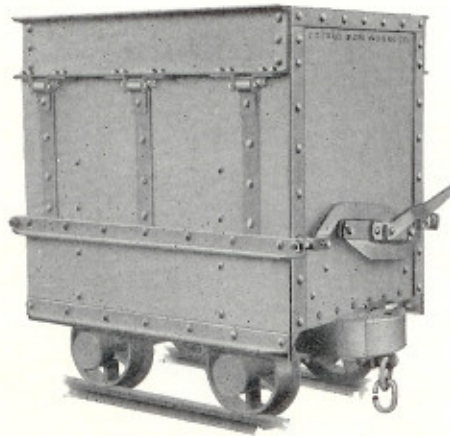
The car body is dumped by a tripping block which operates against the roller on the side of the car.

Both body and door are well braced. When the car is dumped the door is held up by the levers, permitting free passage of material. The weight of the body and load is uniformly distributed on the longitudinal frame members over the truck.

Equipped with spring drawbars and bumpers, with either automatic or link and pin type couplers.

Built with, or without, oak cushioned steel liner plates, and to order. Prices and specifications quoted upon receipt of information requested on page 46.

Gable Bottom Cars



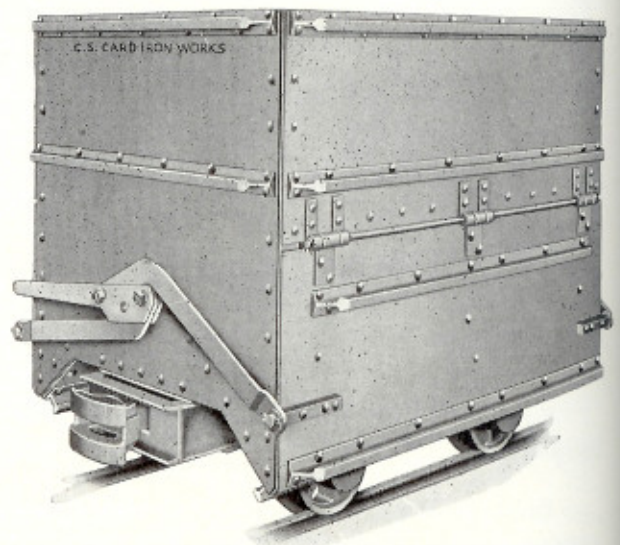
The cuts on this page illustrate but two of the designs of gable bottom cars which we have furnished. The variations are innumerable.

This style of car can be furnished with either automatic or link and pin type couplers, equipped with springs for use in heavy trains. It can be built to any limiting dimensions in height, length or width and for any track gauge.

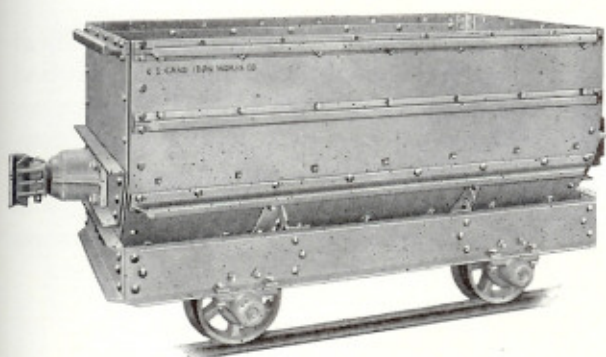
If furnished with the information requested on page 46, we can submit a car which will meet your requirements.

The upper illustration shows a small capacity car built for an Arizona copper company and has solid bumpers and is equipped with "CARD" Patented Roller Bearing Spring Drawbar Truck shown on page 8, Section "A".

The illustration at right shows a car of large capacity which was built for handling ore in quantity, and was equipped with "CARD" Standard Roller Bearing Truck shown on page 4, Section "A".



Rotary Dump Cars



The substantial design of the rotary dump car for severe service is apparent. The simplicity of the body design, without moving parts, cuts repairs to a minimum. The tight body prevents spilling of material along the haulage ways.

Usually equipped with swivel automatic couplers, spring cushioned, and dumped without uncoupling in the train.

The car shown was equipped with oak cushioned steel liner plates. Cars built to meet your requirements upon receipt of the information requested on page 46.

