



SECTION NUMBER ONE

Crossing Signal Poles
Warning Signs
Vibrating Bells
High Voltage Adapters

Etc.

THERAILROAD SUPPLY CO.
GENERAL OFFICESANDWORKS
CHICAGO

SIGNAL DEPARTMENT CATALOGUE AND PRICE LIST

PART ONE, NUMBER SEVEN

Crossing Signal Poles and Signs, Bells, Pole Castings, High Voltage Adapters

THE RAILROAD SUPPLY COMPANY

HENRY S. HAWLEY PRESIDENT

> E. W. VOGEL SIGNAL ENGINEER

E. H. BELL VICE PRESIDENT

J. A. COLBY AUDITOR

GEN'L OFFICES CHICAGO

FACTORY Bedford Building Carroll Ave. and Robey St. CHICAGO

BRANCHES

NEW YORK SAN FRANCISCO ST. PAUL Омана ST. Louis DENVER

And other principal cities.

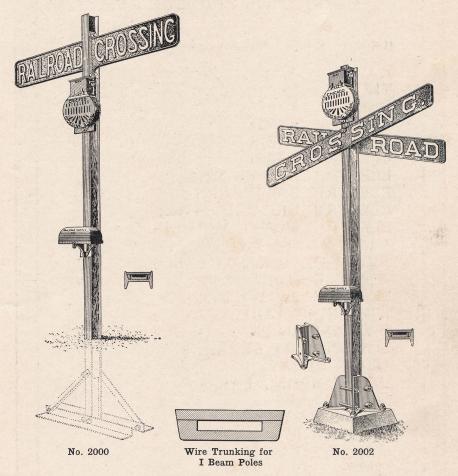
Catalogues and Bulletins

Write for Separate Catalogues and Information on the following:

TIE PLATES DERAILERS BUMPING POSTS MISCELLANEOUS TRACK DEVICES ELECTRIC SEMAPHORE SIGNALS ELECTRIC DISC SIGNALS ELECTRIC SEMAPHORE INDICATORS ELECTRIC DISC INDICATORS ELECTRIC SIGNAL MATERIAL TRAIN ANNUNCIATORS HIGHWAY CROSSING BELLS SIGNAL COMMUTATORS ELECTRIC SWITCH LOCKS LIGHTNING ARRESTERS MECHANICAL TRAIN ORDER SIGNALS TIME CIRCUIT BREAKERS TRACK RELAYS INTERLOCKING RELAYS LINE RELAYS RELAY BOXES CHANNEL PINS BOND WIRES INSULATED JOINTS BATTERY CHUTES BATTERY RECEPTACLES BATTERY ZINCS BATTERY COPPERS ETC., ETC.

> The Railroad Supply Company Chicago

Highway Crossing Signals



We show herewith our Standard Steel Bell Poles made from a strong I beam and equipped with indestructible signs. These poles are furnished drilled and equipped for use with any style of bell and relay box as may be specified. The location of the bells and relay boxes may be changed to suit every requirement. The horizontal style sign pole shown above may be equipped with base casting for fastening on concrete, or the double cross sign pole may be equipped with underground bracing. We claim that these poles and signs make the most durable and neatest highway crossing signal extant. Poles are equipped with wire trunking which allows easy access to the wiring leading to the relays. When ordering give, description; which sign and base is to be used, and state the make of crossing bell or relay box to be used.

Highway Crossing Signals







No. 428

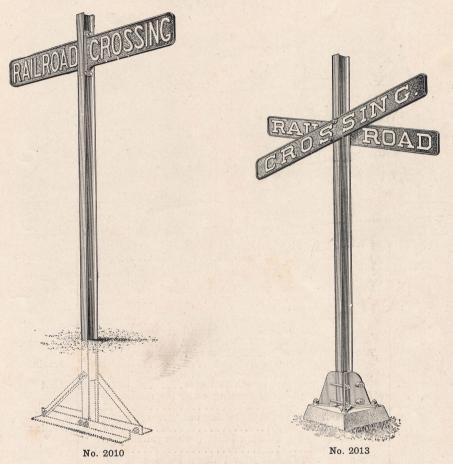
TUBULAR STYLE POLE:

Our Tubular Style Pole has been designed to meet the demand for a round pole in which the wires to the relays and bells are carried within the pole. This, like our Standard I Beam Pole, may also be equipped with either style of sign or base. Clamps Nos. 873-1 and 873-2 provide for the fastening of any style sign, bell or relay box. When ordering specify which style of sign and base wanted, also relay box, and bell to be used, which enables us to properly drill and tap the clamps.

WOOD BELL POLES:

This pole is made from the best lumber, rabbeted for wiring and furnished complete with underground bracing, as shown. When painted same makes an extremely neat pole.

