

National
MANUFACTURING COMPANY

BUILDERS'
HARDWARE

CATALOG NO. 26



BUILDERS' HARDWARE *of quality for over 50 years*



National

BUILDERS'
HARDWARE

CATALOG NO. 26

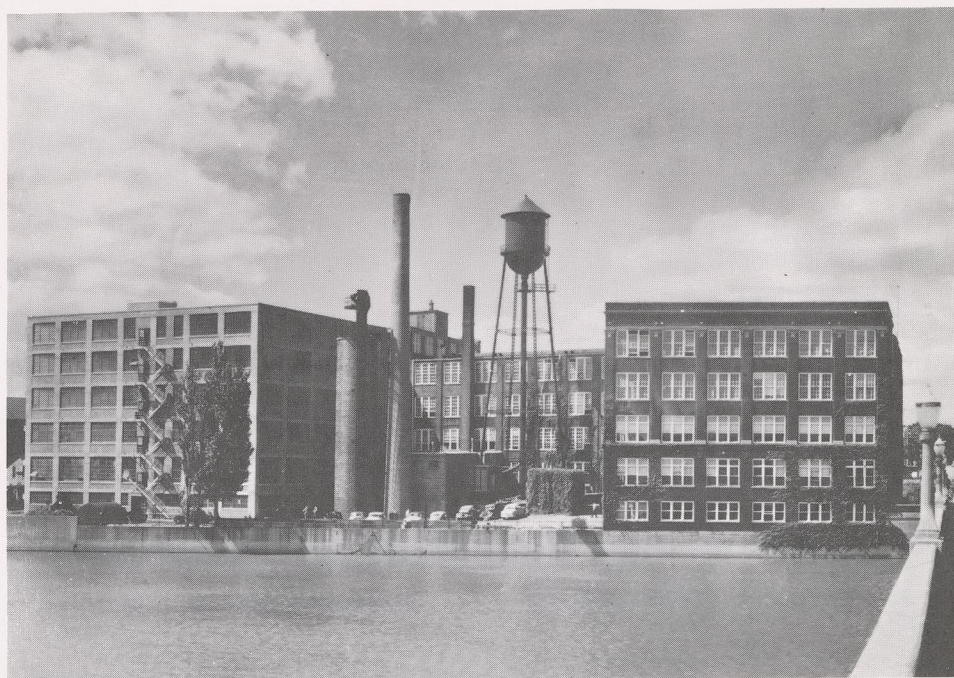
NATIONAL MANUFACTURING COMPANY

* * STERLING * ILLINOIS * *

National MANUFACTURING COMPANY Sterling, Illinois



As viewed from the city



As viewed from Rock River



FOREWORD

Ever since the organization of our Company in 1901, it has been our policy to sell our goods through the retail dealers. By this sales method we have been able to give our customers a better quality of goods, prompt shipment of orders and cooperation in advertising and selling National goods.

The size and variety of our stock enable the dealer to make up an order of a size sufficient to secure the benefit of our liberal freight allowance.

The original and convenient methods used in packing our goods, as described on page 10 of this catalog, bring the goods to you in good condition, and save time for both clerks and customers.

Quality of Goods

In the construction of our goods only the best grades of materials are used. Our machines are of the latest design and our workmen are expert. With our careful method of inspection a perfect product is assured.

New Items

Since the publication of our last catalog, we have added to the National line the following new items:

No. V712 Magnetic Catch	No. 83½ Turn Button
No. V713 Dual Action Magnetic Catch	No. 451 Narrow Leaf Ball Tip Butt
No. 213 Back Plates	No. 453 Narrow Leaf Button Tip Butt
No. 214 Concave Pulls	No. 550 Chest Hinges
No. 127 Double Action Spring Hinge	No. 295 Screw Hook and Eye Hinges
No. 461 Semi-Concealed Hinges	No. 296 Screw Eyes
No. 21 Automatic Gate Latch	No. 960 Safety Hasp

Prices and Terms

A complete net price list applying to this catalog will be gladly mailed upon request. Inquiries for further detailed information concerning our goods will receive our prompt attention.

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TURN BUTTON

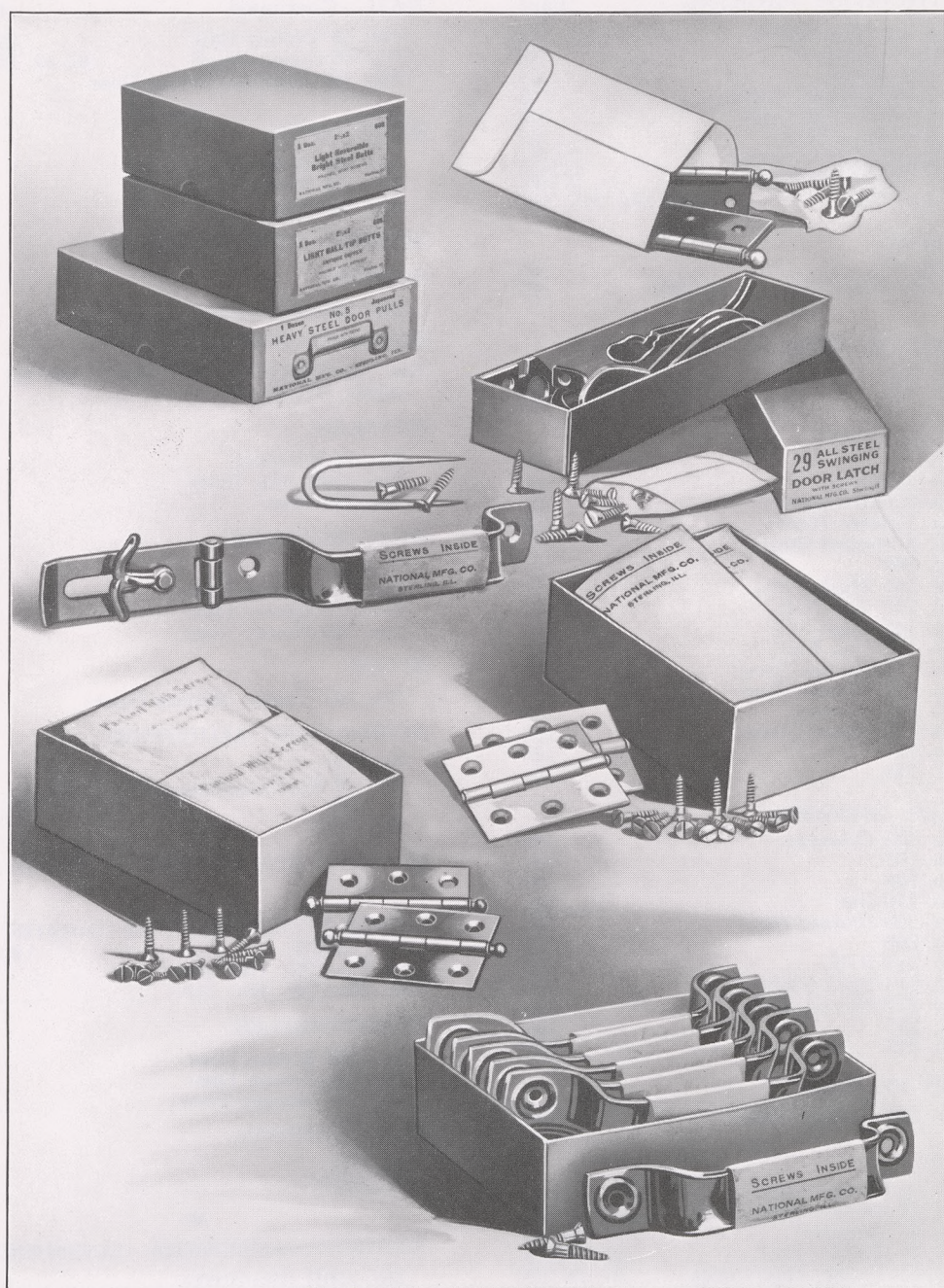
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Method of Packing with Screws



(See opposite page)



Time-Saving Methods of Packing

Every hardware dealer who is interested in keeping down the expense of handling goods, and every one of his clerks, will appreciate National methods of packing goods.

All the smaller sizes of Butts and Hinges are packed one pair in an envelope with screws, one dozen pairs in a box. The larger sizes are packed one pair in a box, with screws. This applies not only to plated finishes, but also to Japan and Bright Steel. All cartons containing one-half and one dozen pairs of Butts or Hinges are sealed with gummed tape. Cartons containing one pair of Butts and Hinges are not taped, but are tied six pairs in a bundle. A glance will tell whether a carton or package has been opened or not. This method saves the time required to count screws, the loss from careless counting and the dealer's and the customer's time. Inventory time is also saved, as broken packages can be "spotted" at a glance.

Sherardizing

Sherardizing has been used as a rust resisting finish for many years and has proved to be very satisfactory.

It is also used as a base for many plated finishes.

Bonderizing

All Japanned and Prime Coat items are first Bonderized; an excellent rust resisting base finish.

Hot Galvanizing

Many of the items in the line, as indicated in the following pages, are also furnished in Hot Galvanized finish.

Zinc Plating

Many items in the line can be furnished in this finish.

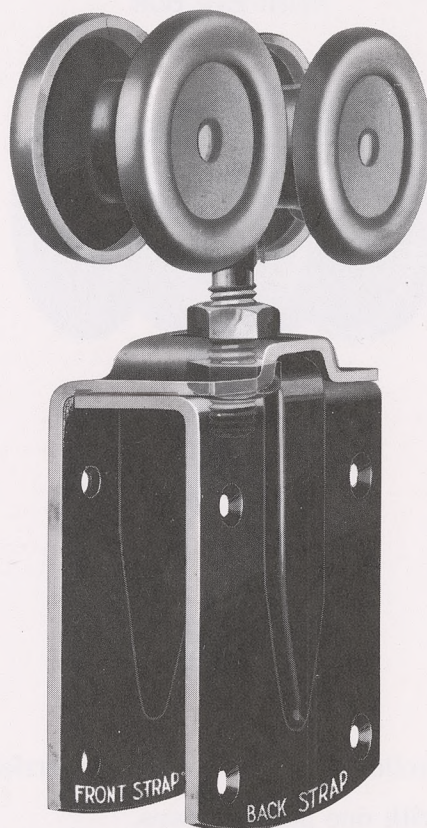
Comparative Symbols of Hardware Finishes

National	Description	U. S. No.	Russell & Erwin Mfg. Co.	Sargent & Co.	Yale & Towne Mfg. Co.	P. & F. Corbin	Lackwood	Penn	Schlage Lock Co.	Seger
Jap.	Bright Japanned	US1B	.....	BJ	J	J	J	J	.....	010
	Dead Black Japanned*	US1D	.....						
Zinc	Zinc Plated	US2C	.....						
Galv.	Hot Galvanized	US2H	.....						
Sher.	Sherardized	US2S	.....						
Brt. Brs.	Bright Brass	US3	10	B	AZ10	A	13 1/2	BB	3	A30
Dull B.	Dull Brass	US4	9	OB	AY22	EA	13	DB	4	D30
Ant. Brs.	Antique Brass	US5	9C	OE	AY21	KA	43	DBR	5	D31
Brze.	Bronze	US9	11	P	BZ10	B	1	BBZ	9	A20
D. Brze.	Dull Bronze	US10	11D	OP	BY22	DB	34	DBZ	10	D20
Oxdz. D. Brze.	Oxidized Dull Bronze	US10A	.....						
O. R. Brze.	Oil Rubbed Bronze	US10B	.....						
Nick.	Nickel	US14	4	N	NZ10	E	5	BN	14	A50
D. Nick.	Dull Nickel	US15	14	LN	NY10	DE	90	DN	15	D50
Bond. D. Blk.	Bonderized Dead Black	US18A	.....							19
Lt. Stat. Brze.	Light Statuary Bronze	US20	2	A	BY65	KB	38	PBZ4	.....	D29
Dk. Stat. Brze.	Dark Statuary Bronze	US20A	2D	A3B	.....	LB	2	BBZ6	.....	DD29
Chr.	Chromium	US26	24	CM	DZ10	CR	96	BCH	26	A110
D. Chr.	Dull Chromium	US26D	34	DCM	DY10	DCR	97	DCH	26D	D110
Bond. P. C.	Bonderized Prime Coat	USP	PC	PC	.....	PC	P	PC	.....
Old Iron	Old Iron									
BAL	Bonderized Aluminized									

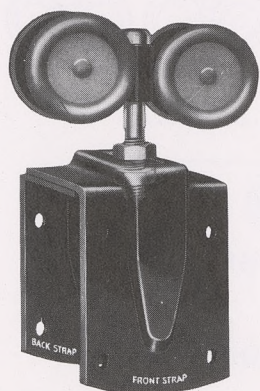
*Dead Black Japanned has been discontinued. See Bonderized Dead Black.



No. 42 Trolley Door Hanger



Back view No. 42 Hanger



Front view No. 42 Hanger

For use with No. 41 Trolley Rail.

For doors weighing from 400 to 1000 pounds.

Wheels are pressed steel, 3 inches in diameter, and have large roller bearings. Drop strap is heavy-gauge steel and is adjustable for doors up to 3 inches thick. Vertical adjustment 1 inch.

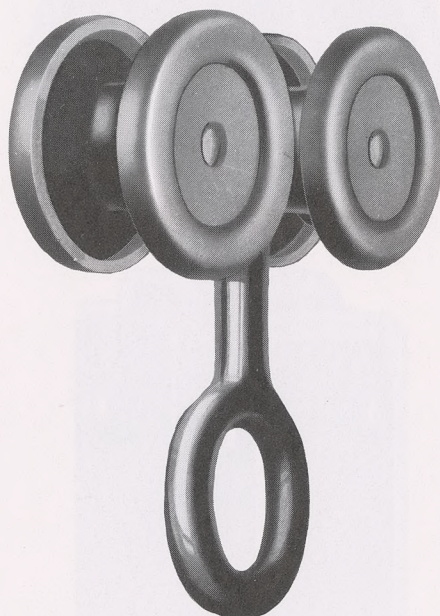
Also used for heavy accordion doors. (See page 30.)

Finish: Japanned or Hot Galvanized.

Packed one pair in a box with bolts for attaching and two end caps.

Weight, per dozen pairs, 158½ pounds.

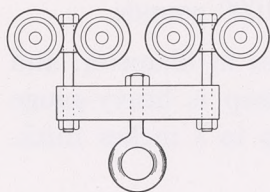
No. 42½ Trolley With Eye Bolt



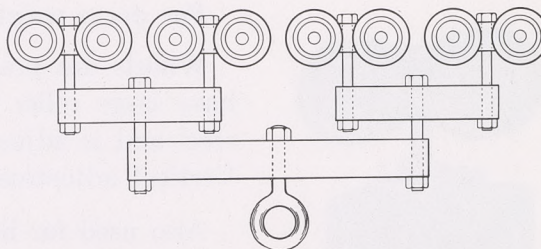
For use with No. 41 Trolley Rail as an overhead carrier.

Packed one in a box with one pair end-caps.

Weight, each, 3¾ pounds.



No. 42½ A



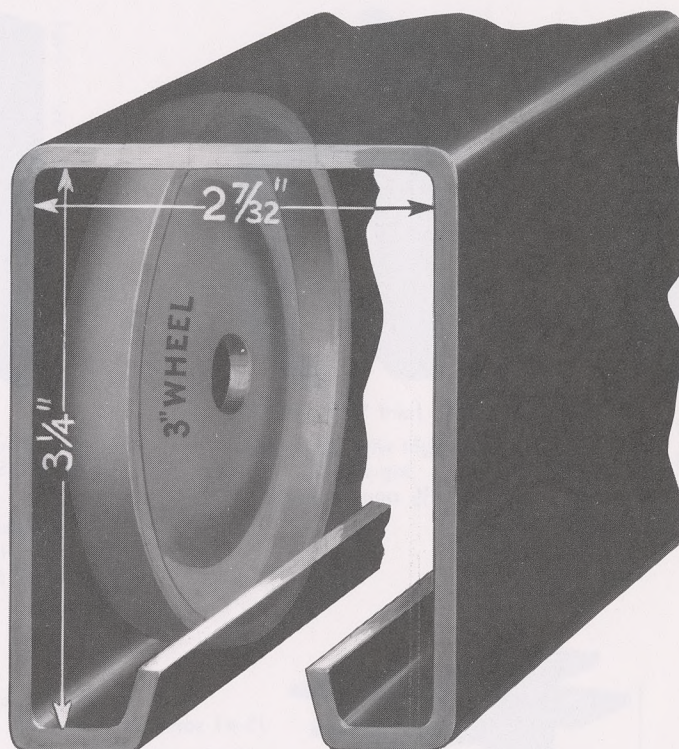
No. 42½ B

Special Trolleys for heavy loads can be furnished as illustrated.

Also other combinations may be had. Prices on request.



No. 41 Trolley Rail



Full-size sectional view No. 41-12 and 41-14 Trolley Rail

For use with No. 42 Trolley Door Hanger. Made of heavy-gauge steel, carefully formed to give an even, perfect tread for the hanger wheels. Inside dimensions, $2\frac{7}{32}$ inches by $3\frac{1}{4}$ inches.

Brackets for this rail are: F-41, G-41, H-41, HS-41, J-41, J-41-2, JC-41, K-41 and KS-41 (see page 16).

No. 41-14 (of 14-gauge steel) for doors weighing up to 600 pounds. Brackets spaced 24 inches apart.

No. 41-12 (of 12-gauge steel) for doors weighing up to 1000 pounds. For doors up to 800 pounds, space brackets 18 inches apart; up to 1000 pounds, 12 inches apart.

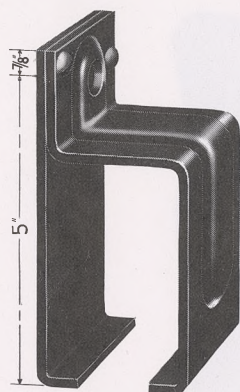
Finish: Japanned or Hot Galvanized.

Made in 6-, 8- and 10-foot lengths.

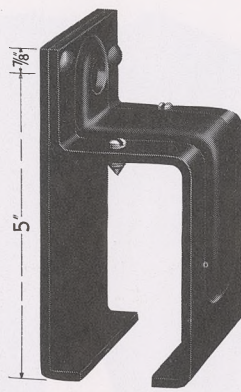
Packed two pieces of a length in a bundle.

Weight per hundred feet, No. 41-14, 287 pounds; No. 41-12, 412 pounds.

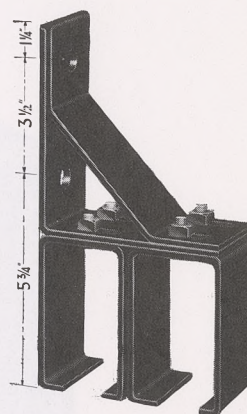
Brackets for No. 41 Trolley Rail



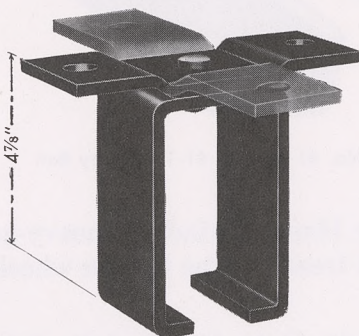
F-41 Bracket
Weight with $\frac{5}{8}$ x 3-inch lag-screws,
2 $\frac{1}{2}$ pounds each.



G-41 Joint Splice Bracket
Weight with $\frac{5}{8}$ x 3-inch lag-screws,
2 $\frac{1}{2}$ pounds each.

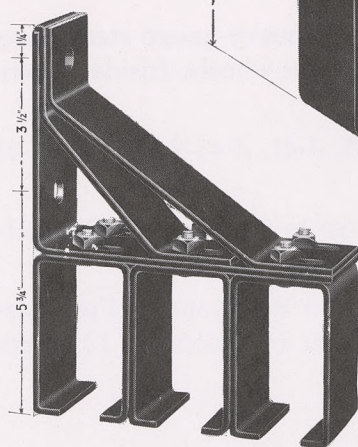


H-41 Double Trolley Bracket
HS-41—Same as above with set-screws
Weight with $\frac{5}{8}$ x 3-inch lag-screws,
7 pounds each.