We build rotary dumps of several types. See pages 92 and 93, Section "E".

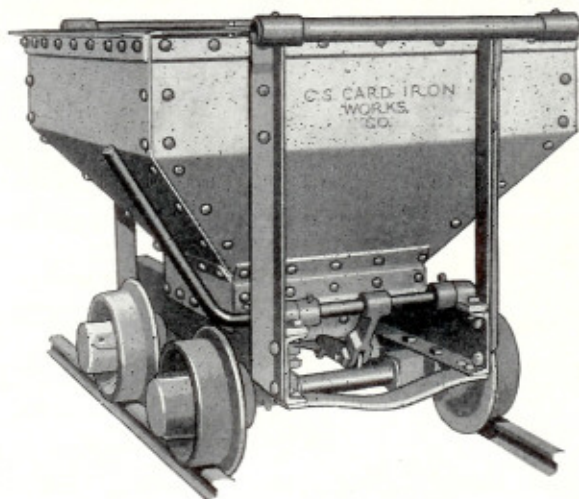
Hopper Bottom Cars

The hopper bottom discharge car shown has a number of uses where dumping over bins and into limited space between rails. A slight change in design will allow material in this car to be discharged to the outside of the rail.

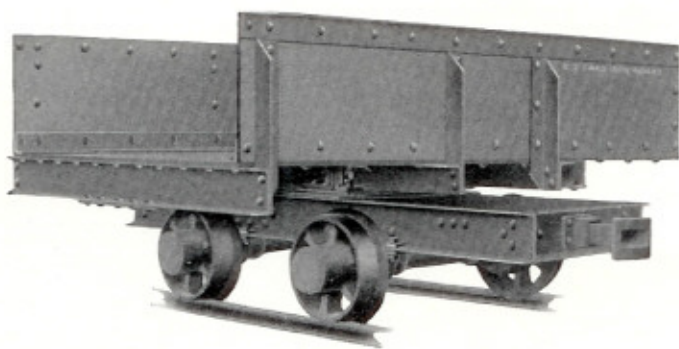
The car shown was equipped with special handles and supports, as it handled a hot material. Bottom is equipped with a slide valve gate.

Cars can be equipped for use in trains, and built to limiting dimensions in length, height and width.

Built on special order to meet your requirements. See page 46.



Quarry Cars



Note the substantial construction of the car shown. It is built to withstand severe quarry service. Although mounted on a turntable with hinge for dumping to the sides, the absence of a door and the low sides permit loading with ease. Equipped with spring drawbars and bumpers for handling in trains.

These cars are built on special order and your requirements can be met if you furnish us the information requested on page 46.

Boiler Room Wagons

Usually used for handling coal to the boilers, but has other uses. With the door dropped, the construction is very clearly shown by the cut.

Regularly equipped with flat tread plain bearing wheels for use without track.

Can be equipped with regular car trucks with flanged wheels, either plain or roller bearing, for use on steel rail tracks.

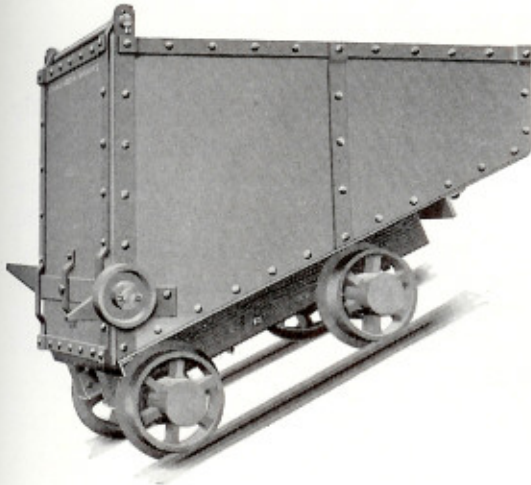
List covers wagons with flat tread plain bearing wheels. Can be equipped with roller bearing wheels. Prices on application.



Specifications; Prices and Average Weights in Pounds, Each.