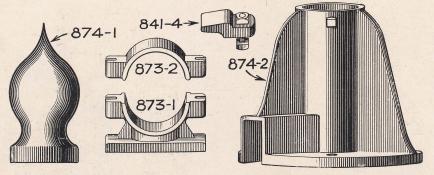
Highway Warning Signs and Posts



Illustrations show our Horizontal and Double Cross Signs and Poles, (as furnished without drilling or wire trunking, with Highway Crossing Signals). These sign poles are furnished in any combination desired, either for use on concrete with base casting or for setting directly into the ground with underground bracing. In ordering, specify which sign and style base required giving catalogue trade number.

We claim the above poles and signs to make the most durable and neat highway warning signs ever placed upon the market; the pole being made of a strong I beam and signs practically indestructible. The raised lettering on signs allows for the repainting of same by inexperienced painters.

Highway Crossing Signals and Poles

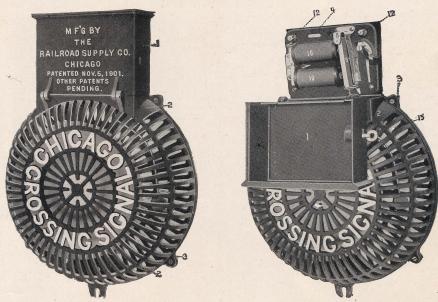


<u> 16. 16. 17. 16. 17. 18. 18. 18. 18. 18. 18. 18. 18. 18. 18</u>			
Trade No.	Description	Price	Code Word
2000	1 Beam Pole with Horizontal Sign and Under-		
	ground Bracing, length 19 feet	\$60.00	Habendo
2001	I Beam Pole with Horizontal Sign and Base Casting, length 15 feet	60.00	Habedi
2002	I Beam Pole with Double Cross Sign and Base Casting, length 15 feet	60.00	Habrol
2003	I Beam Pole with Double Cross Sign and Underground Bracing, length 19 feet	60.00	Habrun
2004	Tubular Steel Pole with Horizontal Sign and Base Casting, length 15 feet	50.00	Hacun
2005	Tubular Pole with Double Cross Sign and Base	50.00	Hacix
428	Casting, length 15 feet	24.00	Had
2006	ground Bracing, length 18 feet Horizontal Style Sign Casting only (two re-	12.00	Hadly
2007	Double Cross Style Sign Casting only (two re-		Hadox
2008	quired per Sign)Base Casting for I Beam Poles (two required	12.00	
	per Pole) Trunking and Capping for I Beam Poles, per	12.00	Heal
2009	toot	20	Healer
2010	Horizontal Style Warning Sign and Post with Underground Bracing, length 19 feet	50.00	Hemp
2011	Horizontal Style Warning Sign and Post with Base Casting, length 15 feet	50.00	Hempul
2012	Double Cross Style Warning Sign and Post with Underground Bracing, length 19 feet	50.00	Heos
2013	Double Cross Style Warning Sign and Post with Base Casting, length 15 feet	50.00	Heotol
841-4	Clamp and Bolt for Style BB Bell and I Beam		
	Poles	$\frac{.40}{2.50}$	Hend Hendis
873-1	Tubular Pole Front Clamp	1.50	Hendry
873-2	Tubular Pole Rear Clamp Pinnacle Casting for Tubular Pole	3.00	Hendox
874–1 874–2	Base Casting for Tubular Pole	5.00	Hern

NOTE:—In ordering poles specify location of bell and relay box, and also which style is to be used Poles are furnished drilled and tapped for any manufacturer's bells or relay boxes.

Style A. Highway Crossing Bell

Patented Nov. 5, 1901

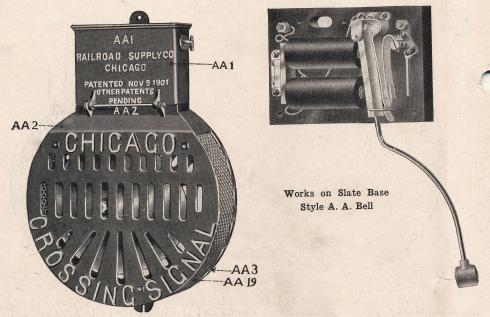


This bell, made strong and durable, is especially adapted for highway crossing alarms. The mechanism very simple and similar to our Style AA Bell, will operate with a minimum amount of battery, giving great volume of sound. Many thousands of these bells have been in use for upwards of ten years on nearly all railroads throughout the U. S. and Canada. It is furnished with carbon, silvercarbon, or platinum contacts, and can be used successfully on high voltages in conjunction with our high voltage adapters. conjunction with our high voltage adapters.