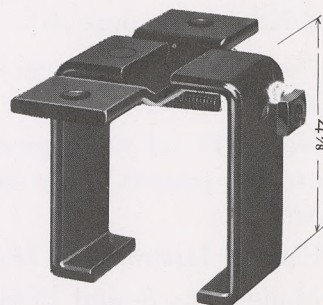


J-41 Ceiling Bracket
JS-41 same as above with set-screws
Weight with $\frac{5}{8}$ x 3-inch lag-screws,
3 $\frac{3}{4}$ pounds each.

J-41-2 Double Ceiling Bracket
Weight with $\frac{5}{8}$ x 3-inch lag-screws,
5 pounds each.



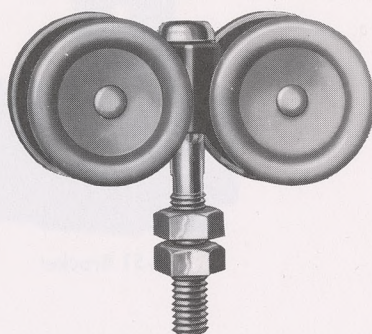
K-41 Triple Trolley Bracket
KS-41—Same as above with set screws
Weight with $\frac{5}{8}$ x 3-inch lag-screws,
10 $\frac{3}{4}$ pounds each.



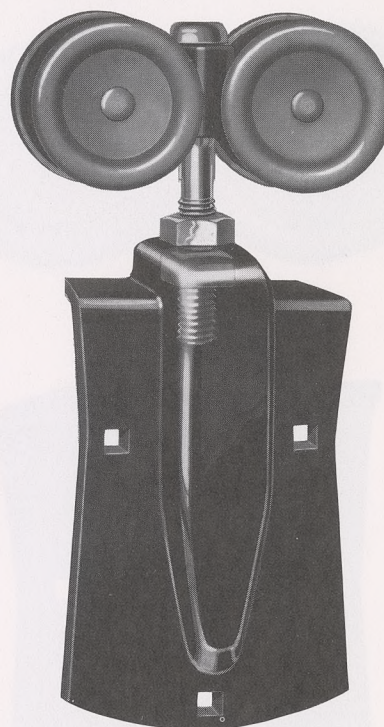
JC-41 Ceiling Bracket
Weight with $\frac{5}{8}$ x 3-inch lag-screws,
3 $\frac{3}{4}$ pounds each.



No. 50 Trolley Door Hanger (Patented)



Truck with connecting bolts only, can be furnished separately.



No. 50 Trolley Hanger

For use with No. 51 Trolley Rail.

The wheels are of pressed steel, $2\frac{1}{8}$ inches in diameter, and have large roller bearings.

The drop strap is made of heavy-gauge steel, very deeply embossed, making it extremely rigid.

The connecting bolt is so attached to the truck as to provide an equalizing device so that equal weight is carried on each of the four wheels.

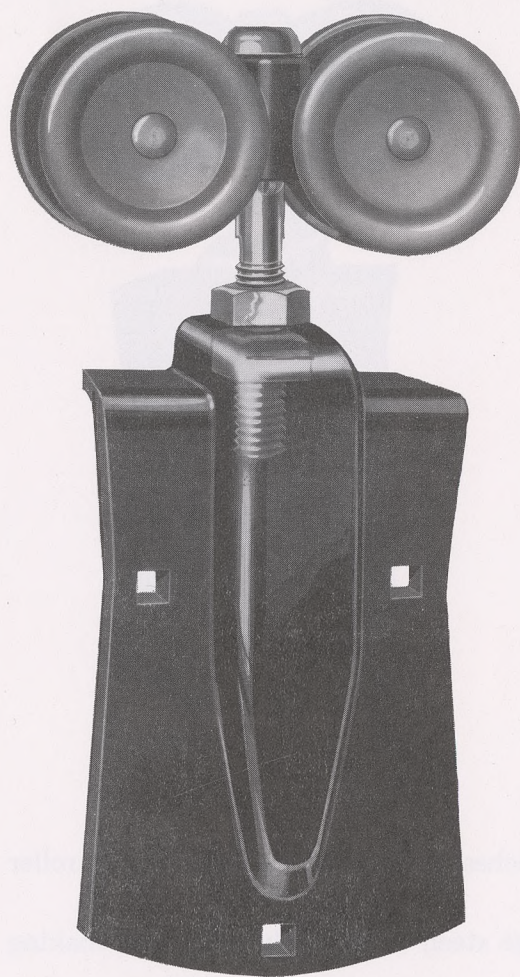
The hanger has both lateral and vertical adjustments, which are unusually simple to operate.

All hangers are adjusted for 2-inch doors when assembled.

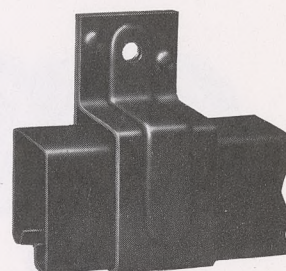
Finish: Japan or Hot Galvanized.

Packed one pair in a box with two end caps and $2\frac{1}{4} \times \frac{5}{16}$ bolts for attaching. One dozen and one-half dozen pairs in a case. Weight, per dozen pairs, 75 pounds, per half-dozen, 39 pounds.

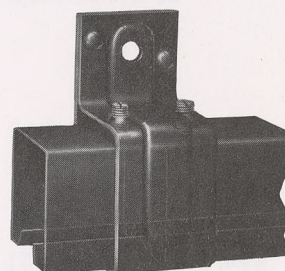
No. 50B Trolley Door Hanger Set
(Patented)



No. 50 Trolley Hanger



F-51 Bracket



G-51 Joint Splice Bracket
(Patented)

For use with No. 51 Trolley Rail.

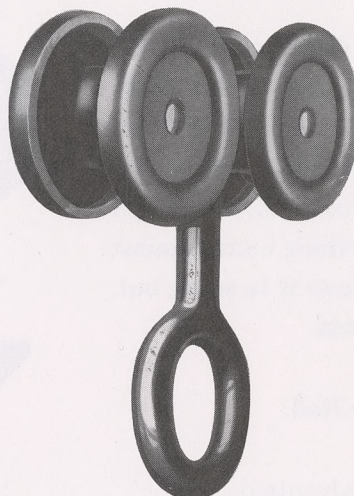
Packed one pair in a box with $2\frac{1}{4} \times \frac{5}{16}$ bolts for attaching, two end caps, two F-51 Brackets and one G-51 Joint Splice Brackets, with lag-screws.

Finish: Japan or Hot Galvanized.

Packed one dozen and one-half dozen sets in a case.

Weight, per dozen sets, 106 pounds, per half-dozen pairs, 54 pounds.

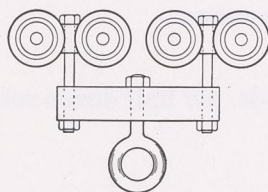
No. 50 $\frac{1}{2}$ Trolley
With Eye Bolt



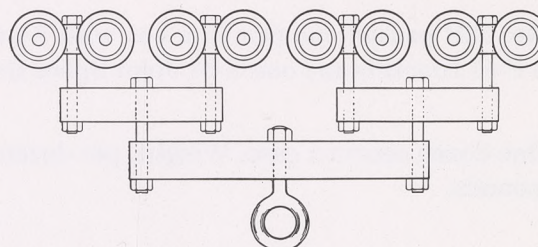
For use with No. 51 Trolley Rail as an overhead carrier.

Packed one in a box with one pair end-caps.

Weight, each 1 $\frac{3}{4}$ pounds.



No. 50 $\frac{1}{2}$ A



No. 50 $\frac{1}{2}$ B

Special Trolleys for heavy loads can be furnished as illustrated.

Also other combinations may be had. Prices on request.

No. 52 Trolley Door Hanger

Flexible and Adjustable
(Patented)

Incorporates all the splendid features of the No. 50 Trolley Hanger. The same wheels, truck, and large bearings. In addition, it has a new and exclusive type of flexible hinge-joint. When the door is hanging in its normal position, the hanger is absolutely rigid; should anything bump against the door, the flexible joint allows it to swing out. Vertical and lateral adjustments.

For use with No. 51 Trolley Rail.

Finish: Japanned or Hot Galvanized.

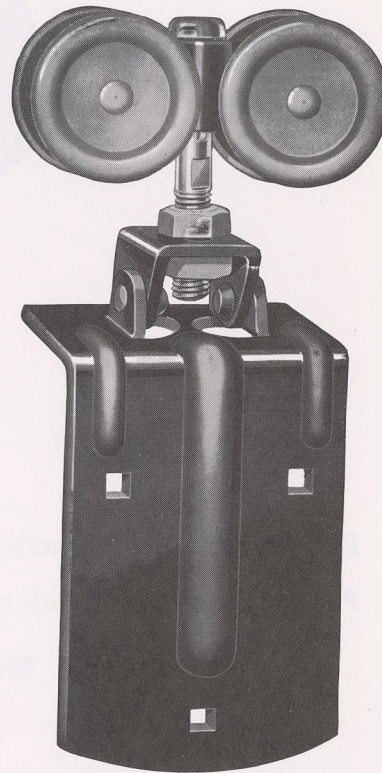
Packed one pair in a box with two end-caps and bolts for attaching.

One dozen and one-half dozen pairs in a case.

Weight, per dozen pairs, 78 pounds, per half dozen pairs, 41 pounds.

No. 52B packed one pair in a box with $2\frac{1}{4} \times \frac{5}{16}$ bolts for attaching, two end-caps, two F-51 Brackets and one G-51 Joint Splice Bracket, with lag-screws.

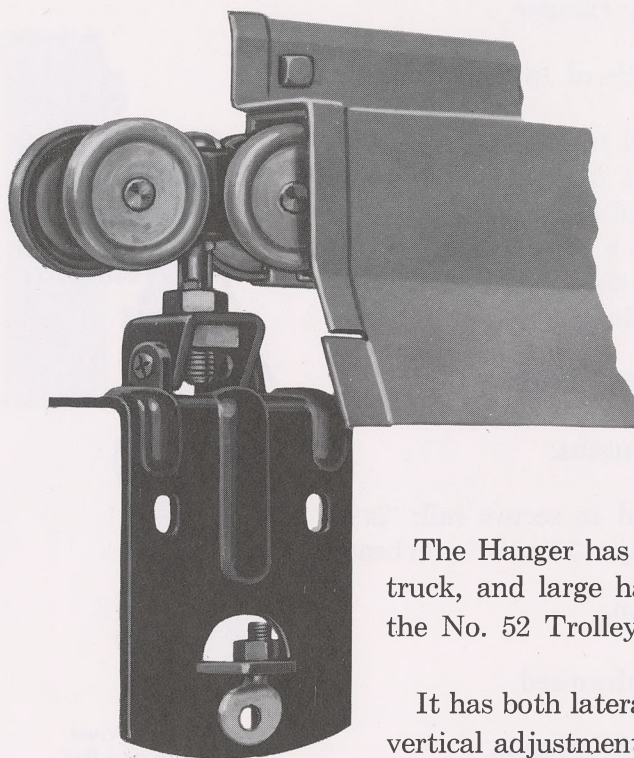
One dozen sets in a case. Weight, per dozen sets, 107 pounds, per half dozen sets, 56 pounds.



No. 52 Trolley Hanger



No. 53 Trolley Door Hanger



No. 53 Trolley Hanger

For use with No. 59
Covered Trolley Rail.
(See page 22.)

For doors weighing
up to 350 pounds.

The Hanger has the same $2\frac{1}{8}$ " diameter wheels, truck, and large hardened steel roller bearings as the No. 52 Trolley Hanger.

It has both lateral and vertical adjustments. The vertical adjustment is the same as used on the No. 88 Storm Proof Hanger, and requires no mortising.

The Hanger has the same exclusive type of flexible hinge-joint as the No. 52 Trolley Hanger. When the door is hanging in its normal position, the Hanger is absolutely rigid. Should anything bump against the door, the flexible joint allows it to swing out.

Finish: Japanned or Hot Galvanized.

Packed one pair in a box with lag bolts for rail, end caps, and $2\frac{1}{4} \times \frac{5}{16}$ -inch bolts for attaching hanger to door. One dozen and one-half dozen pairs in a case.

Weight, per dozen pairs, 87 pounds, per half-dozen pairs, 45 pounds.

No. 59 Covered Trolley Rail

For use with No. 53 Trolley Hanger.

Both rail and cover are made of 16 gauge steel.

The rail is carefully formed the same as our No. 51-16 to give an even, perfect tread for the hanger wheels. The cover is spot-welded to the rail. No brackets required as the rail forms a continuous bracket. The splice joint of the cover is dovetailed on the same principle as the Storm Proof Rail.

For doors weighing up to 350 pounds.

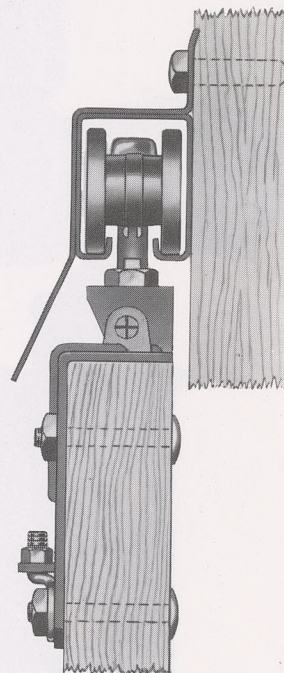
Made in 6, 8, and 10 foot lengths.

Size of lag screws furnished to secure rail: $2 \times \frac{3}{8}$ inches. Size of screws for end caps: $1 \frac{1}{4} \times 12$ round head.

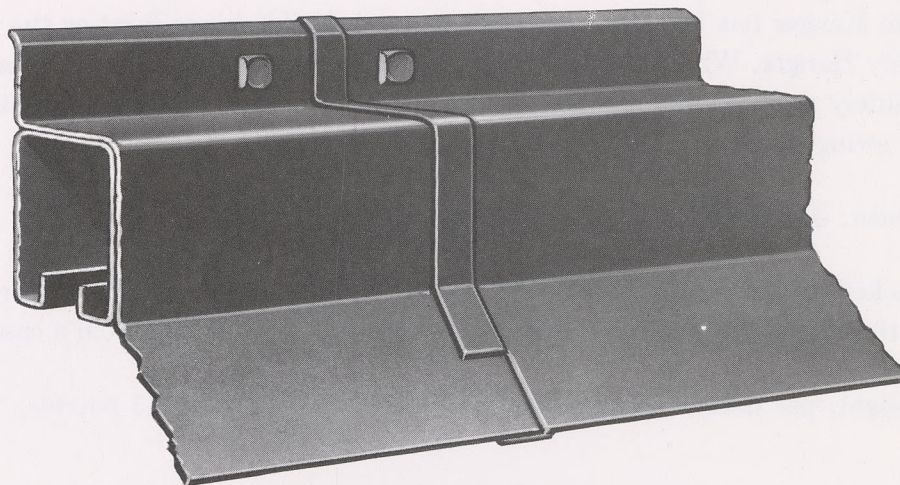
Packed two pieces in a bundle.

Finish: Japanned or Hot Galvanized.

Weight, per hundred feet, 333 pounds.



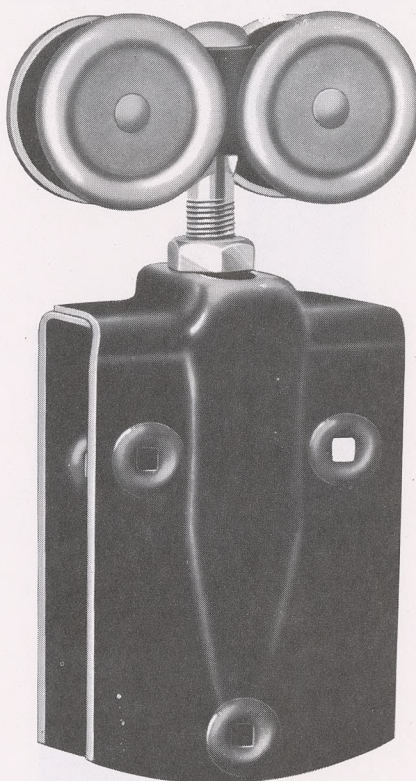
Sectional View
Hanger and Rail



No. 59 Covered Trolley Rail



No. 54B Trolley Door Hanger Set



No. 54 Trolley Hanger

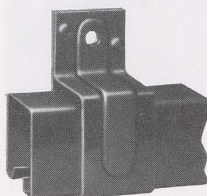
For use with No. 51 Trolley Rail.

The Hanger has the same wheels, truck and large bearings as the No. 50 Trolley Hanger. The double drop strap is slightly embossed for additional strength.

Vertical and lateral adjustments.

Finish: Japanned or Hot Galvanized.

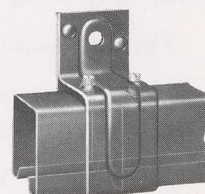
Packed one pair in a box with two F-51 brackets and one G-51 joint splice bracket, two end-caps and sufficient 1½x14 screws for attaching Hangers to door.



F-51 Bracket

Packed one dozen sets in a case.

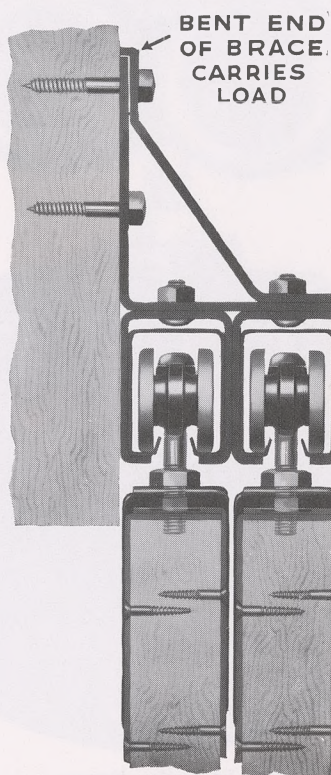
Weight, per dozen sets, 118 pounds.



G-51 Joint Splice Bracket
(Patented)

No. 54 Trolley Door Hanger

For doors to pass each other



Specially designed for use on sliding doors that pass each other, using No. 51 Trolley Rail.

The Hanger has roller bearings, vertical and lateral adjustments and double drop strap, slightly embossed for additional strength.

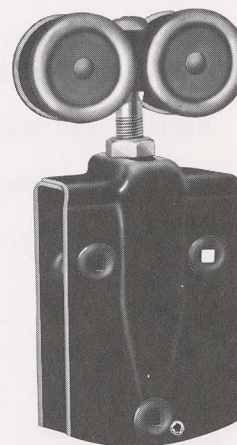
Doors can be hung close together, as screw heads are flush with drop strap.

Finish: Japanned or Hot Galvanized.

Packed one pair in a box with $1\frac{1}{2}$ x14 screws for attaching and two end-caps.

No. 50 and No. 52 Hangers can also be used for doors to pass each other.

Weight, per dozen pairs, 81 pounds.



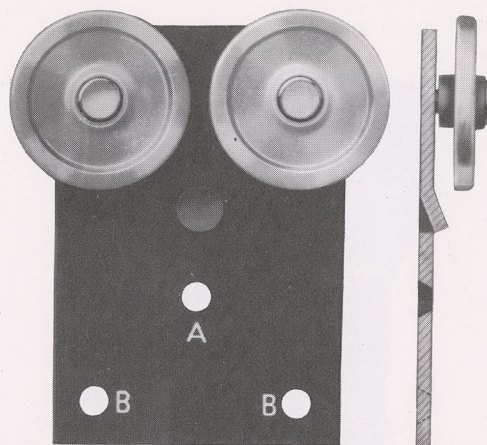
No. 54 Trolley Hanger



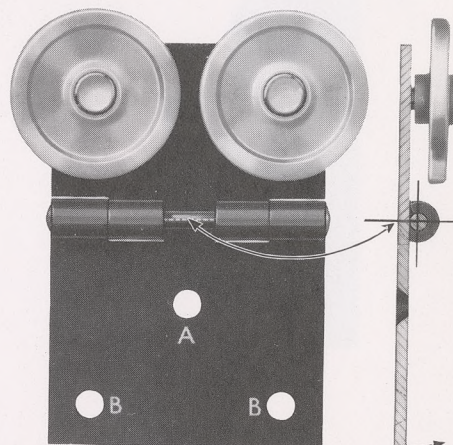
Trolley Door Hangers

(Nylon Wheels)

For very light doors to pass each other



No. 56 Rigid



No. 57 Flexible

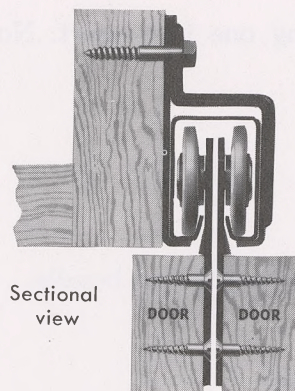
First, drive center screw "A" while door is on ground. Hang door in rail, permitting all wheels to settle on rail, insuring equal distribution of load to each wheel. Then drive screws "B."