Capacity, Cubic Feet	Overall Dimensions			Inside Body Dimensions			Thickness of Steel		Truck		Weight	PRICE
	Length	Width	Height above Floor	Length	Width	Depth	Bottom	Sides and Door	Wheel Diam.	Axle Size		
24	4'-8"	39"	40"	4'-0"	36"	24"	$\frac{3}{8}$ "	No. 10	14"	$1\frac{1}{2}$ "	655	\$95.00
30	5'-8"	39"	40"	5'-0"	36"	24"	$\frac{3}{8}$ "	No. 10	14"	$1\frac{1}{2}$ "	715	100.00
36	6'-8"	39"	40"	6'-0"	36"	24"	$\frac{3}{8}$ "	No. 10	14"	$1\frac{1}{2}$ "	775	105.00

Incline Cars



A popular car for handling materials on inclines, usually surface inclines. Note that the door on the car shown is automatically opened by the roller and lever at the dump point.

These cars are built on special order and we can meet your requirements if furnished the information requested on page 46. Also advise the incline on which the car will operate.

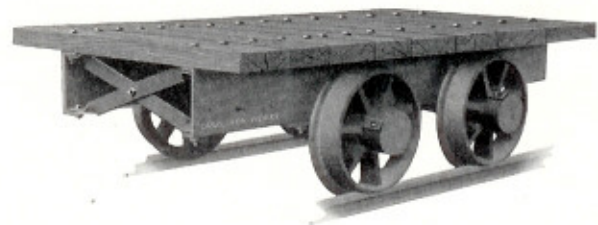
Flat Top or Platform Cars

The uses to which a car of this style can be put are unlimited.

We have built them in many sizes and if you cannot use the cars as listed below advise us your requirements.

They are furnished regularly with an oak top, mounted on structural steel frame, but can be built with steel top if conditions demand. Can also be furnished with cast steel spring drawbars and bumpers for use in trains, if desired.

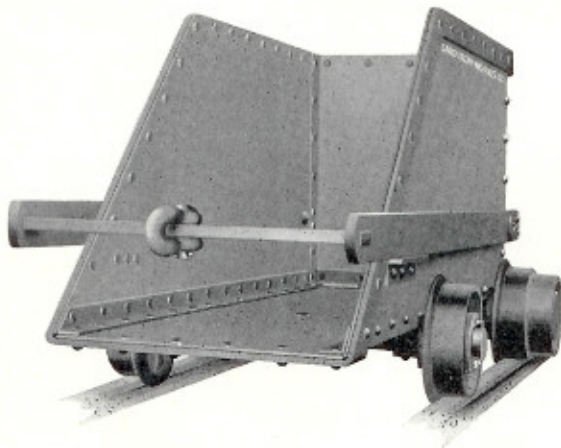
Regularly equipped with "CARD" Standard Roller Bearing Truck shown on page 4, Section "A".



Specifications; Prices and Average Weights in Pounds, Each.

Track Gauge	Platform		Light Duty Car 1½" Oak Top				Heavy Duty Car 3" Oak Top			
	Width	Length	Wheel Diam.	Axle Diam.	PRICE	Weight	Wheel Diam.	Axle Diam.	PRICE	Weight
18"	2'-8"	5'-0"	12"	1¾"	\$56.00	567	14"	2¼"	\$66.00	830
24"	3'-0"	5'-0"	12"	1¾"	57.00	594	14"	2¼"	67.00	875
30"	3'-6"	6'-0"	12"	1¾"	59.00	677	14"	2¼"	69.00	1008
36"	4'-0"	6'-0"	12"	1¾"	60.00	713	14"	2¼"	70.00	1073

Skips



The cut illustrates a style No. 2 skip without an upper side or top.

We build skips to meet your requirements. Please furnish capacity desired, weight per cubic foot of material to be handled, track gauge, incline on which skips operate, and any limiting dimensions.

You will note the difference between styles No. 1 and No. 2 is in the mounting of axles and wheels. Where it is possible to use it, we recommend the style No. 2 skip. The construction is more substantial. Style No. 1 permits a greater capacity in a given space.

Style No. 3 is for use in vertical shafts and shaft dimensions are required (see page 91, section "E"), in addition to capacity and weight per cubic foot of material to be handled.

When required, skips will be furnished with valve or door for handling water.