Trade No.	Description	Price	Code Word
A-19 A-20 A-21 A-22 A-1 A-2 A-3 A-4 A-5 A-6 A-66 A-7 A-77 A-77 A-8 A-9 A-10 A-11 A-12 A-13 A-14 A-15 A-16	Iron Covered Bell, Style A with Silver-Carbon Contacts. Iron Covered Bell, Style A, with Plain Carbon Contacts. Iron Covered Bell, Style A, with Plain Carbon Contacts. Iron Covered Bell, Style A, with Platinum Contacts. Tell-Tale Contact on above extra. Japanned Cast Iron Bell Cover with Hinge Rod Japanned Cast Iron Bell Base and Screws Japanned Iron Mechanism Base. Nickeled Armature Hanger with Bearings and Screws. Carbon Front Contact Spring. Platinum Front Contact Spring. Platinum Back Contact Spring. Platinum Back Contact Spring. Platinum Back Contact Spring. Nickeled Adjustment Stud with Insulations and Screws. Armature and Bel Clapper. complete. One Magnet Coil (specify upper or lower). Magnet Yoke with Magnet Screws. Binding Post, complete. Tell-Tale Contact Post, complete. Tell-Tale Contact Post, complete. Standard Key. Magnet Support with Screws. 12" Steel Gong, with Cap Screw.	\$52.50 50.00 52.50 5.00 5.00 5.00 3.60 5.00 1.40 1.60 2.50 3.00 3.00 3.00 2.50 3.00 2.50 3.00 3.	Bamboo Basic Basilisk Basin Bask Batten Ballus Batten Bayou Baldon Ballon Ballon Balery Bazaar Baby Balloons Bead Beam Bear Bearing Beastly Believe Bellow Bellow Belong Belad

Style A. A. Bell

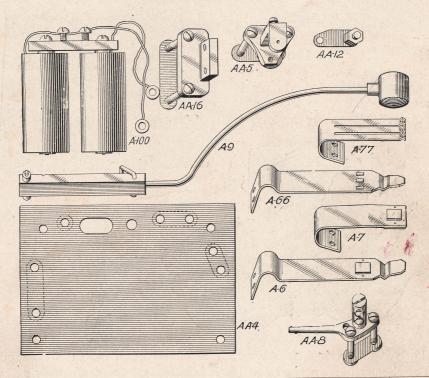
Patented Nov. 5, 1901



This is our standard highway crossing bell. The casing is indestructible, being made of the best grade of malleable iron and steel. The works have been designed for hard and continuous usage out doors. The highest insulation possible is obtained by the use of water-proof magnets and copper and nickel-plated metal parts, which are mounted upon a double enameled heavy slate base. The contact springs are phosphor-bronze and furnished heavily nickel-plated with heavy platinum, silver-carbon, or plain carbon contacts, all having large surfaces, thus insuring greatest reliability, and low resistance at the contact points. These bells have been in long and continued use in damp atmospheres without being affected in their operation. The magnet cores and armature are heavy and made from the best imported Norway iron and are heavily nickel-plated upon copper, thus effectively preventing rust. The standard resistance is 10 ohm. Higher or lower resistances are furnished upon specifications. This bell may be used on any current below 25 volt. For higher voltages it is necessary to use our high voltage adapters.

Style A. A. Bell

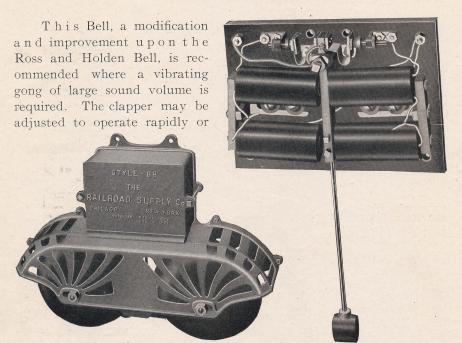
Patented Nov. 5, 1901



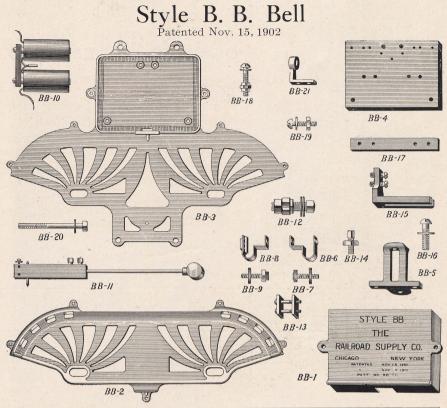
Trade No.	Description	Price	Code Word
4.4.20	Style AA Bell, with Silver-Carbon Contacts	\$52.50	Baton
AA-30	Style AA Bell, with Plain Carbon Contacts	50.00	Bacnus
AA-20 AA-21	Style AA Bell, with Platinum Contacts	52.50	Badino
	Tell-Tale Bell Contact on above, extra	5.00	Banior
AA-22	Japanned Mechanism Cover	5.00	Bakorn
AA-1	Black Japanned Bell Cover, with Hinge Rod	6.00	Bekord
AA-2	Tapanned Mechanism and Bell Base	6.00	Bekue
AA-3	Drilled and Enameled Slate Base	8.00	Beiul
AA-4	Nickeled Armature Hanger, with Screws	2.00	Belut
AA-5	Plain Carbon Front Contact Spring	2.50	Bayou
A-6	Plain Carbon Front Contact Spring	3.00	Baldon
A-65	Platinum Front Contact Spring.	3.00	Bakery
A-666	Silver-Carbon Front Contact Spring	2.50	Bazaar
A-7	Plain Carbon Back Contact Spring	3.00	Baby
A-77	Platinum Back Contact Spring	3.00	Balloon
A-777	Silver-Carbon Back Contact Spring	3.00	Biame
AA-8	Nickeled Adjustment Stud	3.00	Beam
A-9	Armature and Bell Clapper, complete	.35	Brakon
A-12	Binding Post, complete	.50	Bralot
AA-12	Binding Post and Connection.	1.50	Bratle
AA-13	Tell-Tale Contact Spring, Platinum Pointed with Screws.	1.00	Bronx
AA-14	Tell-Tale Contact Post, Platinum Pointed with Screws	1.50	Blond
AA-16	Magnet Support, complete with Double Nuts and Screws.	4.00	Boas
A-17	12" Steel Gong with Cap Screw	8.00	Belad
AA-17	12" Bell Metal Gong, complete with Cap Screw	1.50	Beladus
AA-19	Perforated Steel Side Plate	15.00	Bumell
A-100	One set Magnets, complete	15.00	Damen