No. 56 Rigid

Specially designed for use with No. 51 Trolley Rail for doors to pass (see cut below) and No. 51½ Trolley Rail (see page 26) and lightweight doors.

No. 57 Flexible

Construction same as No. 56 Hanger, except it has flexible hinge joint with stop to hold hanger rigid in vertical position.

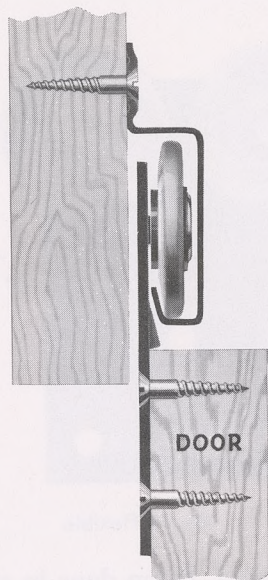


Finish: Zinc.

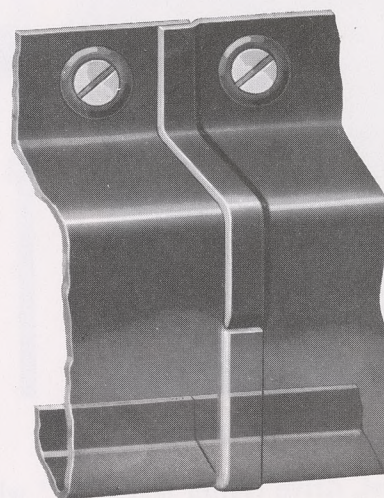
Packed one pair in a box with screws for attaching and end caps. Two dozen pairs in a case.

No. 56—Weight, per dozen pairs, 30 pounds.

No. 57—Weight, per dozen pairs, 35 pounds.

No. 51 1/2 Single Trolley Rail

Sectional view showing
No. 56 Trolley Hanger



View showing
dovetailed joint

A single Trolley Rail for lightweight doors. For use with Nos. 56 and 57 Trolleys Hangers. (See page 25.)

Made of 16 gauge steel with screw-holes for attaching one foot apart. No brackets required.

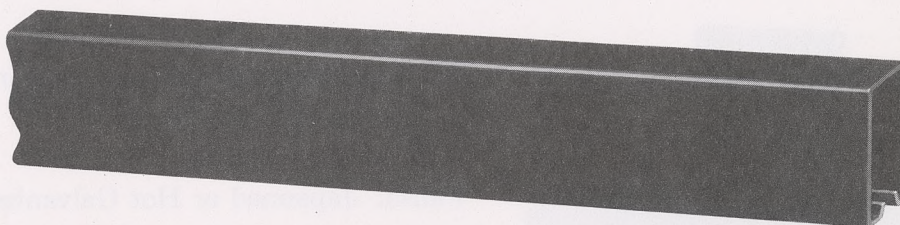
Screws for attaching the rail are not furnished.

Made in 6-, 8- and 10-foot lengths only. Four pieces of a length in a bundle.

Weight, per hundred feet, 112 pounds.



No. 51 Trolley Rail



For use with Nos. 50, 52 and 54 Trolley Barn Door Hangers; also Nos. 853, 855, and 855½ Trolley Garage Door Hangers.

Made of heavy-gauge steel. Carefully formed to give an even, perfect tread for the hanger wheels. Inside dimensions, 1¾ inches by 2¼ inches.

No. 51-16 (of 16 gauge steel) for doors weighing up to 350 pounds. Space brackets 24 inches apart.

Made in 4-, 6-, 7-, 8-, 9- and 10-foot lengths.



Sectional view of 51-14 and 51-16 Rail, full size

No. 51-14 (of 14-gauge steel) for doors up to 400 pounds. Space brackets 18 inches apart.

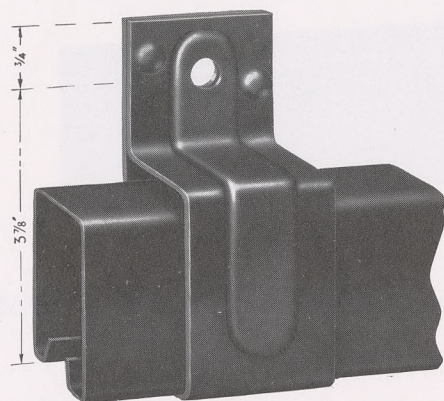
Made in 6-, 8- and 10-foot lengths.

Packed four pieces of a length in a bundle.

Finish: Japanned or Hot Galvanized.

Weight, per hundred feet, No. 51-16, 165 pounds; No. 51-14, 205 pounds.

No. 51 Trolley Rail Brackets



F-51 Bracket

No. F-51 Brackets are used to hang the rail, being placed two feet apart.

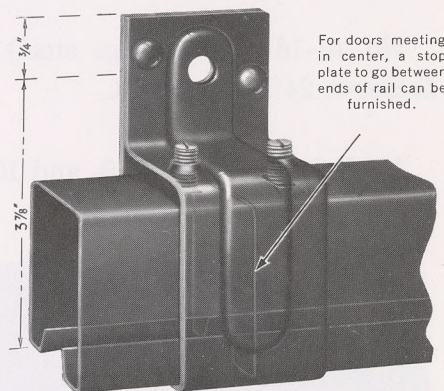
Finish: Japanned or Hot Galvanized.

Packed twenty-five in a box, with $\frac{3}{8}$ x2-inch lag-screws.

Weight, per each, 12 ounces.

This joint splice bracket provides a positive method of firmly fastening the No. 51 rail sections into one continuous length.

On each side of the embossing, at the top of the bracket, there is a locking screw which enters slotted holes in end of rail. The screws are tapered and when inserted will press the rail firmly against bottom of the bracket, pulling the two lengths of rail together and holding them securely in position.



G-51 Joint Splice Bracket
(Patented)

These brackets can also be used with rail not provided with holes for screws. The points of the screws are sharp and will make a sufficient indentation to hold the sections securely.

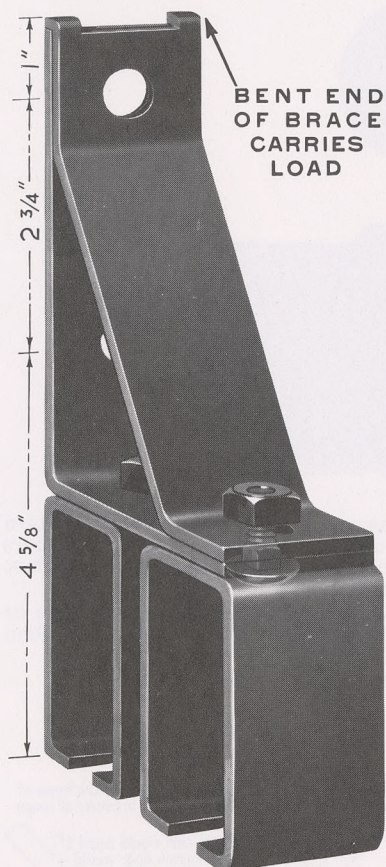
Finish: Japanned or Hot Galvanized.

Packed twenty-five in a box, with $\frac{3}{8}$ x2-inch lag-screws.

Weight, per each, 13 ounces.



No. 51 Trolley Rail Brackets



H-51 Double Trolley Bracket

For use on construction where doors are hung to pass each other, using No. 51 Trolley Rail.

The brackets for the rail are attached to the extension arm with carriage bolts which hold them firmly in position. They can be adjusted either in or out by simply loosening the nut. The bolts cannot turn in the bracket arm, as they have a square shoulder.

As two runs of rail side by side must have very strong support, the outside extension brace is made so the bend comes very close to the nut in the outside bracket. This construction gives the utmost strength.

Finish: Japan or Hot Galvanized.

No. H-51—Packed 10 in a box, with two $\frac{1}{2}$ x2-inch lag-screws.
Weight, 3 pounds each.

No. HS-51—Has set-screws for joining two sections of rail.
Weight, with lag-screws, 3 pounds each.

No. K-51—A triplicate bracket for three parallel runs of rail.
Weight, with $\frac{1}{2}$ x2-inch lag-screws, $4\frac{1}{2}$ pounds each.

No. KS-51—Triplicate Joint splice bracket.

Weight, with $\frac{1}{2}$ x2-inch lag-screws, $4\frac{1}{2}$ pounds each.

Ceiling Brackets

No. J-51—For use on construction where rail is attached to ceiling. Cross bar can be turned to use in two positions as illustrated.

Weight, $1\frac{1}{4}$ pounds each.

No. J-51-2—Double Ceiling Bracket.

Weight, $1\frac{3}{4}$ pounds each.

No. JC-51—With split bolt.

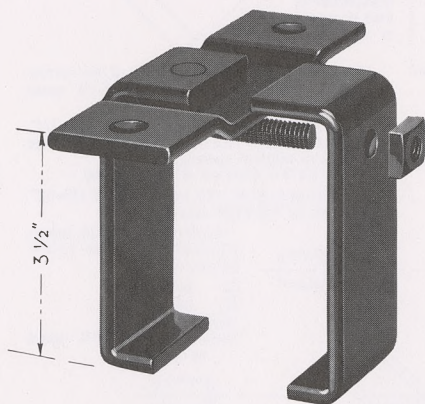
Weight, $1\frac{1}{4}$ pounds each.

No. JS-51—With set-screws for joining two sections of rail.

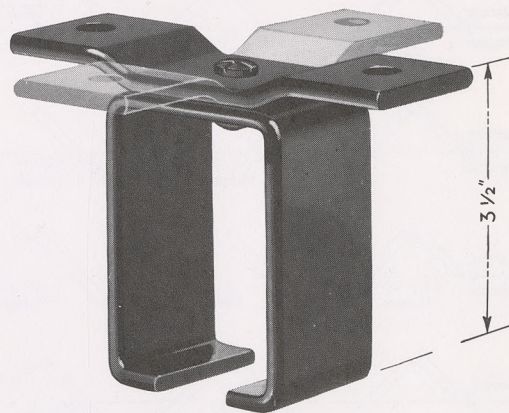
Weight, $1\frac{1}{4}$ pounds each.

Finish: Japan or Hot Galvanized.

Furnished with $\frac{3}{8}$ x2-inch lag-screws.

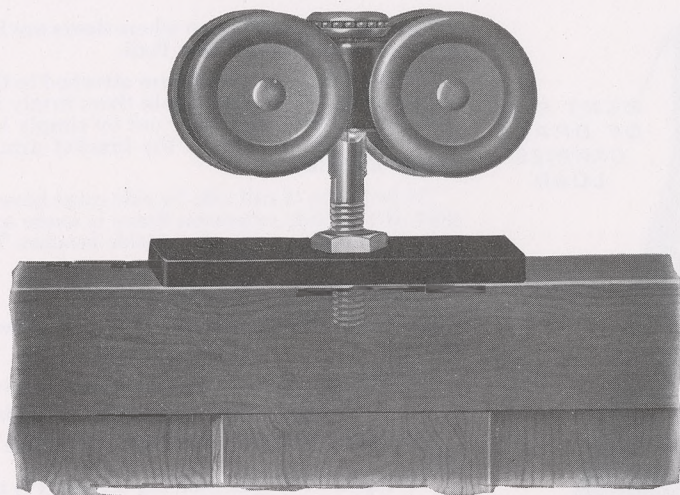


JC-51 Ceiling Bracket



J-51 Ceiling Bracket

No. 47 Adjustable Accordion Door Hanger



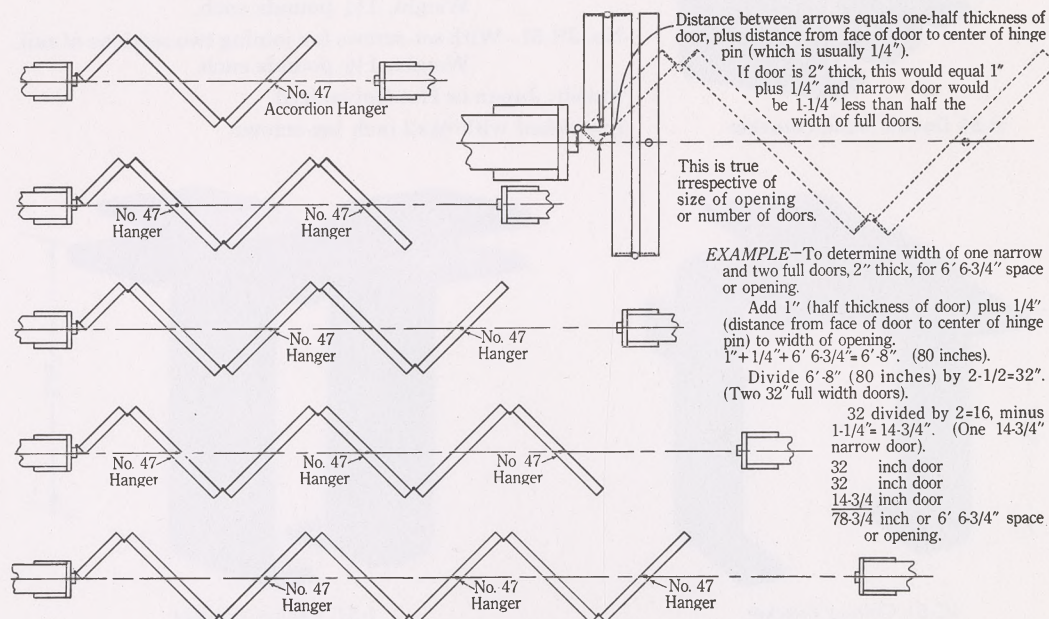
The swivel of hanger is ball-bearing. The same truck is used as with our Trolley Garage and Barn Door Hangers. Used extensively in churches, schools, auditoriums, etc., where a number of doors in an opening are hung in series. Attached to top of door with a heavy flat plate, $1\frac{1}{2}$ x 5 inches, using six 2 x 10 screws. Plates for thinner doors can be furnished.

The No. 51 Trolley Rail together with ceiling brackets is used in connection with this hanger or the rail may be attached directly to the header, holes being drilled in the rail for the screws, when so specified.

The No. 42 Trolley Hanger, page 13, is used for heavy accordion doors.

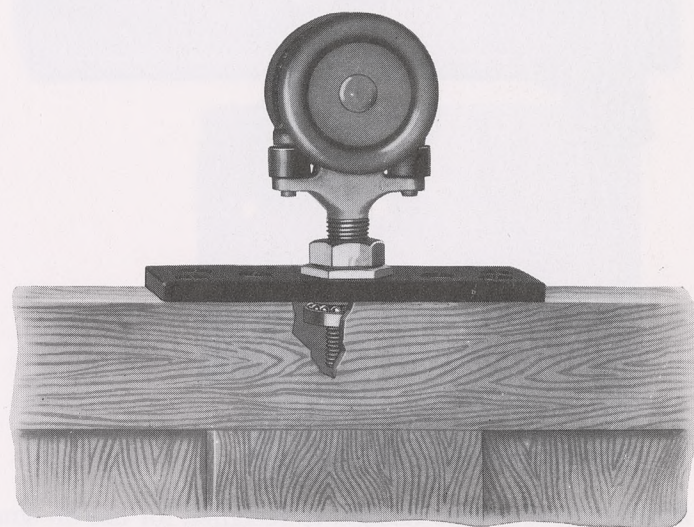
Packed two in a box with screws.

Weight, two only, 5 pounds.





No. 47½ Adjustable Accordion Door Hanger
Single Wheel



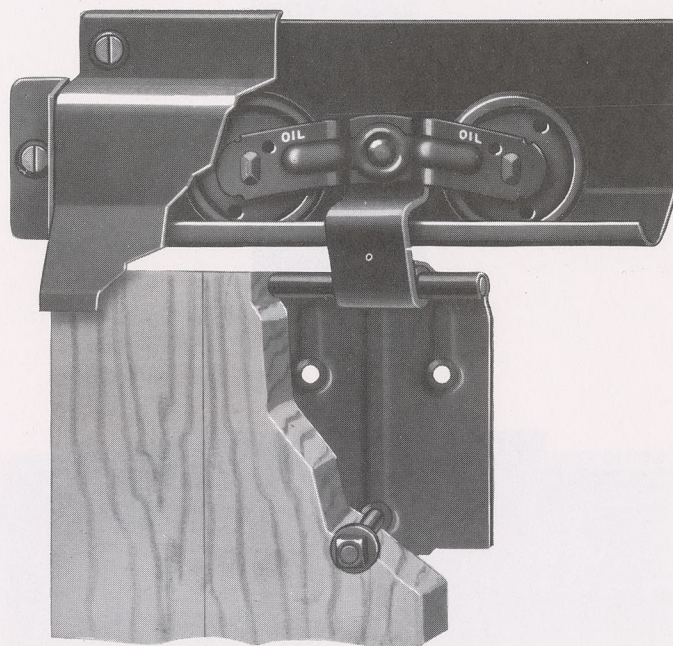
The construction is the same as the No. 47 Accordion Door Hanger (see page 30), except that single truck is used and two small rollers to reduce the friction on rail.

Plate for top of door 1½ x 5 inches. Size of screws 2 x 10 flat head.

For use with No. 51 Trolley Rail, when a hanger is used on each door in an opening.

Packed two in a box, with screws.

Weight, two only, 3¼ pounds.

No. 55 Storm-Proof Junior Door Hanger

The No. 55 Storm-Proof Junior Hanger is designed for use on small barn doors, inside stable doors, shed doors and garage doors weighing not over 200 pounds.

All the exclusive features used in the "Big 4" and Nos. 77 and 88 Storm-Proof Hangers are found in No. 55 Storm-Proof Junior.

Each hanger has two 2¼" diameter wheels, in tandem, with anti-friction, steel-hardened roller bearings.

No great care is required in attaching the hangers to the doors as the equalizing-pin in the center of the wheel-truck insures even distribution of the load to each wheel.

It is both a rigid and a flexible hanger. When the door hangs straight down, there is no vibration in the hanger, but the hinged joint allows it to swing out should anything bump against the door.

Oil holes in the cover and truck straps are provided.

It is fastened to but one side of the door, which makes it much easier to attach than the clevis-style hanger.

Finish: Japanned or Hot Galvanized.

These hangers are packed one pair in a box, with 2¼ x 5/16 bolts for attaching the hangers to the doors, also screws for hanging the rail, and end caps.

Packed one dozen and one-half dozen pairs in a case.

Weight, per dozen pairs, 54 pounds, one-half dozen pairs, 29 pounds.



No. 58 Storm-Proof Junior Rail

In principle and design, the No. 58 Storm-Proof Junior Rail is identical with No. 60 Storm-Proof Rail. The only difference is in the size and weight.

It is storm-proof and bird-proof; it shields the top of the door from snow, rain and wind. As compared to other Junior type barn door rails this is a distinctive feature in the National No. 58 Junior.

It fits closely against the building.

No brackets are required, as the rail itself forms a continuous bracket.

The rail is exceedingly strong and will support all the weight the hangers will carry.

The rail joints are dovetailed, forming the sections in practically a one-piece rail. No splice covers necessary.

The cover can be removed at any time for painting inside of rail.

The smaller holes at each end of the tread-part are for use in nailing the rail into position until the screws can be inserted, as clearly illustrated in directions packed with each pair of hangers. A great convenience.