Style B. B. Bell

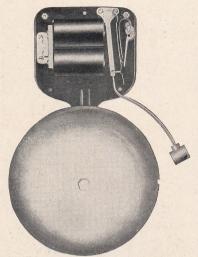
Patented Nov. 15, 1892



slowly, and having no springs, is absolutely positive in its action. The clapper in its normal position is held against one contact spring by gravity. This spring has connections with one set of magnets. Upon current passing through this contact and its respective magnets, the clapper is attracted by magnetism, delivering a powerful stroke against one gong and then the current passes through the other spring and set of magnets returning clapper against opposite gong. The casing is heavy and substantial, and entirely encloses the magnets and contact springs by being drawn against the back, which has rubber gaskets. This bell will deliver a greater volume of sound with a lower voltage and amperage than any other bell on the market, and is one of our latest, and, like our Style AA Bell, has no bushings or insulations which may cause short circuits or grounds in any of its wirings. The base upon which the mechanism is mounted is heavy enameled slate. We furnish same with plain carbon contacts, silver-carbon contacts, or platinum contacts, all of which are interchangeable. This bell may also be used on high voltages in conjunction with our high voltage adapters and is recommended for electric street railway service.



Trade No.	Description	Price	Code Word
BB-30	Style BB Bell, complete with Plain Carbon Contacts and		T.
BB-31	Style BB Bell, complete with Plain Carbon Contacts and	\$70.00	Broxt
DD-91	Bell Metal Gongs	75.00	Broster
BB-32	Style BB Bell, complete with Silver-Carbon Contacts and	72.00	Danielina
BB-33	Steel GongsStyle BB Bell, complete with Silver-Carbon Contacts and	72.00	Brosting
	Bell Metal Gongs	77.00	Brop
BB-34	Bell Metal GongsStyle BB Bell, complete with Platinum Contacts and Steel	75.00	Broper
BB-35	GongsStyle BB Bell, complete with Platinum Contacts and Bell	75.00	Broper
	Metal Gongs	80.00	Bruf
BB-1 BB-2	Japanned Iron Mechanism Cover Japanned Iron Gong Cover	5.50	Brufer Brufing
BB-2 BB-3	Japanned Iron Base, with Rubber Gasket, Screws and Bolts	6.00	Brute
BB-4	Slate Base, Drilled and Enameled	$\frac{8.00}{1.75}$	Brufas
BB-5 BB-6	Armature Hanger	2.50	Bruting Brang
BB-7	Platinum Contact Screw	1.50	Brob
BB-8	Plain Carbon Contact Spring	$\frac{1.50}{2.00}$	Bromo Bromoid
BB-88 BB-9	Silver-Carbon Contact Spring	1.50	Brocash
BB-99	Silver-Carbon Contact Screw	2.00	Brobdig
BB-10 BB-11	One set Magnets, complete	$\frac{16.00}{2.00}$	Brofund Brofue
BB-11	Gong Bolt, complete	.30	Brotule
BB-13	Double Nuts with Screws for Contact Springs	.50	Brotum Broting
BB-14 BB-15	Armature Trunnion Bearing	1.10	Brotisto
BB-16	Proce Screw to hold BB-15	20	Brotiet
BB-17 BB-18	Drilled Strap for BB-15 and BB-16. Binding Post, complete	.40	Brocam Brofundas
BB-18 BB-19	Screw and Nut for BB-21.	.25	Brophy
BB-20	Bolt and Washer for BB-1	.25	Brophat Brofit
BB-21	Bracket for Contact Screws	.30	Bront



Skeleton Frame Bells

Style "A"

This bell is made of the same highclass materials, and is identical with Style "A" Iron Covered Bell, excepting the base. It is guaranteed and is intended for use indoors, or within a wooden cover; preferably our combination bell and relay box.