Two pieces of a length, both cover and rail, are packed in a bundle. The parts nest compactly together, and consequently occupy less than one-half the space in the store room of any other enclosed rail.

The holes for screws are one foot apart.

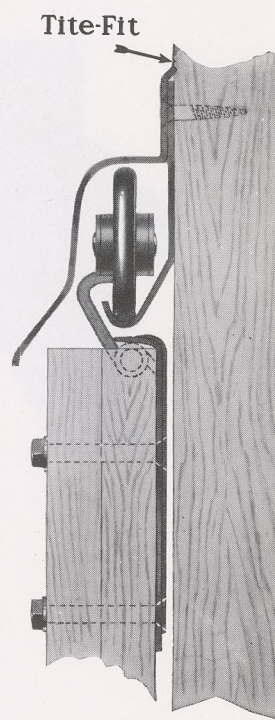
1 1/4x14 screws are furnished to secure rail to building.

Finish: Japanned or Hot Galvanized.

No. 58 Storm-Proof Junior Rail is packed for shipment in the same manner as is No. 60 Storm-Proof Rail. For method of packing, see page 38.

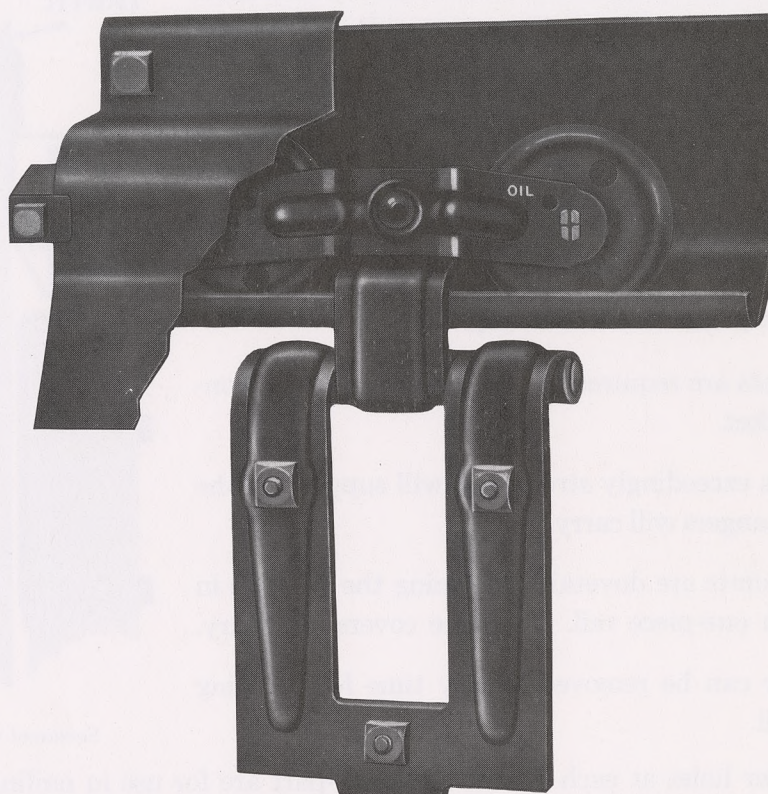
Made in 4-, 6-, 8- and 10-foot lengths.

Weight, per hundred feet, 185 pounds.



Sectional view

No. 77 Flexible Storm-Proof Door Hanger
(Patented)



The No. 77 Storm-Proof Hanger incorporates all the excellent features of the No. 66 Storm-Proof Hanger, and in addition it has the flexible hinge-joint. When the door hangs straight down, there is no vibration in the Hanger, but the hinged joint allows it to swing out should anything bump against the door. Carrying capacity, up to 350 pounds.

The connecting-strap and drop-strap are heavily embossed, increasing the already great strength of the Hanger. The method of attaching connecting-strap to truck permits the free action of the equalizing-pin, and holds the truck firmly in an upright position. The steel used in drop-strap and connecting-strap is $\frac{3}{16}$ inch thick.

Oil-holes for bearings are also provided.

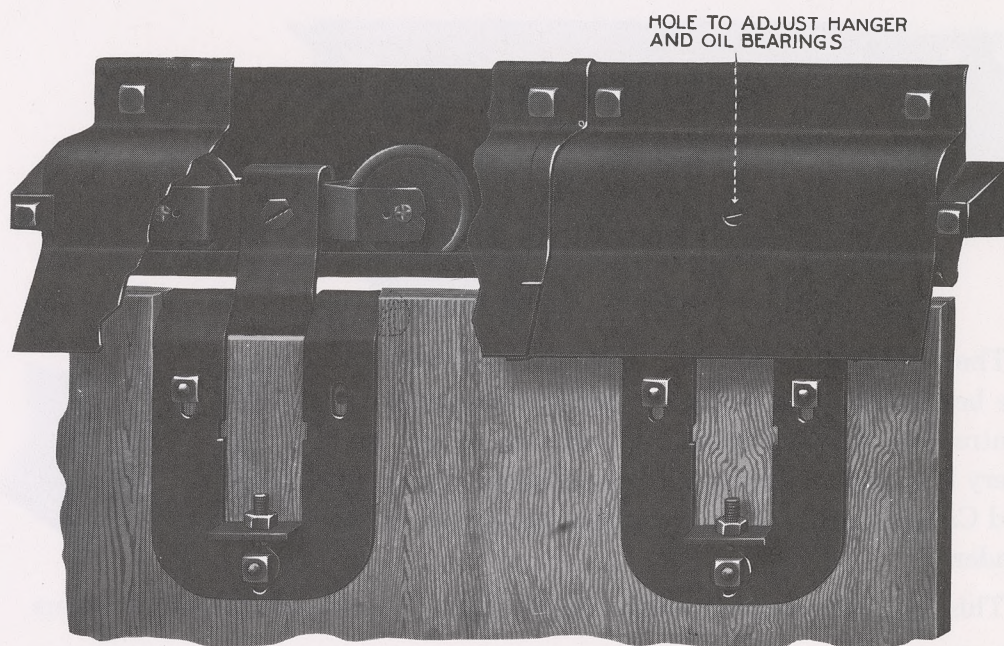
Finish: Japanned or Hot Galvanized.

Packed one pair in a box, with $2\frac{1}{4} \times \frac{5}{16}$ bolts for attaching the Hangers to door; also lag-screws and end-caps for the rail. Each box contains also a set of illustrated directions for attaching the Hangers and rail.

Packed one dozen pairs in case. Weight, per dozen pairs, 93 pounds.



No. 88 Adjustable Storm-Proof Door Hanger



The Adjustable Storm-Proof Hanger illustrated is used in connection with Storm-Proof Rail. It has two adjustment features, vertical and lateral. The adjustment construction is very simple and is easily operated.

Each Hanger has two $2\frac{3}{4}$ " diameter wheels, in tandem, with hardened anti-friction steel roller bearings.

Another distinctive feature of this construction is that the door is carried closer to the rail than with any other adjustable hanger we know of.

Carrying capacity, 350 pounds.

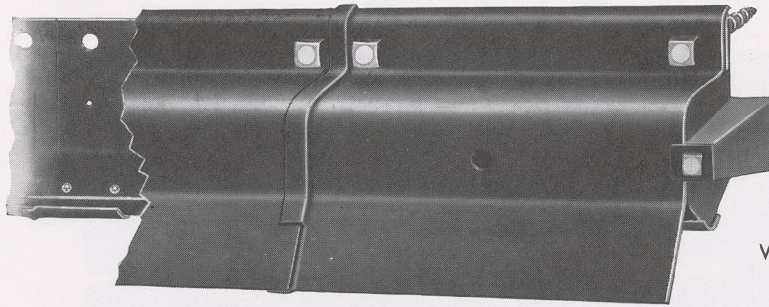
Finish: Japanned or Hot Galvanized.

The Hangers are packed one pair in a box, with $2\frac{1}{4} \times \frac{5}{16}$ bolts for attaching the Hangers to the door; also lag-screws and end caps for the rail. Each box contains also a set of illustrated directions for attaching the Hangers and rail.

Packed one dozen and one-half dozen pairs in a case.

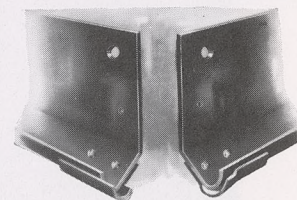
Weight, per dozen pairs, 111 pounds, one-half dozen pairs, 57 pounds.

No. 60 Storm-Proof Rail (Patented)



View showing construction of Rail Joint

The steadily increasing sale of the Storm-Proof Rail is the best evidence as to its popularity with dealers and contractors. Several millions of feet are in use, under every imaginable condition, in all sections of this country and Canada, and in all cases satisfactory service is being rendered.



This rail is for use with either the No. 77 or No. 88 Storm-Proof Hangers.

It fits closely against the building.

It is storm-proof and bird-proof.

No brackets are required, as the rail itself forms a continuous bracket.

The rail joints are dovetailed, forming the sections in practically a one-piece rail. No splice covers necessary.

The cover can be removed at any time for painting inside of rail.

The smaller holes shown in the illustration are for use in nailing the rail into position until the lag-screws can be inserted, as clearly illustrated in directions packed with each pair of hangers.

The holes for lag-screws are 2 feet apart.

Size of lag-screws furnished to secure rail, 2 x $\frac{3}{8}$ inches; to secure end-caps in rail, 3 $\frac{1}{2}$ x $\frac{5}{16}$ inches.

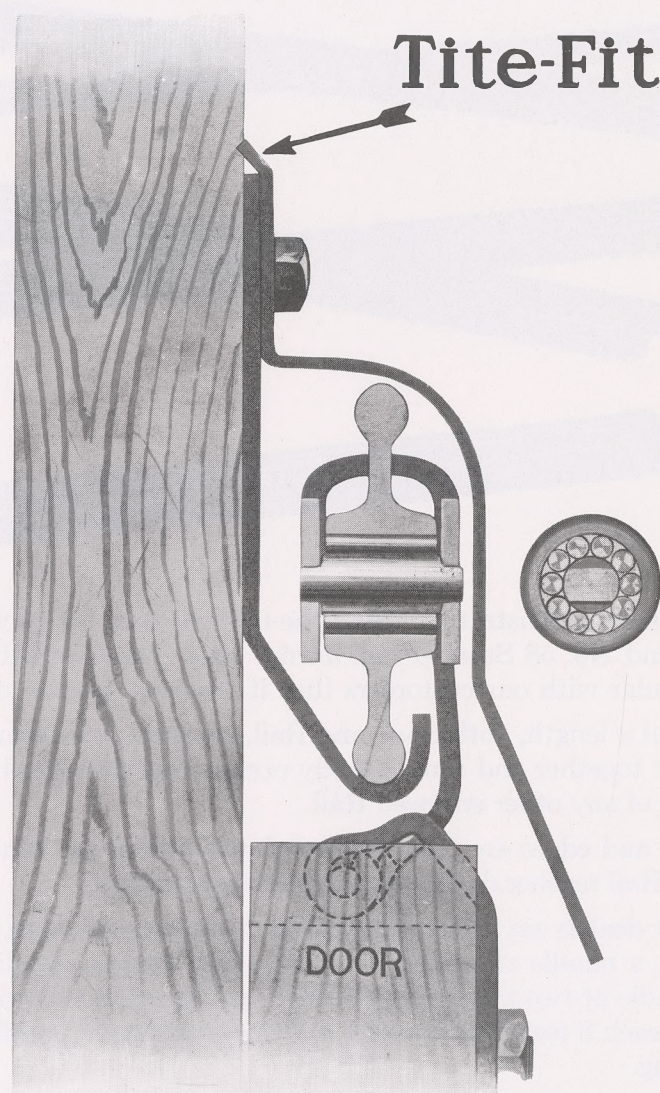
Finish: Japanned or Hot Galvanized.

Made in 4-, 6-, 8- and 10-foot lengths, two pieces of a length in a bundle. (For method of packing, see page 38.)

Weight, per hundred feet, 284 pounds.



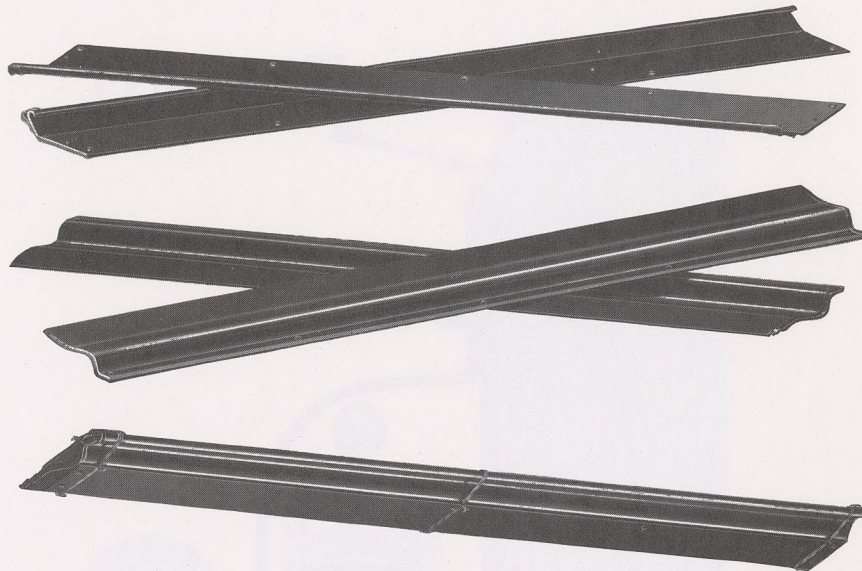
Sectional View of No. 60 Storm-Proof Hanger and Rail



This illustration shows very clearly the extra length of the cover. The cover comes down to a point where it fully protects the opening above the top of the door.

Note the "Tite-Fit" Storm-Proof feature at the top, the perfect tread for the wheels and the roller bearings with which each wheel is equipped.

Method of Packing No. 60 Storm-Proof Rail



The accompanying illustration shows the method used for packing our No. 60 Storm-Proof and No. 58 Storm-Proof Junior Rail. This method of packing has proved so popular with our customers that it deserves special mention.

Two pieces of a length, both cover and Rail, are packed in a bundle. The parts nest compactly together and consequently occupy less than one-half the space in the store room of any other enclosed Rail.

The corners and edges are fully protected and cannot get bent in shipping or handling. The Rail reaches destination in perfect condition.

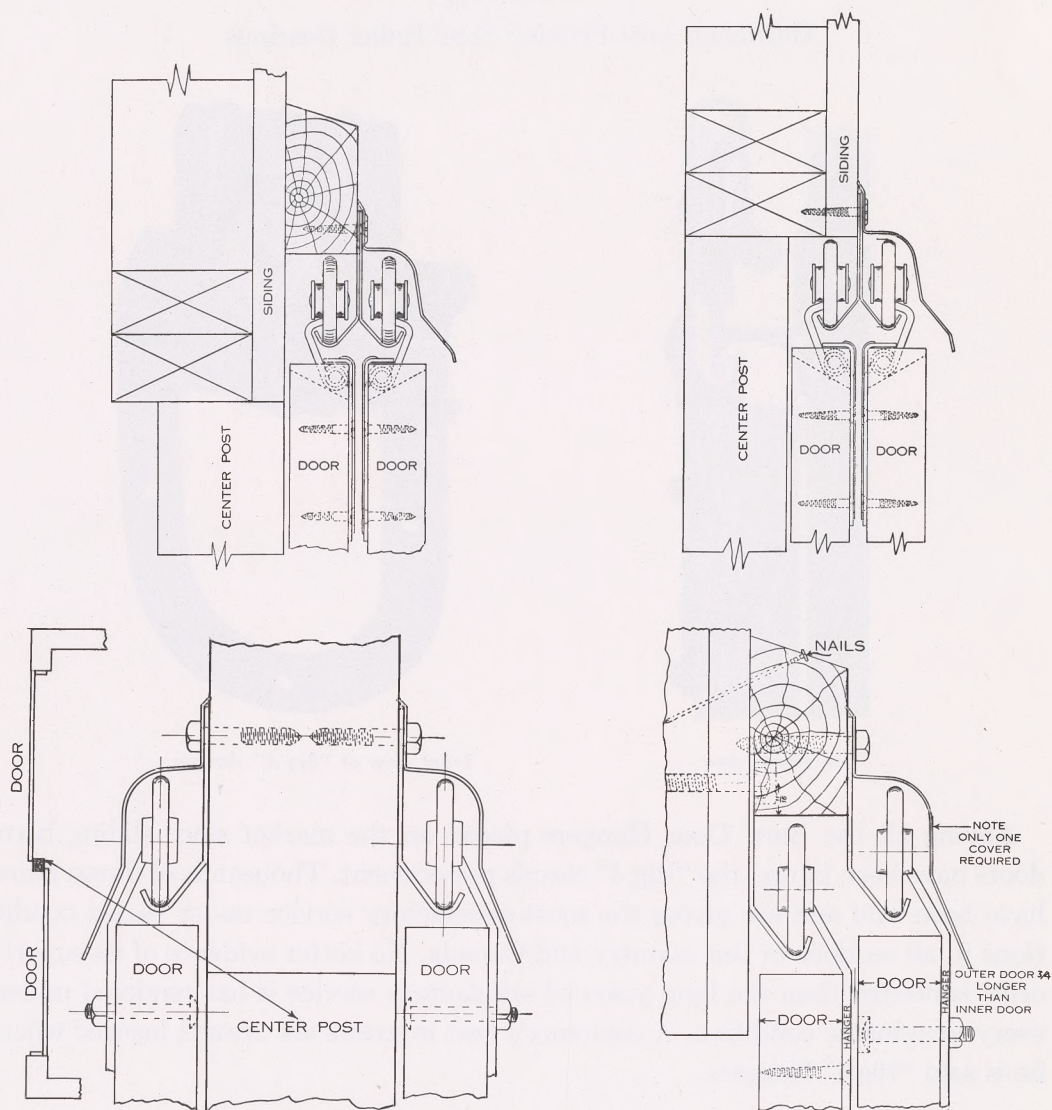
Many of our dealers say they seldom find it necessary to open a bundle. For a 4-foot opening, a bundle of two pieces, each 4 feet long, is supplied; for a 6-foot opening, a bundle of two pieces, each 6 feet long; for an 8-foot opening, a bundle of two pieces, each 8 feet long; and for a 10-foot opening, a bundle of two pieces, each 10 feet long.

As the most particular part of hanging a door is lining up the track properly on the building, the Rail is made in two pieces, track and cover. The carpenter has only one-half the weight to handle while lining up the Rail, as the cover is not put in place until everything is ready for inserting the lag-screws. The Rail is very easy to handle, as it is perfectly flat.

All these features have been adopted only after careful investigation and experiment, and should be taken into consideration when comparing Storm-Proof with other enclosed rails.



Methods of Hanging Doors to Pass Each Other



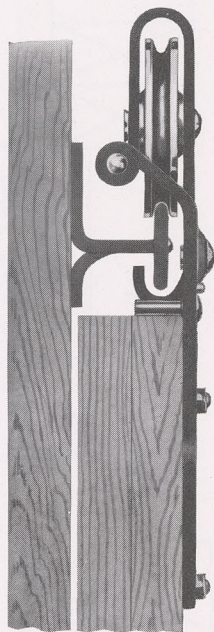
The above drawings illustrate interesting and practical methods of hanging doors to pass each other. Any of the Storm-Proof Hangers and Rail can be used for the installations outlined above.

No special brackets or equipment are required. Note that on three drawings only one cover is used, reducing the cost quite materially.