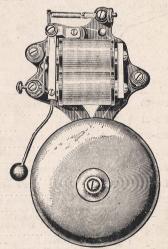
Trade No.	Description	Price	Code Word
A-23	Skeleton Bell, Carbon Contacts	\$40.00	Ball
A-24		42.50	Barren
A-25		42.50	Balsam
A-26		6.00	Balsamic

All repair parts are identical with Style "A" Crossing Bell.

Skeleton Bell

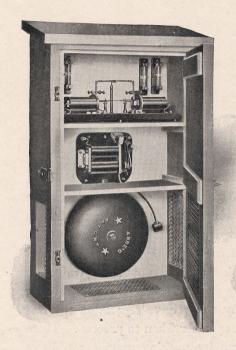
Style "X"

A bell made to meet the demand for a reliable pivoted armature bell which can be sold at a lower price than our Style "A" bells and which will give satisfaction where any bell of this kind may be used.



Trade No.	Description	Price	Code Word
X-3	3" Nickel Plated Gong. 4" " " " " " " " " " " " " " " " " " "	\$ 2.50	Badnor
X-4		3.00	Badnip
X-5		5.00	Badsop
X-6		6.50	Bafar
X-8		8.00	Befering
X-10		12.00	Bister
X-12		18.00	Bistod

Highway Crossing Bell and Relay Box

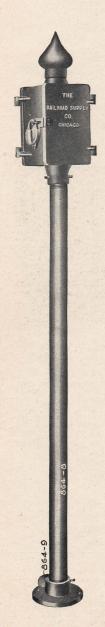




In the illustration herewith we show our Combination Bell and Relay Box, which is preferred by some railroads for use with our Style A Bell and Relay in lieu of an iron covered bell and separate relay box. This box is strongly made, thoroughly weather-proof, and with separate compartments protecting the bell and relay mechanisms. Gong compartment openings are protected on four sides with a heavy perforated metal screen. The relay compartment is sufficiently large to hold any manufacturer's interlocking, or two single relays and their lightning arresters. Where necessary, additional relays and lightning arresters may also be put in the compartment with the bell mechanism.

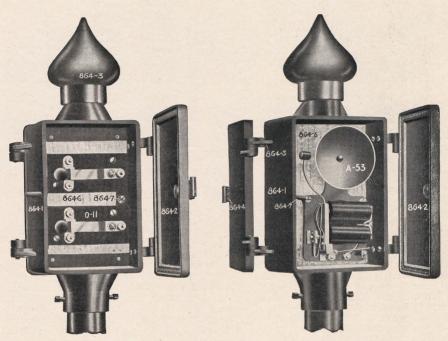
Trade No.	Description	Price	Code Word
P-1	Combination Bell and Relay Box, Pine,	@1C 00	D-4
D 0	one coat priming Combination Bell and Relay Box,Oak,	\$16.00	Botox
P-2	one coat priming	20.00	Bolonga

Siding Bell Box



The Box and Post shown herewith were designed to supply the demand for an apparatus which will establish communication between outlying switches and interlocking towers or telegraph offices. By the use of a simple system of code signals switchmen may notify towermen or telegraph operators of their intended movements on to, or off the main line. The answers to the switching crew are given on the vibrating bell, A-53, which is contained in a separate compartment within the box, and is thus not accessible to them, but only to the signal men. By the use of this apparatus outgoing trains on passing sidings may proceed to the main line switch at which point they will receive signals on the bell from the telegraph operator when to proceed. These signals are answered by pushing upon Strap Keys 0-11, which operate similar bells or indicators in the telegraph office or interlocking tower. The entire apparatus is of neat design and durable make. This device is well suited to meet the demands of general managers of roads not maintaining a signal department, for a reliable and economical means of transmitting instructions governing train movements from outlying sidings or switches on to main lines.

Siding Bell Box



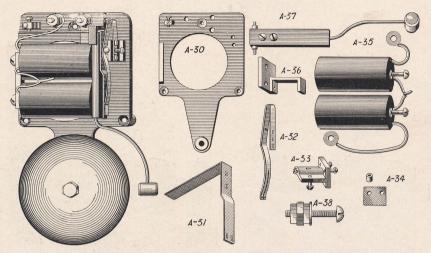
Front View Open

Rear View Open

Trade No.	Description	Price	Code Word
864 864-1 864-2 864-3 864-4 864-5 864-6 864-7 864-8 864-9 864-10 0-11 A-53	Siding Bell Box complete with Bell and one O-11 Strap Key. Box Casting only for above. Door for 864-1. Pinnacle Casting for 864-1. Hinge Hasp for Door. Hinge Lug for 864-1. Wooden Base for Strap Key and Bell. Lock Bolt for Bell Compartment. Steel Pipe. Base Casting for 864-8. Siding Bell Box complete without Strap Key or Bell. Front and Back Contact Strap Key. Style A Bell, 4" Inverted Gong (10 ohm).	\$28.00 4.00 2.00 1.50 .50 .75 .25 2.00 1.00 16.00 3.25 10.00	Buck Bucto Buctor Bud Budy Buer Buffer Bruin Bruno Bunting Bucking Follow Bunter