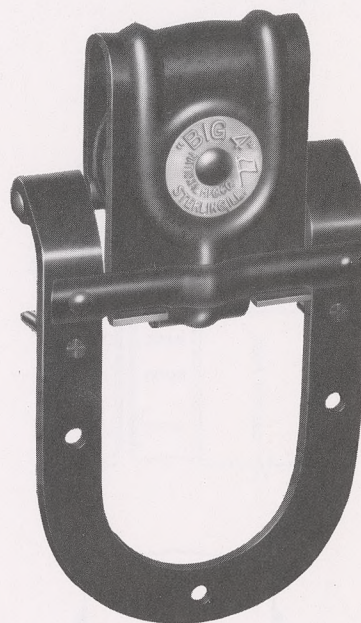
"Big 4" Flexible Door Hanger

(Patented)

Hardened Anti-Friction Steel Roller Bearings



Sectional view



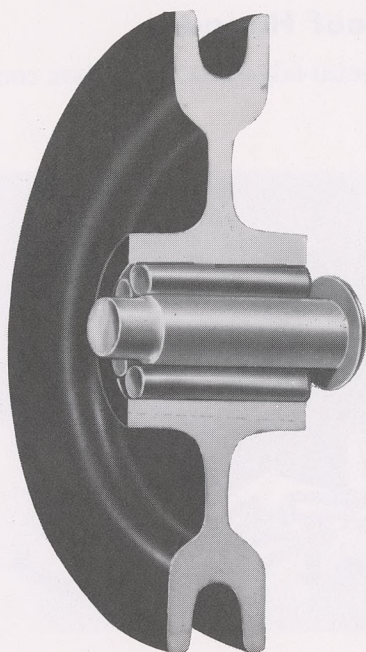
Front view of "Big 4" Hanger

Among all the Barn Door Hangers placed on the market since sliding barn doors have been in use, the "Big 4" stands pre-eminent. Thousands of dozen pairs have been sold and are giving the most satisfactory service under varied conditions in all sections of this country and Canada. No better evidence of its superiority is needed than the long years of satisfactory service it has rendered under every imaginable condition. A customer's best interests are always insured when he is sold "Big 4" Hangers.

The following is a detailed description:

First—The "Big 4" Hanger is built on extremely heavy lines, and in the simplest form of construction. To give greater strength we emboss the hood as shown in the illustration. No complicated parts to get out of order.

Second—The Hanger is made entirely of steel. It is supplied with hardened anti-friction-steel roller bearings, giving a perfectly free motion to the door.



Sectional view of Axle and extra long hardened Bearings

Third—It is both a flexible and a rigid Hanger. When the door is hanging in its normal position, the Hanger is perfectly rigid, there being no vibration as in other flexible hangers. At the same time, if anything should bump against the door, the flexible feature comes into play and the door is allowed to swing out and rise higher than with any other flexible hanger.

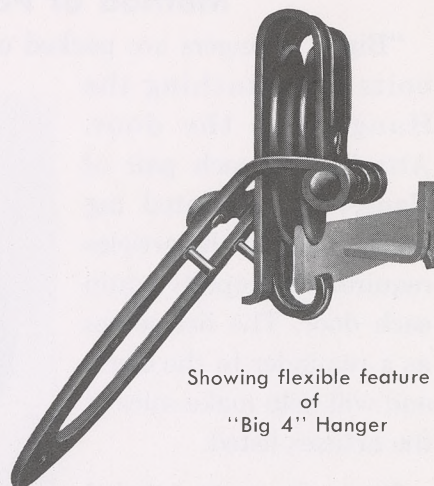
Fourth—The Hanger is fastened to but one side of the door, which makes it much easier to attach than the clevis-style hanger.

Fifth—There are three bolt-holes in each Hanger, and when coupled up the door comes closer to the track than with any other hanger.

Sixth—The axle has a shoulder on the end, which prevents the wheel-housing from being pressed together and binding on the hub of the wheel. *The axles and rivets are zinc plated, to prevent rust.*

Seventh—The wheel and frame are japanned before assembling, and the wheel is reamed out *after* japanning. This method prevents the japan from getting into the bearings, as it would if the Hanger were dipped after being assembled.

Eighth—The two studs, together with the hook turned under the rail, absolutely prevent the Hanger from jumping the track. The two studs serve also as a guide to attach Hangers to the door.



Showing flexible feature of "Big 4" Hanger

Packed one pair in a box. One dozen and one-half dozen pairs in a case.
Weight, per dozen pairs, 98 pounds, one-half dozen pairs, 50 pounds.

Method of Packing Storm-Proof Hangers

Storm-Proof Hangers are packed one pair in a metal-edge box. Each box contains the following:

- 1 pair Hangers.
- 2 end-caps for Rail.
- Enough $2\frac{1}{4} \times \frac{5}{16}$ -inch bolts to attach Hangers to door.
- 2 lag-screws, $3\frac{1}{2} \times \frac{5}{16}$ inches, to attach end-caps in Rail.
- 9 lag-screws, $2 \times \frac{3}{8}$ inches, to attach Rail to building.
- 1 card of directions.

Socket wrenches for lag-screws and bolts are also furnished, one with every six pairs of Hangers. Box containing wrench is distinguished by a special label.

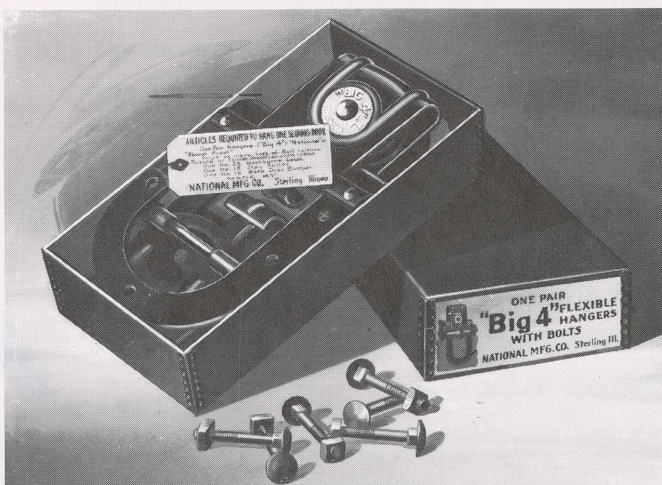
Boxes are neatly labeled and will make an attractive appearance on your shelves.



Method of Packing "Big 4" Hangers

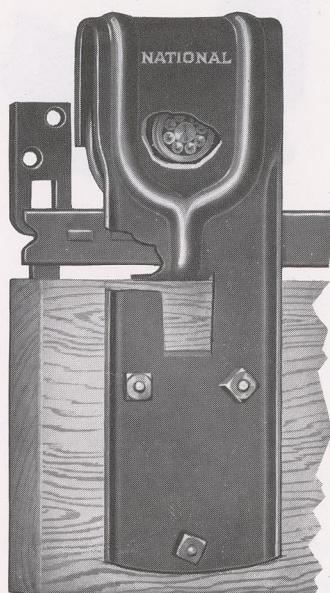
"Big 4" Hangers are packed one pair in a metal-edge box with $2\frac{1}{4} \times \frac{5}{16}$ -inch bolts for attaching the Hangers to the door. Attached to each pair of Hangers is a printed tag giving a list of the articles required to properly equip each door. The list serves as a reminder to the clerk, and will help make sales of the articles listed.

Boxes are neatly labeled and will make an attractive appearance on your shelves.





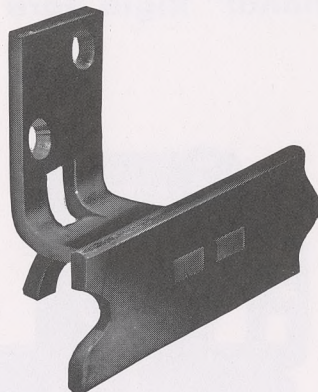
No. 11 "National" Rigid Barn Door Hanger



The embossed steel frame, with edges turned up, makes it very rigid. The lug turned in under the rail keeps the wheel from getting off, and serves as a guide for putting the Hanger on the door. Fitted with hardened anti-friction-steel roller bearings. Packed one pair in a box, with $2\frac{1}{4} \times \frac{5}{16}$ bolts. One dozen and one-half dozen pairs in a case. See page 41 for illustration showing bearings.

Width, $3\frac{1}{2}$ inches. Diameter of wheel, $3\frac{1}{2}$ inches.

Weight, per dozen pairs, 67 pounds; one-half dozen pairs, 35 pounds.

No. 44 "Braced" Rail

1 1/4 x 3/16 inches. Made in 4-, 6-, 7-, 8-, 9-, 10- and 12-foot lengths.

This Rail is used with the "Big 4" and No. 11 "National" Hangers and Nos. 850, 851, 852, and 852 1/2 Swivel Hangers.

During the time it has been on the market, millions of feet have been sold and are giving universal satisfaction.

The following are points of superiority:

The brackets are the same width and thickness as the Rail itself.

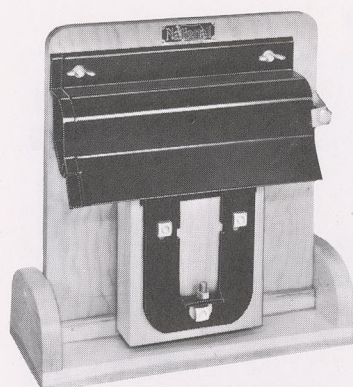
Braced below, thereby diminishing strain on the screws. This bracing feature triples the carrying strength.

The holes are staggered, so the screws will not go into the same grain of wood.

The brackets are only 12 inches apart and double-riveted, making it very rigid.

Any flat-rail barn door hanger will run on it.

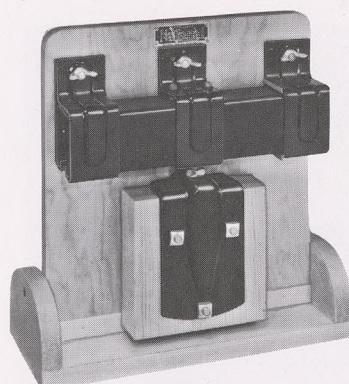
Eight pieces of a length in a bundle.
Weight, per hundred feet, 103 pounds.



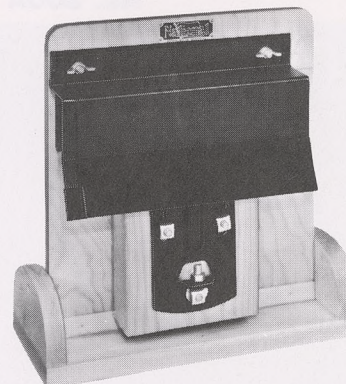
No. 88 Storm Proof Hanger
No. 60 Storm Proof Rail



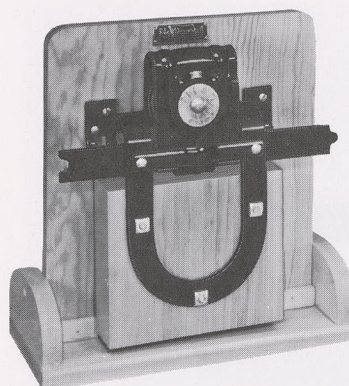
No. 55 Storm Proof Jr. Hanger
No. 58 Storm Proof Jr. Rail



No. 52 Trolley Hanger
No. 51-16 Trolley Rail



No. 53 Trolley Hanger
No. 59 Trolley Rail



Big 4 Hanger
No. 44 Braced Rail

Hanger and Rail Models

Any two of above models can be made up as a double model by mounting back to back.

No. 88 Model, weight 19 pounds

No. 55 Model, weight 16 pounds

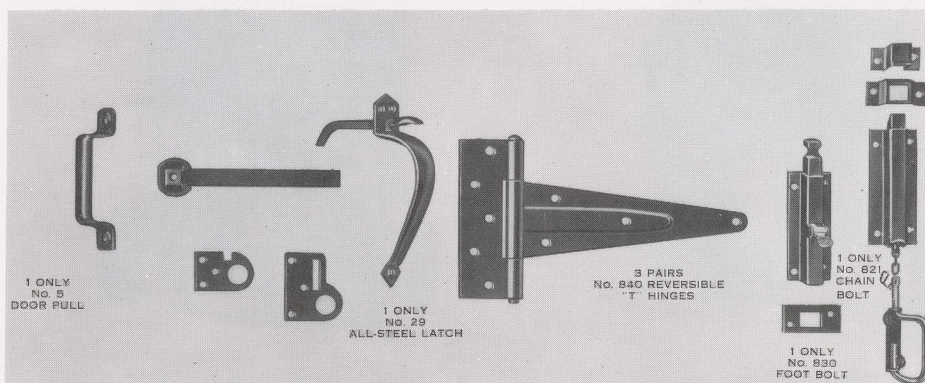
No. 52 Model, weight 19½ pounds

No. 53 Model, weight 19 pounds

Big 4 Model, weight 18½ pounds

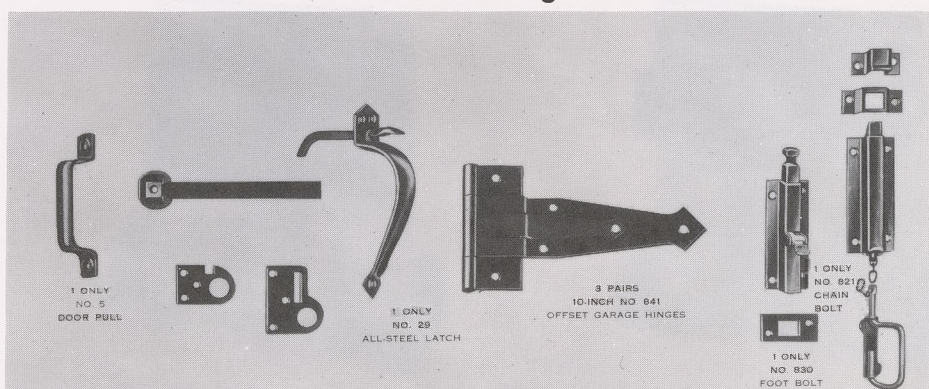
Garage Sets for Hinged Doors

No. 800 Garage Set



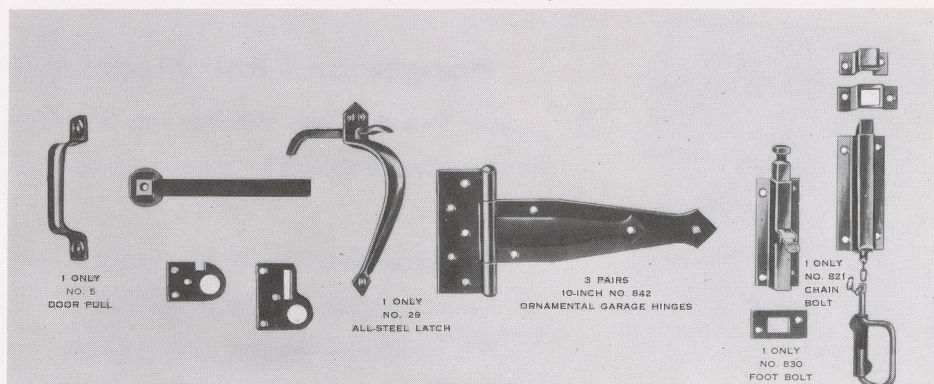
Packed one complete set in a strong, metal-edge box. For list of contents, see pages 60 and 61.

No. 800A Garage Set



Packed one complete set in a strong, metal-edge box. For list of contents, see pages 60 and 61.

No. 800B Garage Set

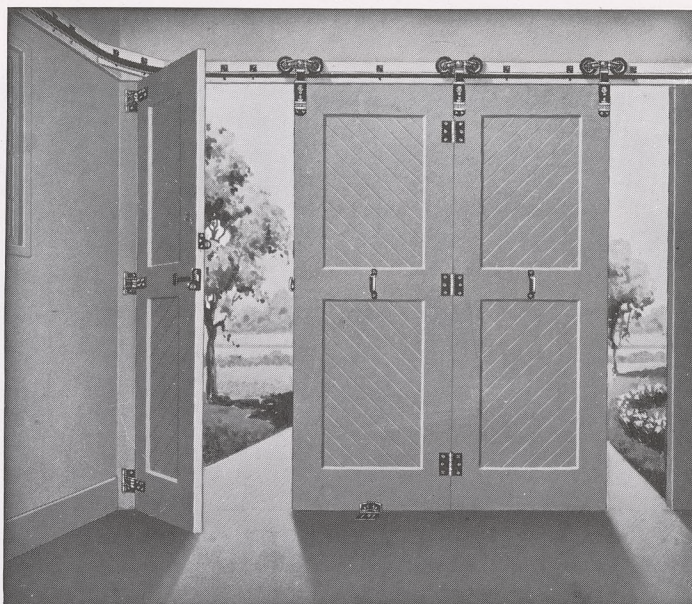


Packed one complete set in a strong, metal-edge box. For list of contents, see pages 60 and 61.

Above sets furnished in Japan finish only.



No. 803 Garage Door Set



Designed to carry doors around the corner.

The swivel hangers are equipped with two roller-bearing wheels so that they will follow the track better. The truck that connects these wheels is bent slightly to prevent the flanges of the wheels from binding when turning the corner.

The hangers are adjustable.

All hardware is hung on the inside of building and protected from the weather.

Can be used for doors operating either to right or left.

Furnished regularly for an 8-foot opening with 8 feet of No. 44 Braced Rail for over the door opening, 6 feet for along the side wall and a 27-inch radius curve for turning the corner. This curve is bent at the factory to insure a perfect arc when hung.

For larger doors, width of opening should be given when ordering.

Furnished in Japan finish only.

For list of contents, see pages 60 and 61.

No. 805½ Sliding and Swinging Garage Door Sets



Inside view of No. 805½ showing doors closed

No. 847 Offset Garage Hinges are used to attach the doors to the jambs.

With these offset hinges, the doors swing practically clear of the opening.

Furnished regularly with 6-foot No. 44 Braced Rail for 8-foot opening. When used on larger doors, width of opening should be given when ordering.

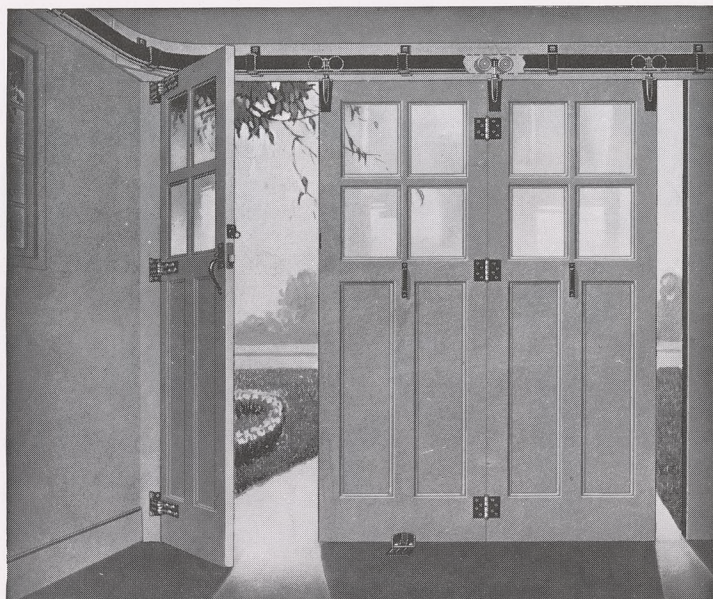
No. 806½ same as above except packed with No. 27 Latch.

All sets furnished in Japan finish.

For list of contents, see pages 60 and 61.



Nos. 812 and 813 Trolley Garage Door Sets



Designed to carry doors around the corner.

The No. 855 Trolley Garage Hanger is deeply embossed, which provides additional strength. The hanger has both lateral and vertical adjustment features. Connecting bolt is $\frac{1}{2}$ -inch, with S.A.E. thread.

No. 855 and 855 $\frac{1}{2}$ Hangers are illustrated on pages 57 and 58.

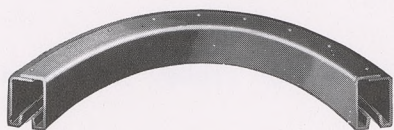
All the hardware is hung on the inside of the building.

Furnished regularly for an 8-foot opening with 8 feet of No. 51 Trolley Rail for use over the door opening, 6 feet for along side wall and a 27-inch radius curve for turning the corner.

When used on openings wider than 8 feet, additional rail is required, and the width of the opening should be given when ordering.