Style A. Skeleton Bells

4-inch, 5-inch, 6-inch



Illustrations herewith show our 4", 5" and 6" A Bells. This style is used extensively as indicator bells in stations, interlocking towers, telegraph offices, watchmen's cabins and at outlying switches. Standard resistance is 10 ohm. We watenmen's cabins and at outlying switches. Standard resistance is 10 ohm. We guarantee this bell to operate with little battery and deliver powerful strokes upon the gong. Platinum contact springs, which are long and flexible, do not break the circuit until the stroke is completed. The contact springs are so arranged that any desired adjustment may be obtained easily and in a positive manner. All working parts are heavily nickel-plated upon copper and are designed for heavy and continuous usage.

The above bells are adaptable for voltages up to 25; with higher voltages our high voltage adapters should be used. These hells are also furnished as single

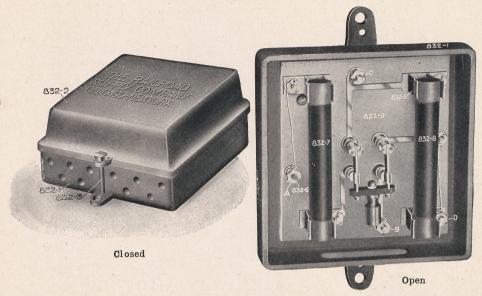
high voltage adapters should be used. These bells are also furnished as single

stroke bells for use with code signals.

Trade No.	Description	Price	Code Word
A-50	Style A Bell, 4" Gong, 10 ohm Resistance	\$10.00	Bullock
A-51	Style A Bell, 5" Gong, 10 ohm Resistance	10.25	Bumper
A-52	Style A Bell, 6" Gong, 10 ohm Resistance	10.50	Bun
A-53	Style A Bell, 4" Inverted Gong for Siding Bell		
	Box, 10 ohm Resistance	10.00	Bunter
A-29	Japanned Skeleton Frame for Styles A-50 to		
	A-52 inclusive	2.00	Buncarp
A-30	Japanned Skeleton Frame for A-53	2.00	Bunsot
A-31	Platinum Front Contact Spring	2.00	Buncole
A-32	Platinum Back Contact Spring	2.00	Bunlad
A-33	Back Contact Spring Support	.75	Byro
A-34	Mica Insulations for A-33	.50	Byronas
A-35	One set Magnets, complete, (specify resistance)		Byrito
A-36	Armature Hanger, complete	.75	Byrig
A-37	Armature and Bell Clapper	2.00	Bylix
A-38	Binding Post, complete, with Mica Insulations	.25	Bylum

NOTE: -Other than standard resistance must be specified.

High Voltage Adapters



Our High Voltage Adapters are furnished for use with any apparatus (particularly Highway Crossing Bells) where current of a direct voltage from power or light circuits is obtainable. In such cases this apparatus eliminates the use of batteries. All our bells will operate satisfactorily on any voltage up to 600 by the use of these adapters. The principle employed makes this device reliable and economical in its use. The adapters are furnished complete, mounted upon a heavy slate base, within a gasketed iron box, and are equipped with fuses and double pole knife switch. They are especially recommended for use with Highway Crossing or Block Signals for electric railways operating on 500 volt direct current.

Trade No.	Description	Price	Code Word
*832-20	High Voltage Adapter, Complete within Iron Box, as shown. Box Casting. Cover Casting. Lock Bolts for Cover. Adapter Box Clip. Binding Post Complete with Three Nuts. Adapter Rod for Line Side. Adapter Rod for Instrument Side Slate Base drilled and enameled Double Pole Knife Switch Fuses (State Amperage)	\$22.00	Bermat
832-1		3.00	Beros
832-2		2.00	Bedfern
832-3		.40	Behor
832-5		.75	Benson
832-6		.35	Biart
832-7		4.00	Bidon
832-8		4.00	Bocanar
832-9		5.00	Bocano
832-10		2.00	Bocup
832-11		.10	Bosis

^{*}Specify High Voltage, also apparatus or voltage for which same is to be used.

O'Neil Highway Crossing Bell

This style is practically obsolete and we refrain from cataloging the bell and its parts, but we are prepared to furnish its various repair parts, which may be ordered from old catalogue reference, or by accompanying the order with sample.

"American" and "Ross and Holden" Crossing Bells

Orders for repair parts or complete apparatus for either of these two styles will be filled promptly, if accompanied by either catalogue reference or sample.