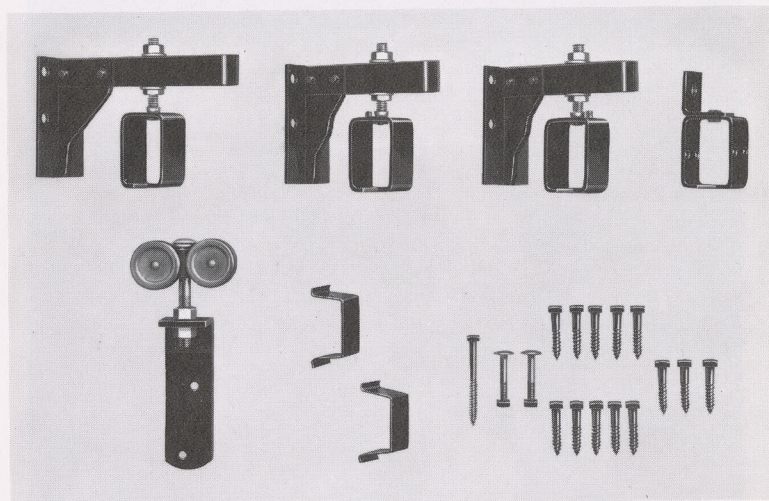
Furnished in Japan finish. For list of contents, see pages 60 and 61.

No. 51-16 Trolley Rail Curves (90° angle) can be furnished as follows for Nos. 812 and 813 sets:



- 12-inch radius, weight, 3 pounds each.
- 18-inch radius, weight, 6 pounds each.
- 27-inch radius, weight, 7 pounds each.
- 36-inch radius, weight, 9 pounds each.

No. 814 Trolley Garage Set



This set is packed for use in special cases where the hinges, bolts, latches, rail, etc., are purchased separately.

The set contains the following:

- 1 only No. 853 roller-bearing Trolley Hanger with ball-bearing swivel
- 1 only A-51 Center Bracket
- 2 only B-51 Intermediate Brackets
- 1 only C-51 End Bracket
- Bolts and lag-screws for attaching above
- End-caps for No. 51 Trolley Rail

Furnished in Japan finish. One complete set in a box.

For list of contents, see pages 60 and 61.

Weight, per set, 14 pounds.

814X—Contents same as above and with 18 feet 9 foot Trolley Rail for a double opening.



Nos. 815 and 816 Three-Door Trolley Garage Sets



In these sets the No. 51-16 Trolley Rail and the No. 853 Garage Hanger are used. An easily operated weather-tight combination.

The Hanger has both lateral and vertical adjustments, and is equipped with roller bearings and ball-bearing swivel.

For illustration of Hanger see page 57.

Can be used either on the inside or outside of garage.

Furnished regularly for an 8-foot opening.

The No. 815 is the same as the No. 816 except that the No. 29 Latch is used.

For list of contents, see page 60 and 61.

Furnished in Japan finish. Packed one complete set in a box.

No. 817X Four-Door Trolley Garage Set



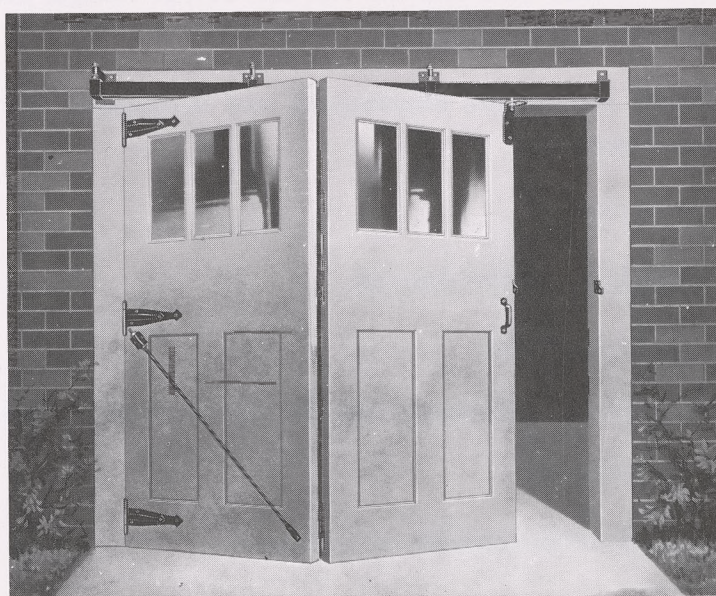
This set is packed especially for a double opening, using No. 51 Trolley type Hangers and Rail. Can be used either inside or outside of the garage.

Furnished in Japan and Hot Galvanized finishes.

Packed one complete set in a wooden box.

For list of contents, see pages 60 and 61.

Nos. 817A and 817B Two-Door Trolley Garage Sets



These sets can be used either on the inside or outside of the garage.

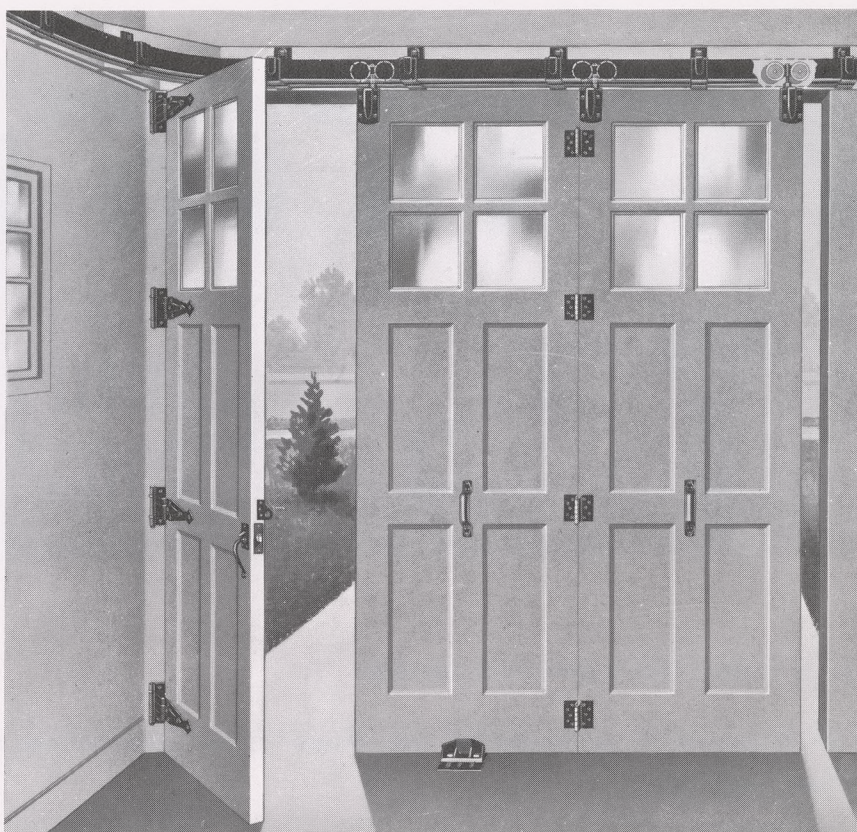
Our 60-inch No. 197 Turnbuckle is packed with these sets. It is attached with four $\frac{1}{4}$ -inch bolts.

For list of contents, see pages 60 and 61. Furnished in Japan finish. Packed one complete set in a box.



No. 823 Trolley Garage Door Set

For heavy doors



No. 41-14 Trolley Rail is used with this set.

The No. 856 Trolley Hanger packed with this set has both lateral and vertical adjustment features and ball-bearing swivel. Weight, each, 5 pounds, 4 ounces.

All hardware is hung on the inside of the garage.

Furnished regularly for a 10-foot opening, with 10 feet of No. 41-14 Trolley Rail for use over the door opening, 10 feet for along the side wall and a 27-inch radius curve for turning the corner.

When used on openings wider than 10 feet, additional rail is required, and the width of the opening should be given when ordering.

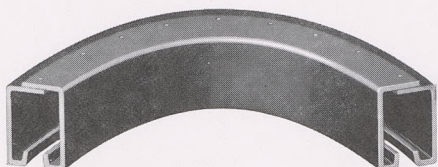
Furnished in Japan finish.

For list of contents, see pages 60 and 61.

No. 41-14 Trolley Rail Curves (90° angle) can be furnished as follows:

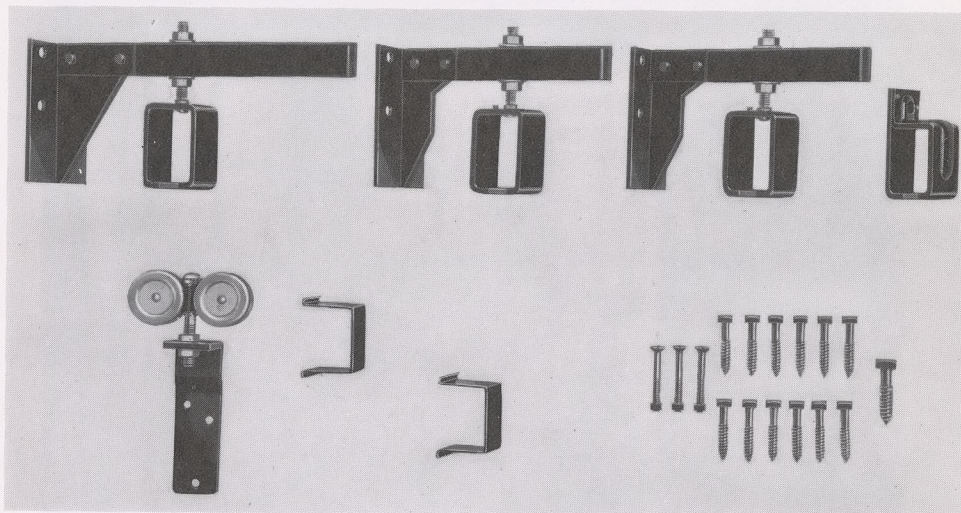
27-inch radius, weight, 13 pounds each.

36-inch radius, weight, 16½ pounds each.



No. 824 Trolley Garage Set

For heavy doors



No. 41-14 Trolley Rail is used with this set.

This set is packed for use in special cases where hinges, bolts, latches, rail, etc., are purchased separately.

The set contains the following:

1 only No. 854 roller-bearing Trolley Hanger with ball-bearing swivel.

Weight, 7 pounds.

1 only A-41 Center Bracket. Weight, 2¼ pounds.

2 only B-41 Intermediate Brackets. Weight, 9¾ pounds each.

1 only C-41 End Bracket. Weight, 11¾ pounds.

Bolts and lag-screws for attaching above.

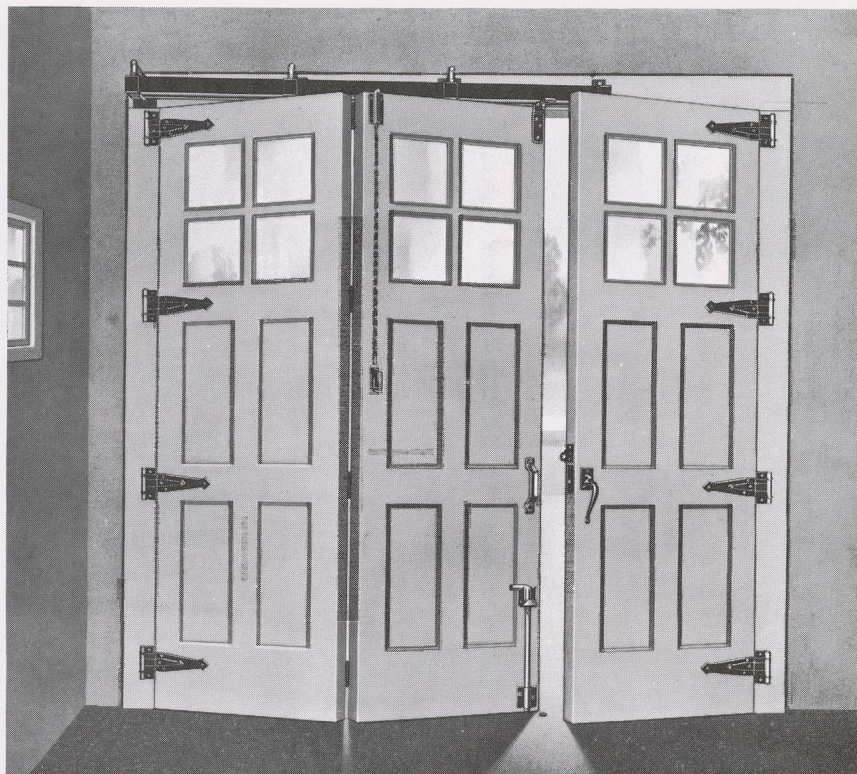
End-caps for No. 41-14 Trolley Rail.

Furnished in Japan finish, one complete set in a box.

For list of contents, see pages 60 and 61.

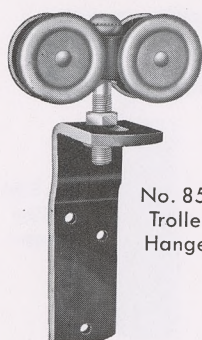


No. 826 Three-Door Trolley Garage Set
For heavy doors



No. 41-14 Trolley Rail is used with this set.

The No. 854 Trolley Hanger used with this set has both lateral and vertical adjustments, and is equipped with roller bearings and ball-bearing swivel.



No. 854
Trolley
Hanger

Can be used either on the inside or outside of garage.

Furnished regularly for a 10-foot opening. When used on openings wider than 10 feet, additional rail is required, and the width of the opening should be given when ordering.

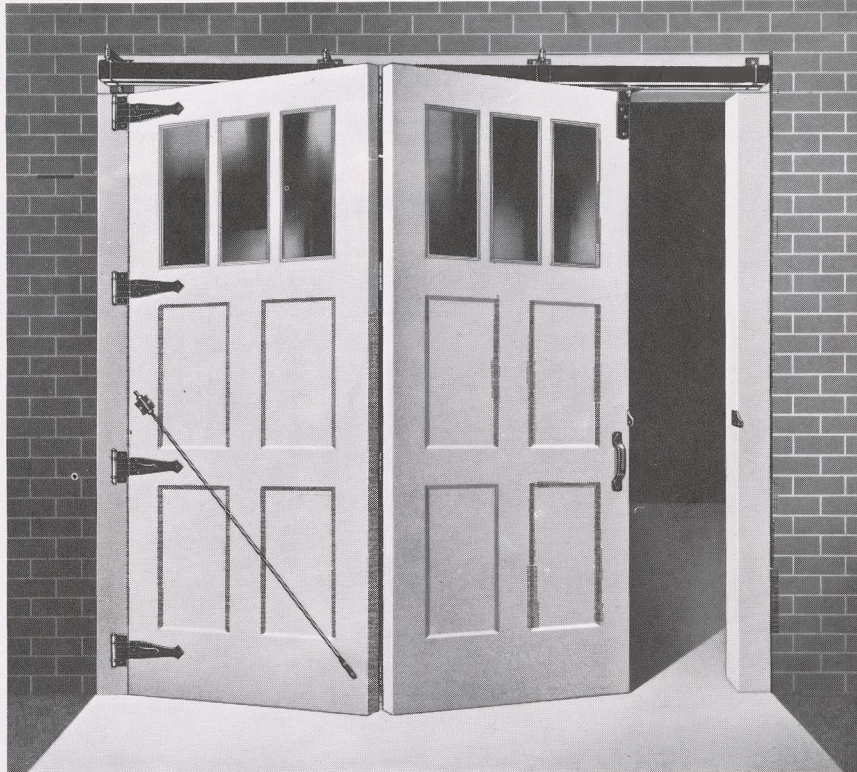
Furnished in Japan finish.

Packed one complete set in a box.

For list of contents, see pages 60 and 61.

No. 827C Two-Door Trolley Garage Set

For heavy doors



No. 41-14 Trolley Rail is used with this set.

The No. 854 Trolley Hanger used with this set has both lateral and vertical adjustments, and is equipped with roller bearings and ball-bearing swivel.

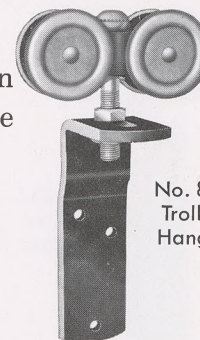
Can be used either on inside or outside of garage.

Furnished regularly for a 10-foot opening. When used on openings wider than 10 feet, additional rail is required, and the width of the opening should be given when ordering.

Furnished in Japan finish.

Packed one complete set in a box.

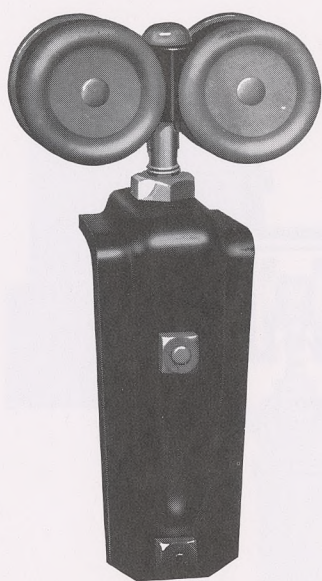
For list of contents, see pages 60 and 61.



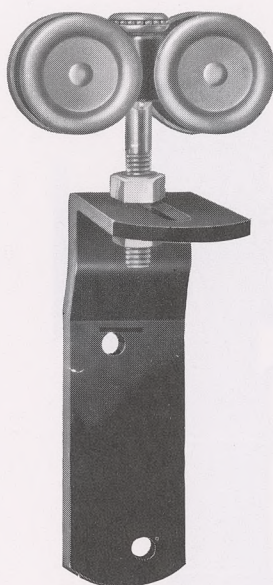
No. 854
Trolley
Hanger



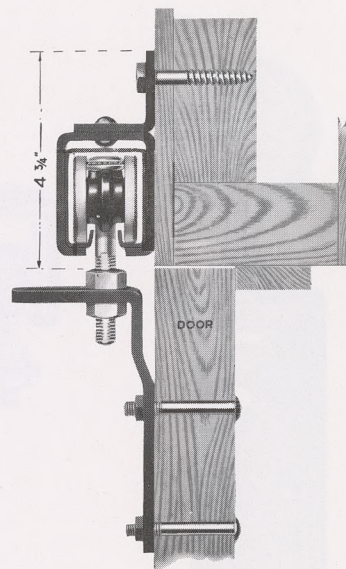
Swivel Trolley Garage Hangers



No. 855
Swivel Trolley Hanger.
Weight, one only, $2\frac{3}{4}$ pounds.



No. 853
Swivel Trolley Garage
Hanger



Sectional view No. 853 Swivel
Trolley Hanger and No. 51
Trolley Rail

The wheels are formed of heavy-gauge pressed steel, and run perfectly true and easy in the rail, as the holes for axles are accurately punched in the center.

These Hangers have roller-bearing wheels and ball-bearing swivels. Galvanized to prevent rust.

The truck is a gray iron casting with a hub approximately $\frac{1}{4}$ inch longer than is customarily used. This gives more bearing surface and permits the use of longer roller bearings. The axle being longer, the wheels are farther apart and cannot bind against the upturned flanges of the rail, eliminating friction.

The adjustment feature to raise or lower the door is very simple and effective. The upright bearing bolt is flattened on two sides to prevent its revolving in the lateral adjusting slot of the Hanger. It can be adjusted with one wrench.

No. 853S Swivel Trolley Garage Hanger, for use on doors requiring special offset.

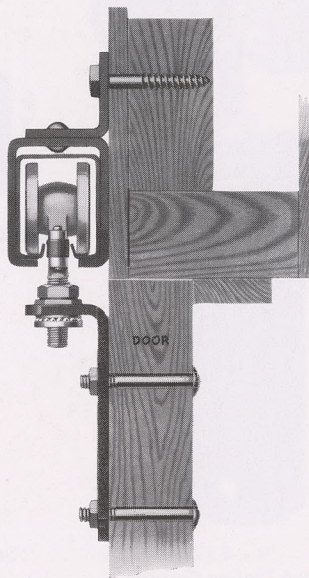
When furnished separately, the Hangers are packed one in a box with bolts and two end-caps for No. 51 Rail.

Weight, with bolts, $3\frac{1}{2}$ pounds each.

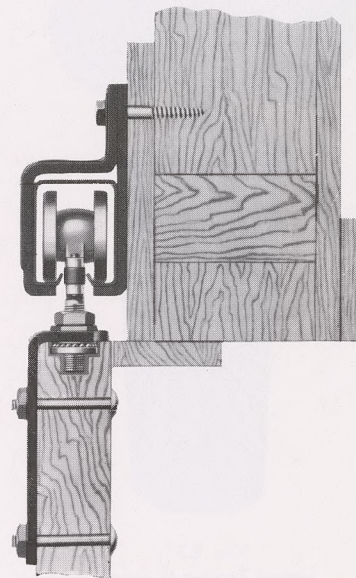
No. 855 $\frac{1}{2}$ Swivel Trolley Hanger



No. 855 $\frac{1}{2}$ Swivel
Trolley Hanger



Sectional view showing door
hung to set in against stop.



Sectional view showing door
hung to slide past casing.

For use with No. 812 and No. 813 Trolley Garage Sets, as illustrated on page 49.

Hangers have roller-bearing wheels and ball-bearing swivels. Galvanized to prevent rust.

For use where two sets are used in one opening without center post.

View at the right shows door hung to slide past casing.

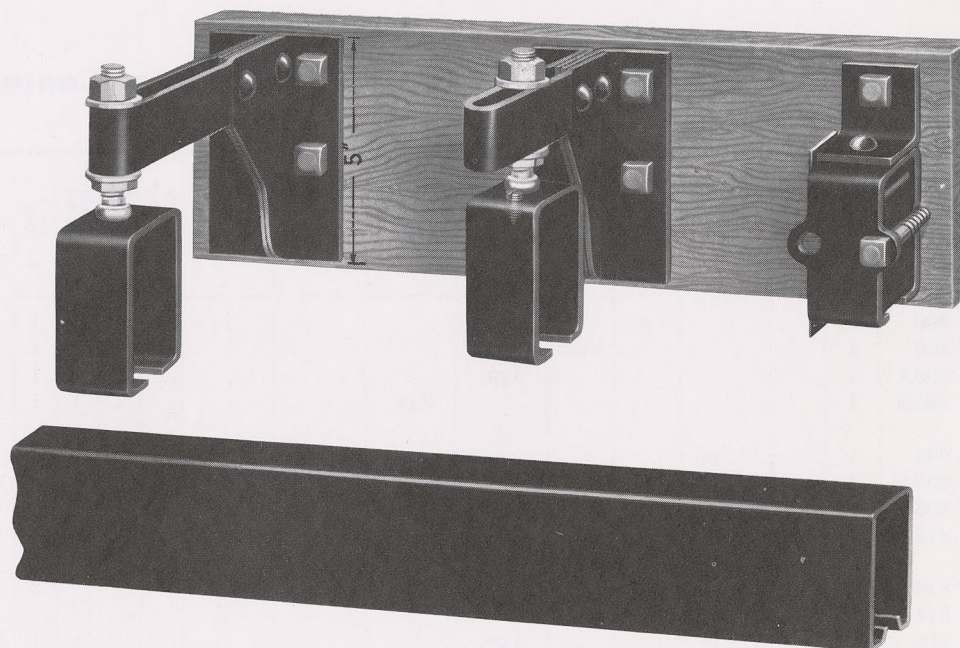
View at the center shows drop strap reversed for doors hung to set in against stop.

Hangers are packed two in a box with bolts and end-caps.

Weight, two only, 5 $\frac{1}{2}$ pounds.



Trolley Rail Brackets



No. C-51
End Bracket

No. B-51
Intermediate Bracket

No. A-51
Center Bracket

Brackets illustrated are packed with Garage Sets Nos. 814, 815, 816 and 817.

The extension arm of the B-51 and C-51 Brackets is made of $\frac{3}{16}$ x $1\frac{1}{4}$ -inch best quality steel, riveted to the bracket proper with special "bridge truss rivets."

All B-51 Brackets have set screws to hold rail in position.

Frequently the headroom over the door is not sufficient to permit the use of a 2 x 8 header. In such cases a 2 x 6 header must be used. These brackets can be attached to the narrower header.

The holes in the bracket plate are staggered so the lag-screws enter different grains in the wood. They are above the center of the bracket plate. This construction provides greater carrying capacity.

The lower part of the bracket plate serves the same purpose as the brace on our Braced Rail and aids in holding the bracket rigidly in place.

The adjusting bolt attaching the rail bracket to the extension arm is $\frac{1}{2}$ inch in diameter, with S.A.E. threads.

Weights: No. A-51, 1 pound; No. B-51, $2\frac{3}{4}$ pounds; No. C-51, $3\frac{1}{4}$ pounds.

Packed with $\frac{3}{8}$ x 2-inch lag-screws.

The A-41, B-41 and C-41 Brackets (see page 54) are the same as above, except that they are for use with the No. 41 Rail and are much heavier.

Table of Contents

Garage Set Number	No. 29 Latch	No. 27 Latch	4" x 4" No. 505 Jap. Butt	8" No. 840 Hinge	10" No. 840 Hinge	No. 841 Hinge	No. 842 Hinge	No. 846 Hinge	No. 847 Hinge	No. 820 Chain Bolt	No. 821 Chain Bolt	No. 830 Foot Bolt	No. 5 Pull	No. 40 Padlock Eyes
8" 800	1			3 pr.							1	1	1	
10" 800	1				3 pr.						1	1	1	
800A	1					3 pr.					1	1	1	
800B	1						3 pr.				1	1	1	
803	1		1 1/2 pr.						1 1/2 pr.				2	1 pr.
805 1/2	1		1 1/2 pr.						3 pr.		1	1	1	1 pr.
806 1/2	1		1 1/2 pr.						3 pr.		1	1	1	1 pr.
812	1		1 1/2 pr.						1 1/2 pr.				2	1 pr.
813		1	1 1/2 pr.						1 1/2 pr.				2	1 pr.
814														
815	1		1 1/2 pr.			3 pr.					1	1	1	1 pr.
816		1	1 1/2 pr.			3 pr.					1	1	1	1 pr.
814X														
817A						1 1/2 pr.		1 1/2 pr.			1	1	2	1 pr.
817B							1 1/2 pr.	1 1/2 pr.			1	1	2	1 pr.
817X						3 pr.		3 pr.		2		2	2	1 pr.

If a No. 810 Garage Door Holder is desired packed with any of the No. 800 type sets, designate it by adding an "H" to the catalog number, as 10-inch No. 800H.

Table of Contents

Garage Set Number	No. 27	No. 846 Hinge	12" No. 843 Hinge	No. 821 Chain Bolt	No. 835 Came Bolt	No. 7 Pull	No. 40 Padlock Eye	No. 854 Hanger	No. 856 Hanger	A-41 Bracket
823	1	2 pr.	2 pr.			2	1 pr.		3	
824								1		1
826	1	2 pr.	4 pr.	1	1	1	1 pr.	1		1
827C		2 pr.	2 pr.	1	1	2	1 pr.	1		1



of Garage Sets

No. 850 Swivel Hanger	No. 851 Swivel Hanger	No. 852 Swivel Hanger	No. 853 Swivel Hanger	No. 855 Swivel Hanger	A-51 Bracket	B-51 Bracket	C-51 Bracket	F-51 Bracket	G-51 Bracket	No. 51 Trolley Rail	51-16 Trolley Curve	No. 51 End-caps	No. 44 "Braced" Rail	No. 44 "Braced" Rail Curve	No. 197 Turnbuckle	No. 20 Floor Guide	Weight per Set, Lbs.	Garage Set Number
																	12 1/4	8" 800
																	17 3/4	10" 800
																	14	800A
																	14	800B
		3											14 ft.	1		1	36	803
1													6 ft.				21	805 1/2
1													6 ft.				24	806 1/2
				3				7	2	14 ft.	1	2				1	*24 1/2	812
				3				7	2	14 ft.	1	2				1	*27	813
			1		1	2	1					2					14	814
			1		1	1	1			6 ft.		2					*27	815
			1		1	1	1			6 ft.		2					*29 3/4	816
			1		1	2	1			18 ft.								814X
			1		1	2	1			9 ft.		2			1		*26	817A
			1		1	2	1			9 ft.		2			1		*26 1/4	817B
		2		2	2	2	2			18 ft.		4					*49	817X

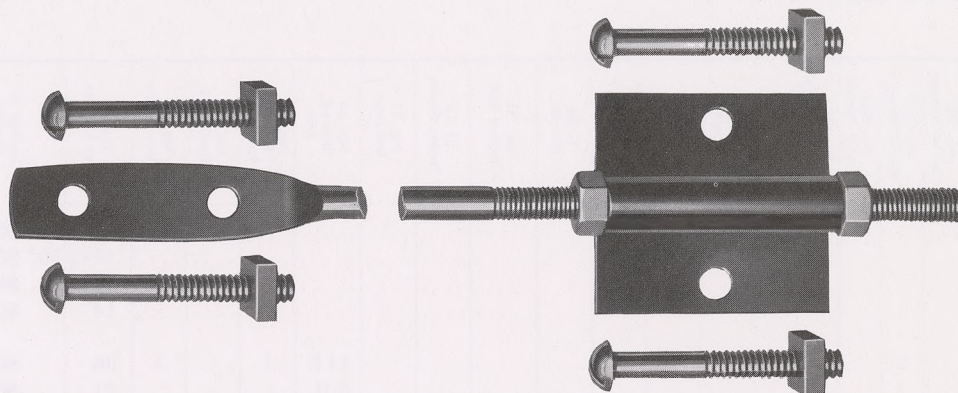
*Weight does not include rail.

All Nos. 800, 803, 804, 805 and 806 type sets are furnished in Japan only.

of Heavy Garage Sets

B-41 Bracket	C-41 Bracket	F-41 Bracket	G-41 Bracket	41-14 Rail	41-14 End-caps	No. 197 Turnbuckle	No. 20 Floor Guide	27" Radius Curve, No. 41-14 Rail	Weight per Set, Lbs.	Garage Set Number
		9	2	20 ft.	2		1	1	150	823
2	1								48	824
2	1			8 ft.	2				111	826
2	1			11 ft.	2	1			106	827C

No. 197 Garage Door Turnbuckle



This Turnbuckle is made especially for use with the No. 817 Garage Set, but it is also sold separately.

It should be used on all doors, as it will prevent sagging and keep them in alignment.

It is made of $\frac{5}{16}$ -inch steel and is attached to the door with four $\frac{1}{4}$ x $2\frac{1}{4}$ -inch zinc-plated bolts.

The adjustment device locks securely. Vibration cannot loosen it.

Furnished in Japan finish only. One dozen 60-inch in a wooden box. All other sizes one dozen in a bundle.

Size	Weight per Dozen Pounds	Size	Weight per Dozen Pounds
60 inches	23	96 inches	31
72 inches	26	108 inches	33
84 inches	28	120 inches	36

(For Screen Door Turnbuckles, see page 120.)



No. 810 Garage Door Holder



Garage doors constructed to swing on hinges are rendered harmless when equipped with this Garage Door Holder. It holds the doors securely open and prevents them from damaging the car when entering or leaving the garage.

The Holder has a rigid, U-shaped steel arm 32 inches long.

A swivel joint allows the Holder to fold back out of the way along the head jamb when the door is closed.

When the door is opened the long, heavy U-shaped arm slides through the steel catch-plate and engages at the top instead of at the bottom of the bracket. Gives greater holding power.

To close the door, a light pull on the safety chain operates the trip-bar and releases the Holder.

The complete Holder is made throughout of heavy-gauge steel and is amply strong for any door.

Packed one pair in a package, complete with screws. Six pairs in a case.

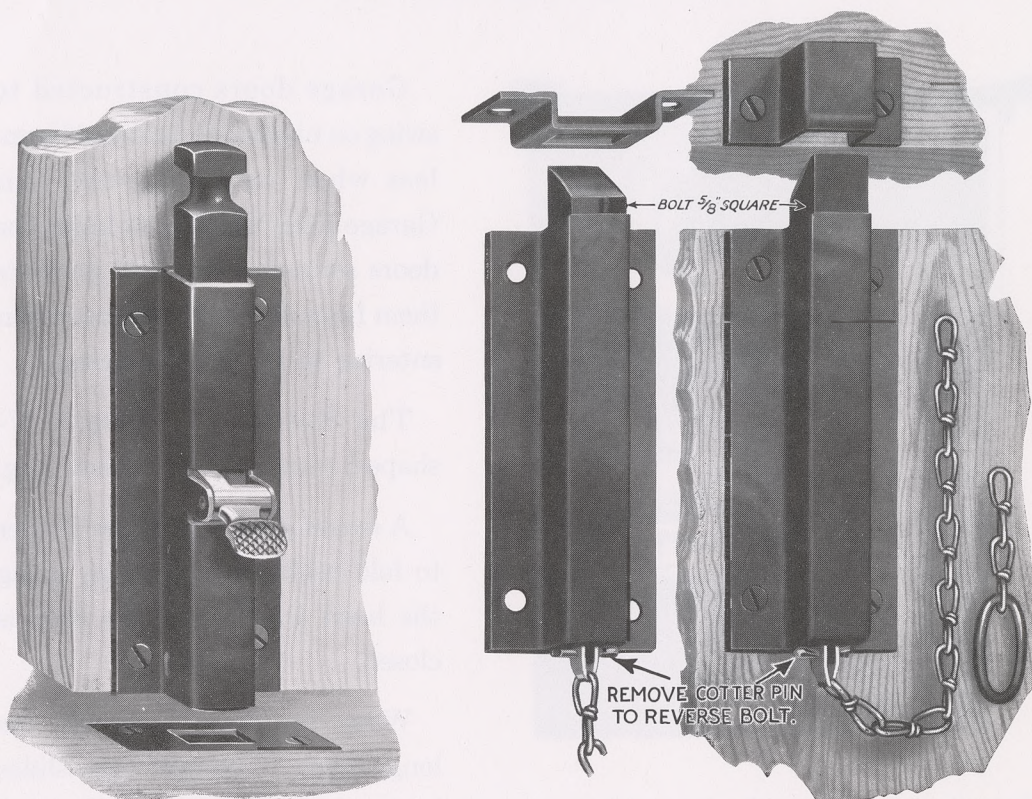
Packed also with swinging garage door sets when so desired. (See page 46.)

Finished as follows: Japan, Bond. Dead Black, Galvanized.

Weight, per pair, $7\frac{3}{4}$ pounds.

Six pairs in a case, weight, 56 pounds.

Foot and Chain Bolt Set



No. 830 Foot Bolt

No. 820 Chain Bolt

The cases of these bolts are 6 inches long and made of wrought steel. The bolts are extra heavy malleable iron, being $\frac{5}{8}$ inch square.

Foot Bolt—The lever to raise the bolt has a positive action. The bolt is held in place when raised by an oil-tempered steel friction spring. Cannot get out of order.

Chain Bolt—Equipped with high-grade safety chain 21 inches long which cannot pull apart. It is reversible by removing cotter-pin and turning bolt. Plates have rounded top, giving a roller-shaped bearing on which bolts work easily.

Packed one set in a box, one No. 820 and one No. 830, with 1-inch screws, staple for chain guide and two plates for head jamb, one for doors swinging in and one for doors swinging out. Three dozen sets in a case. Packed separately, when so ordered, one-half dozen in a box. Six dozen in a case. Any finish desired.

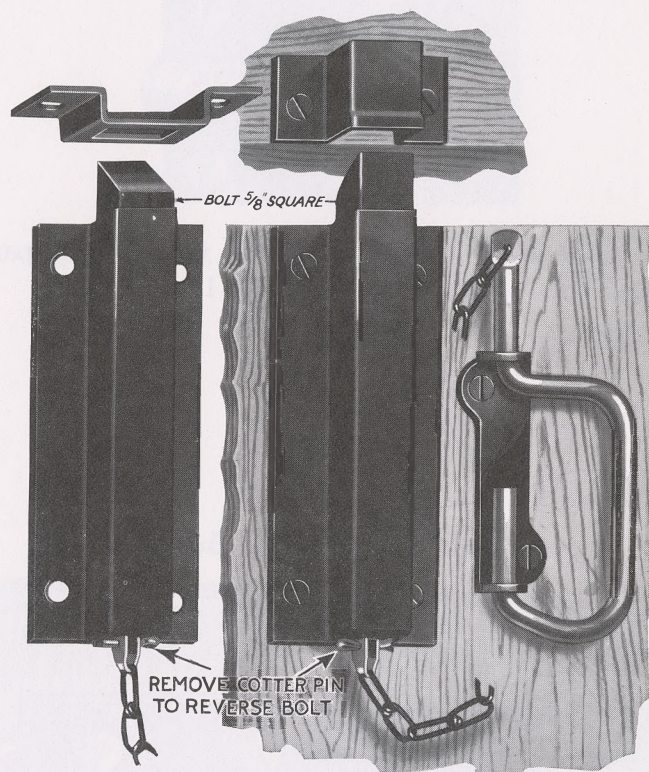
Weight, per dozen sets, one each, 22 pounds.

No. 820—Weight, per dozen, $10\frac{1}{2}$ pounds.

No. 830—Weight, per dozen, $11\frac{1}{2}$ pounds.



No. 821 Chain Bolt
(Patented)



Construction the same as No. 820 Chain Bolt on page 64, except a handle in place of the ring on the chain.

Any finish desired. For list of finishes, see page 12.

Packed one-half dozen in a box, with 1-inch screws and two plates for head jamb, one for doors swinging in and one for doors swinging out.

No. 821 only, weight, per dozen, 13 pounds.

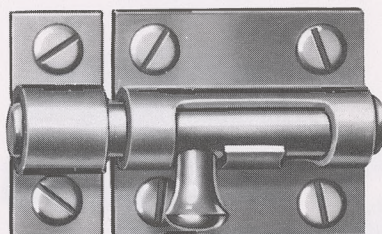
Six dozen in a case.

Packed also in sets with No. 830 Foot Bolt.

Weight, per dozen sets, one each, $24\frac{1}{4}$ pounds.

Three dozen sets in a case.

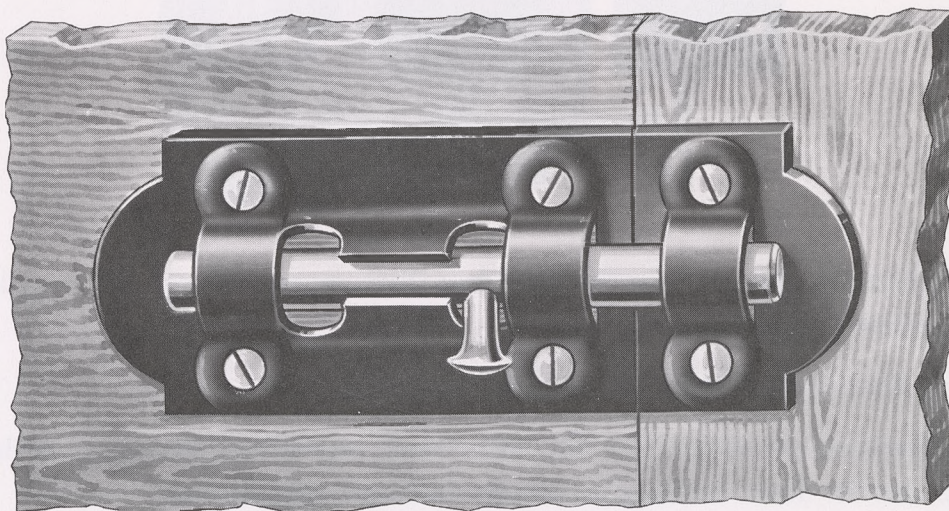
No. 833 Cellar Window Bolt



Made of cold rolled steel. Packed one dozen in box, with pan head screws. Any finish desired. For list of finishes, see page 12.

Size Inches	Number Screws	Size Screws Pan Head	Number Dozen in Case	Weight per Dozen, Pounds
2	6	$\frac{5}{8}$ x 6	50	$1\frac{1}{2}$
$2\frac{1}{2}$	6	$\frac{5}{8}$ x 6	50	$1\frac{3}{4}$

No. 834 Barrel Bolt



Made of cold rolled steel. Packed one dozen in a box, with oval-head screws. Any finish desired. For list of finishes, see page 12.