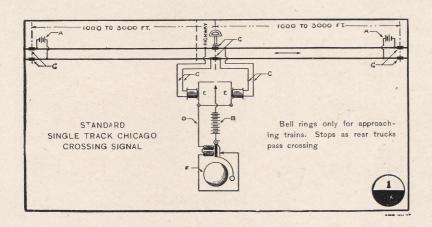


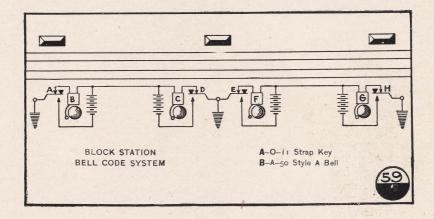
Highway Crossing Alarm Light

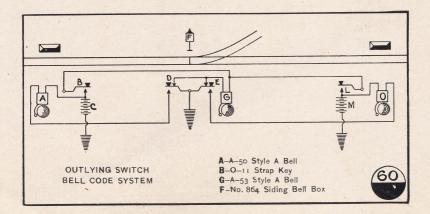
Illustration herewith shows our Electric Light Casing, as used on Highway Crossing Alarms by placing same on the upper part of the pole pointing the lenses, which may be either red or green, up and down the highway. The same batteries that operate the bell operate the light by equipping bell with a tell-tale contact; the battery current is switched alternately through the bell and then the light, thus making an attractive, visible night signal.

Trade No.	Description	Price	Code Word
*L-10 L-5 C-75 B-20 B-21	Lamp Casing with Socket and Lamp. 6-Volt Battery Lamp, only. O'Neil Bell complete in cage R. & H. Bell complete in Box. R. & H. Bell, only, complete	$ \begin{array}{r} 1.50 \\ 48.00 \\ 80.00 \end{array} $	Fold Form Bowsprit Boon Boosy

^{*}Specify whether red or green lenses are wanted.







Printed and Bound for the Signal Department of The RAILROAD SUPPLY
COMPANY at the Press of the FAITHORN
COMPANY at 66-74 Sherman St., CHICAGO

The second of th

Highway Crossing Signals

Locomotive Type Crossing Bell

AND =



Crossing Bell No. 990

"The Crossing Alarm Bell that Rings Like a Locomotive Bell"

The Railroad Supply Company

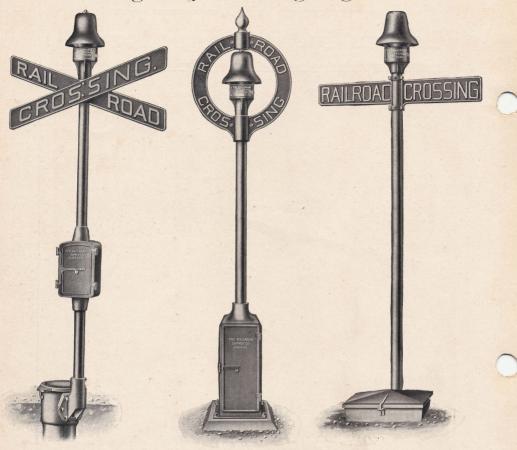
General Offices and Works: CHICAGO

SUPPLEMENT TO CATALOGUE No. 7

SECTION 1

February 1910

Highway Crossing Signals



No. 2028 No. 2030 No. 2032

THE Highway Crossing Signals above illustrated are the latest, most compact and reliable crossing alarms ever produced. All parts on these signals are interchangeable. Any of the signals shown can be furnished with any of the signs illustrated. The poles are made of 4-inch steel pipe, and together with other parts illustrated, are indestructible. Any of the above signals may be furnished equipped with our style CC, or our celebrated style A or AA Bells.

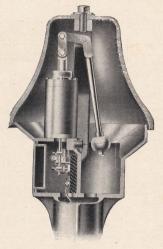
Signal No. 2028 has a relay box, wood lined and rubber gasketed, that will accommodate two interlocking relays and lightning arresters. Provisions for batteries to ring the bell are made in the 7-foot battery chute, which also answers the purpose of a solid foundation for the entire signal.

Signal No. 2030 has a substantial gasketed weather-proof case, adapted for use on concrete foundations. Case is wood-lined, with shelves arranged to hold

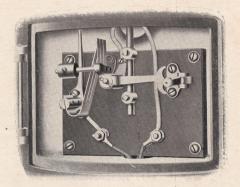
all necessary relays, lightning arresters and batteries.

Signal No. 2032 is equipped with an iron box to be set within the ground to hold the batteries, and a separate damp-proof compartment for any interlocking relay. The Locomotive Type Bell, illustrated on above signals, is most economical to use, as one cell of storage or four cells of caustic potash batteries will operate same very satisfactorily. The saving in first cost of batteries required and very material saving effected in maintenance, is apparent.

Locomotive Type Highway Crossing Bell



Sectional View



Mechanism. Compartment with door open.

Note simplicity and accessibility for inspection and adjustment

E illustrate herewith our latest improved type Electric Highway Crossing Bell. The gong on this bell is of the type and size as used on locomotives. The mechanism is contained within the gong, as shown in sectional view. The solenoid electro magnet used delivers powerful strokes upon the inside of the gong at from 40 to 60 blows per minute. The contacts and switch device are mounted upon a heavily enameled slate base, contained in a separate and absolutely water-tight compartment, having a large door for easy access and inspection. The armature of the solenoid magnet operates a single-pole snap switch, which makes and breaks the circuit quickly and without loss of power. When the circuit is closed the armature is attracted and the snap switch, actuated by the rocker arm, breaks the circuit just as the heavy hammer strikes a powerful blow upon the inside of the gong. As the circuit is broken the armature and hammer return by gravity to normal position. The highest efficiency with least possible battery consumption is thus attained, current through the bell being actually used only one-half of the time that the bell is in operation. Unless otherwise specified, this bell is furnished to be operated from one cell of storage battery or four cells of caustic potash battery. When in operation this bell emits the same loudness and quality of sound, and rings with the same velocity as an ordinary locomotive gong, from which it is apparent that this is the most suitable type of bell for highway crossing alarms. This type of Crossing Bell was designed and patented by two railway signal engineers of national reputation, and placed in service in large numbers on some of the most leading railroads. It has given utmost satisfaction because of its great clearness and volume of sound, together with simplicity and great economy in batteries to operate same.

THE RAILROAD SUPPLY COMPANY

Trade No.	DESCRIPTION	Price	Code Word
990	Locomotive Type Bell, with socket for 4-inch	\$100.00	Luctv
990-50	Pipe Locomotive Type Bell, with socket for 3-inch		Lusty
990-51	Pipe Locomotive Type Bell, for bolting to top of	100.00	Lute
990-52	Wooden Post	100.00	Lurid
	to face of Wooden Post	100.00	Lunate
990-53	Rocker Arm Contact Spring, Triple Fingered Platinum	3.00	Loyal
990-54	Rocker Arm Contact Spring, Carbon Contact	2.50	Lotus
990-55	Back Contact Spring, Triple Fingered Platinum	3.00	Lope
990-56	Back Contact Spring, Carbon Contact	$2.50 \\ 50.00$	Long Loft
990-11	Gong only, for Locomotive Type Bell	50.00	Loit
2028	Signal as shown, consisting of Bell, Relay Box, Signs, Pole and Chute	190.00	Locker
2020	Same as above, but without Signs	166.00	Litmus
2029 2030	Signal as shown, consisting of Bell, Combina-	100.00	Bitmus
	tion Wood-lined Relay and Battery Box,	000 00	T1
	Signs and Pole	226 .00 202 .00	Local Lingo
2031	Same as above, but without Signs	202.00	Lingo
2032	Signal as shown, consisting of Bell, Combination Iron Relay and Battery Box, Signs and		
		186.00	Lintel
2033	Pole Same as above, but without Signs	162.00	Lilac
2034	Same as No. 2032, but equipped with Style		
2004	K-158 Relay Box on Pole for Style H Relay	196.00	Limb
2035	Same as No. 2028, but equipped with No. 835		
2000	Relay Box	206.00	Lime
835	Iron Relay Box for Style HH, or Mason Glass		
7-16-16-10 K	Enclosed Single-Track Interlocking Relay, or		
	two Standard Track Relays	17.00	Hesam
K-158	Iron Relay Box for Style H Single-Track Inter-		
	locking Relay	9.00	Dice
H-75	Standard Style H Relay for Single Track		Cabin
H-76	Standard Style H Relay for Double Track	50.00	Cabinet
HH-75	Standard Style HH All Glass Enclosed Inter-	00 00	Hemal
35-5	locking Relay for Single Track	80.00	Hemai
M-75	Standard "Mason" Glass Enclosed Interlocking Relay for Single Track	70.00	Hemula
	Keray for Single Track	10.00	

Deduct from the above List Prices on Signals as follows:

If Style CC No. 953 Bell is wanted	\$30.00
If Style CC No. 953-A Bell is wanted	50.00
If Style BB Bell is wanted	25.00
If Style AA Bell is wanted	
If Style A Bell is wanted	60.00

All signs are interchangeable and any signals shown can be furnished with any signs shown without change in price.

For other styles of Highway Crossing Signals and Bells, see Section 1, Catalogue 7, also July, 1909, Supplement.

NOTE. We manufacture over twenty-five different Crossing

Alarms, suitable for any Highway Crossing on steam or electric railroads.

Also, all Electric Signal Apparatus, such as Motor-Driven Semaphore Signals, Relays of all descriptions, Lightning Arresters, Channel Pins, Bond Wires, Battery Chutes, and all other requirements in signaling work.