Size Inches	Number Screws	Size Screws Oval-head	Number Dozen in Case	Weight per Dozen Pounds	Shipping Weight per Case, Pounds
$2\frac{1}{2}$	6	$\frac{5}{8}$ x 4	25	$1\frac{1}{4}$	32
3	7	$\frac{5}{8}$ x 5	25	$2\frac{1}{2}$	59
4	7	$\frac{3}{4}$ x 6	25	3	75
5	7	$\frac{3}{4}$ x 7	10	$3\frac{3}{4}$	40
6	9	$\frac{3}{4}$ x 7	10	$4\frac{1}{2}$	48



Cane Bolts

No. 835

This is the only self-locking Cane Bolt on the market. It can be used either as a top, or a bottom bolt or it can be applied sidewise on swinging doors.

The bolt is made of $\frac{5}{8}$ -inch steel and is zinc plated for rust-proofing.

The barrel, through which the bottom of the bolt slides, is attached to the door with two $\frac{5}{16} \times 2\frac{1}{4}$ bolts.

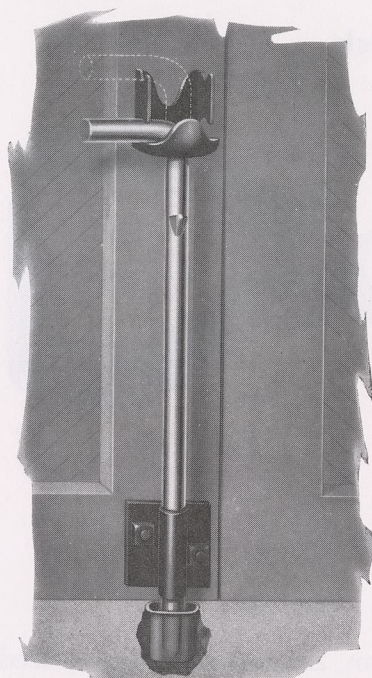
Made in two sizes, 18-inch and 24-inch.

Finished in Japanned, Zinc and Hot Galvanized finishes.

Packed one-half dozen in a box, with $\frac{5}{16} \times 2\frac{1}{4}$ bolts, $1\frac{1}{2} \times 14$ flat head screws and six floor sockets.

Weight, per dozen:

18-inch, $31\frac{3}{4}$ pounds; 24-inch, $43\frac{1}{2}$ pounds.



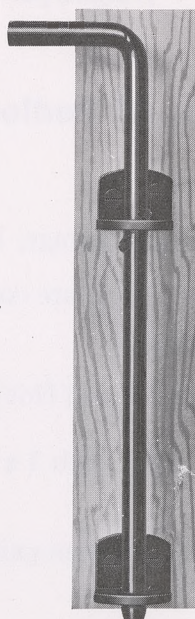
No. 835 Cane Bolt

No. 835 1/2

Same size and finish as No. 835 Cane Bolt but is adjustable for length of throw.

Made in 18-inch size only. Packed $\frac{1}{2}$ dozen in a box, with $\frac{5}{16} \times 2\frac{1}{4}$ -inch bolts and $1\frac{1}{4} \times 12$ screws.

Weight, per dozen, 32 pounds.



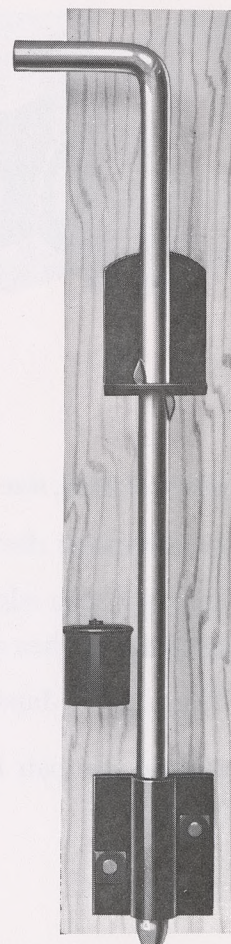
No. 836 Cane Bolt

No. 836

A small size Cane Bolt made in 12-inch size only.

Packed one dozen in a box, with $1\frac{1}{4} \times 10$ flat-head Sherardized screws.

Weight, per dozen, 14 pounds.



No. 835 1/2 Cane Bolt

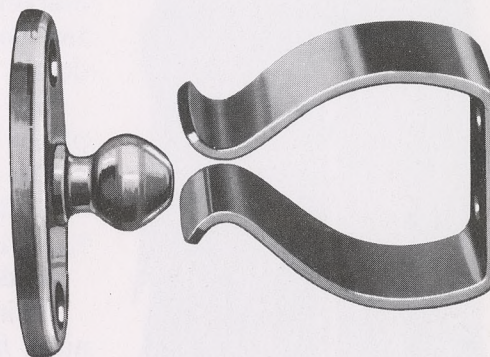
No. 711 Friction Catch

Made entirely of No. 2 temper steel.
Attach with round-head screws.

Packed one dozen in a box, with
1 x 7 oval-head screws.

Any finish desired. For list of finishes,
see page 12.

Weight, per dozen, 2¾ pounds.



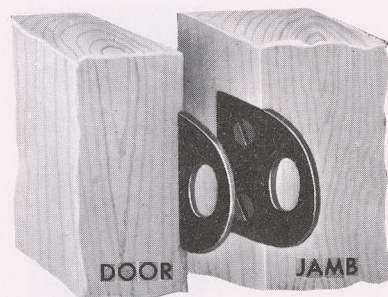
No. 38 Padlock Eyes

Made of steel, size 1¼ x 1⅝.

Furnished in Japan, Zinc and Hot Galvanized
finishes.

Packed one pair in an envelope, with ¾ x 7
flat-head screws. One dozen pairs in a box.

Weight, per dozen pairs, 13 ounces, with screws.
Weight, per dozen pairs, 9 ounces, without screws.



No. 40 Padlock Eyes

Made of steel, size 2¼ x 1⅝.

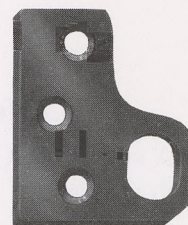
A convenient device for locking garage, barn or shed doors.

Mortised into edge of door, screws are concealed, preventing
their removal when doors are closed.

Furnished in Japan, Sherardized and Hot Galvanized finishes.

Packed one pair in an envelope, with 1 x 10 flat-head screws. One dozen pairs
in a box.

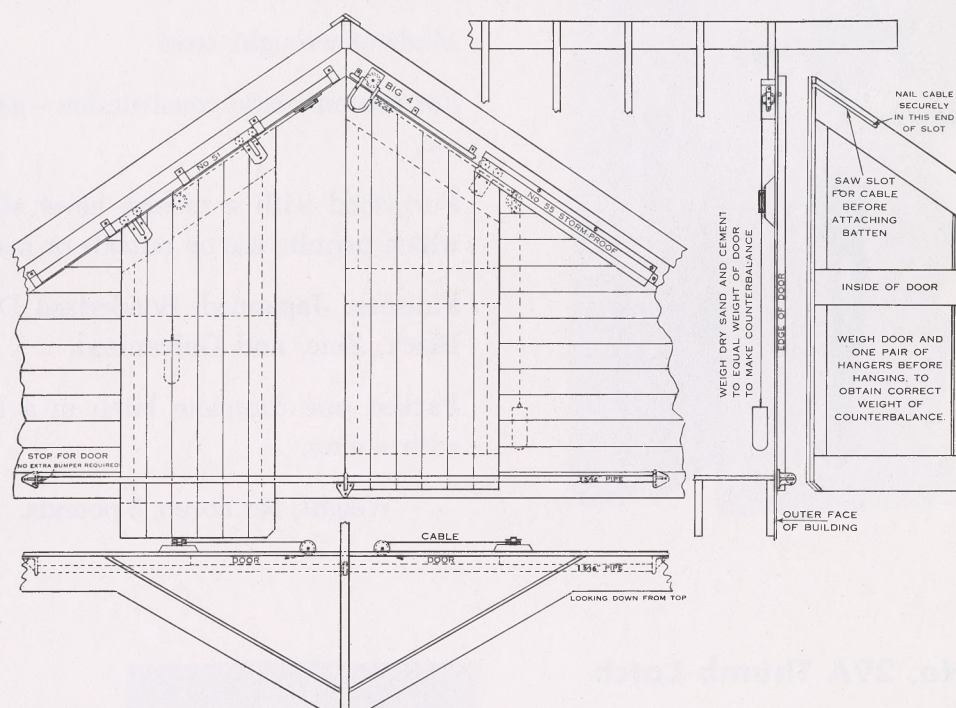
Weight, per dozen pairs, 2½ pounds.



Cut half size



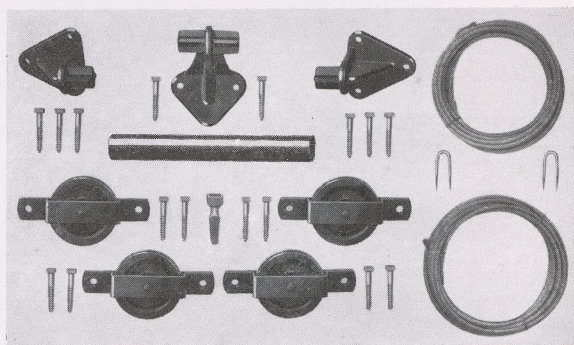
No. 10 Gable Door Set For Sliding Doors of Hay Barns



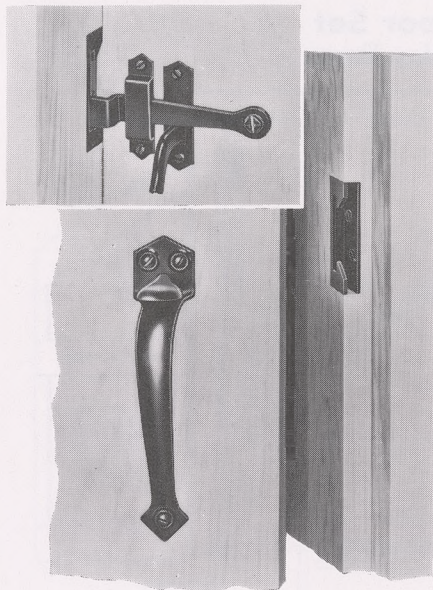
Any National Hanger and Rail Combination can be used in connection with this set.

The end brackets that hold the pipe and keep the doors from swinging out at the bottom act as bumpers for the doors when open. No other bumpers required. These brackets are extra heavy and are attached with three lag-screws.

This set is for a 10-foot opening and consists of the following items:



- 2—20-foot pieces $\frac{3}{16}$ -in. Steel Cable (40 feet in all).
 - 2—10-foot pieces $1\frac{5}{16}$ -in. pipe (20 feet in all).
 - 2—End Brackets for pipe.
 - 1—Center Bracket for pipe.
 - 4—Iron Pulleys with steel frame, Japanned, complete with lag-screws.
 - 2—2-inch Staples.
 - 1 only—Socket Wrench.
- Weight, per set, 34 pounds.



No. 24A Thumb Latch

Made of wrought steel.

For use on rustic construction – gates, etc.

Furnished with a reverse bevel strike which permits use on outside or inside.

Finishes: Japanned, Bonderized Dead Black, Zinc, and Galvanized.

Packed one complete latch in a box, with screws.

Weight, per dozen, 5 pounds.

No. 29A Thumb Latch

Made of wrought steel.

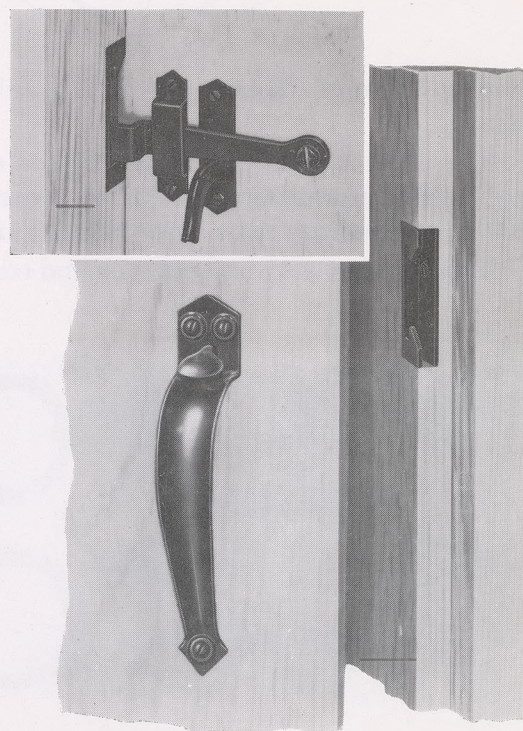
For use on rustic construction – gates, etc.

Furnished with a reverse bevel strike which permits use on inside or outside.

Finishes: Japanned, Bonderized Dead Black, Zinc, and Galvanized.

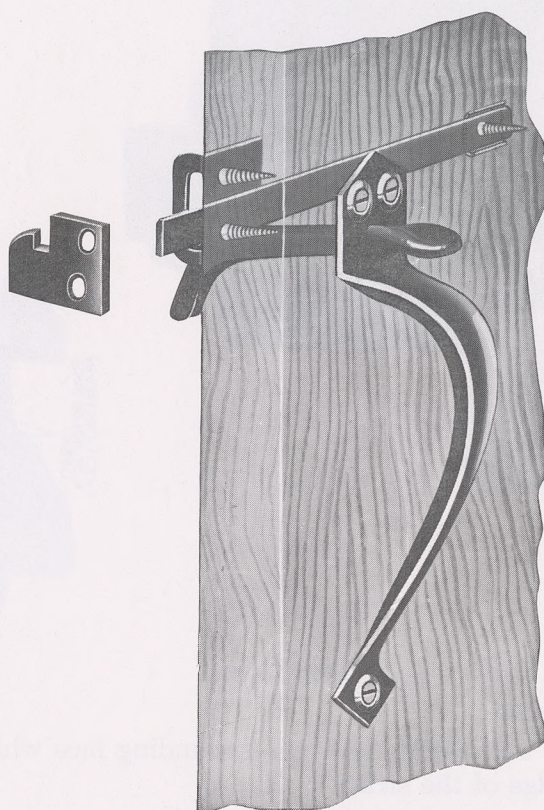
Packed one complete latch in a box, with screws.

Weight, per dozen, 12 pounds.





No. 24 Cottage Door Latch



This Latch is made especially for light-weight doors, such as screen doors, cellar doors, storm doors, etc.

It is made entirely of steel.

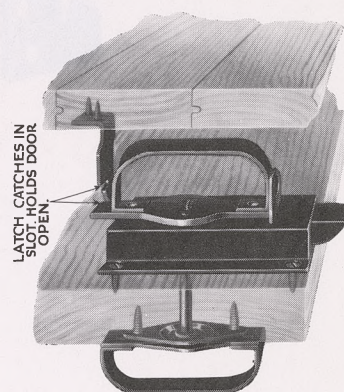
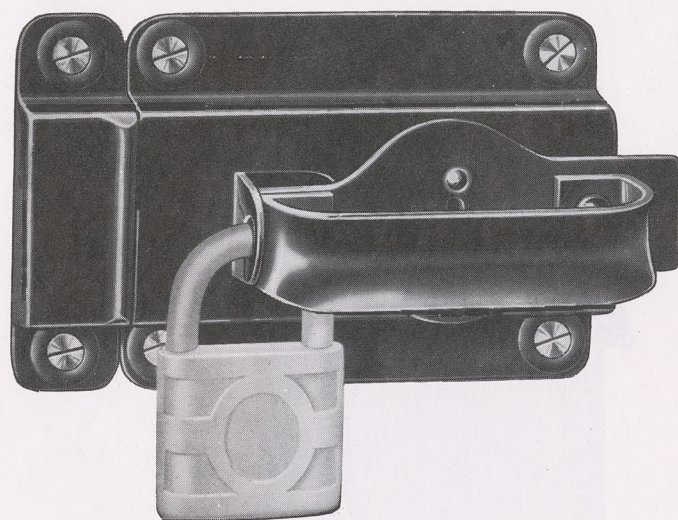
The long, graceful lines of the handle are out of the ordinary in this type of Latch, giving it a distinctive appearance. Length of handle overall, $6\frac{5}{8}$ inches.

Finishes: Japan, Bond. Dead Black, Zinc and Hot Galvanized.

Packed one in a box, with $\frac{3}{4}$ x 7 flat-head screws for strike and slide and $\frac{3}{4}$ x 7 oval-head screws for handle. Six dozen in a case.

Weight, per dozen, $4\frac{1}{2}$ pounds.

No. 25 Swinging Door Latch



A popular type of Latch for swinging doors.

Made entirely of steel.

The large bolt is zinc-plated and has a rounding face which works easily on the roller-shaped edge of the strike.

Adjustable for doors $\frac{3}{4}$ inch to $2\frac{1}{4}$ inches thick.

Construction prevents flattening of handle when door swings back against building.

Handle is placed back of center of case—prevents injury to hand when opening or closing door.

Strike has wide opening, which insures a positive lock should the door sag.

Illustration shows how padlock can be inserted to lock Latch.

Spring made of music wire.

Easily installed—bore a $\frac{3}{4}$ -inch hole for the handle and insert screws.

Finishes: Japan, Bond. Dead Black, Zinc and Hot Galvanized.

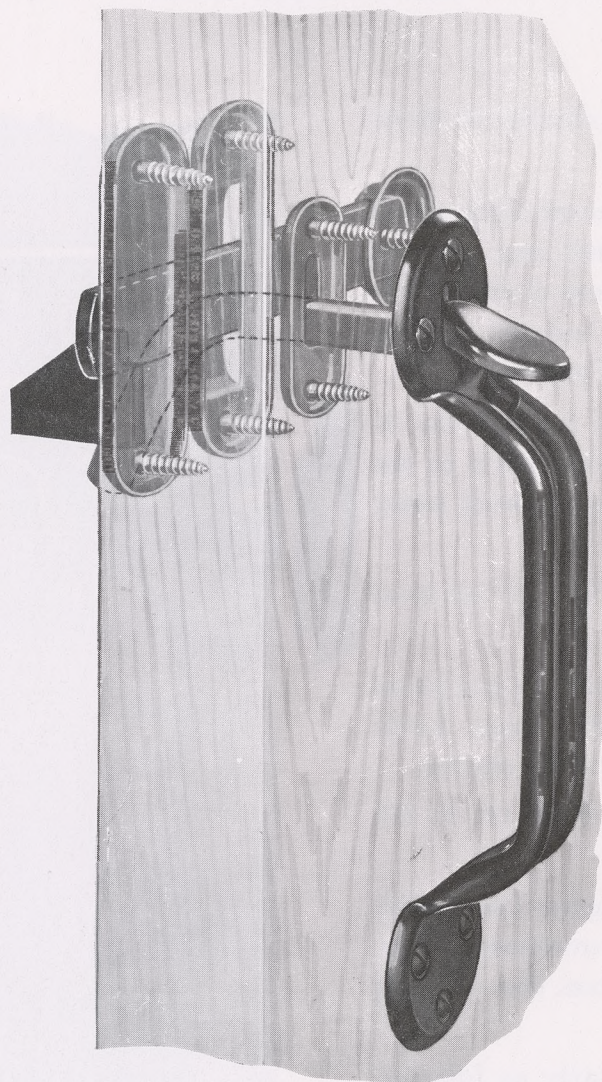
Packed one in a box, with 1 x 9 oval-head screws and catch to hold door open. Two and one-half dozen in a case.

Weight, per dozen, 24 pounds.

Weight, per case, 59 pounds.



No. 26 Extra Heavy Latch



Made of cold rolled steel. For doors $1\frac{1}{2}$ to $2\frac{3}{4}$ inches in thickness.

Made for use especially on heavy doors of garages, warehouses, and other industrial buildings. The latch handle is $10\frac{3}{4}$ inches long.

Packed one in a box with $1\frac{1}{2}$ x 12 oval-head screws. Furnished in Japan or Bond. Dead Black, Zinc or Hot Galvanized.

Weight, per dozen, 38 pounds.

No. 27 Door Latch

Here's the aristocrat of Door Latches.

The handles, one on either side of the door, with their long, graceful lines, resemble those of the higher-grade door locks, and will improve the appearance of any door.

The mechanism is simplicity itself. No complicated parts to get out of order. Does its work easily and effectively.

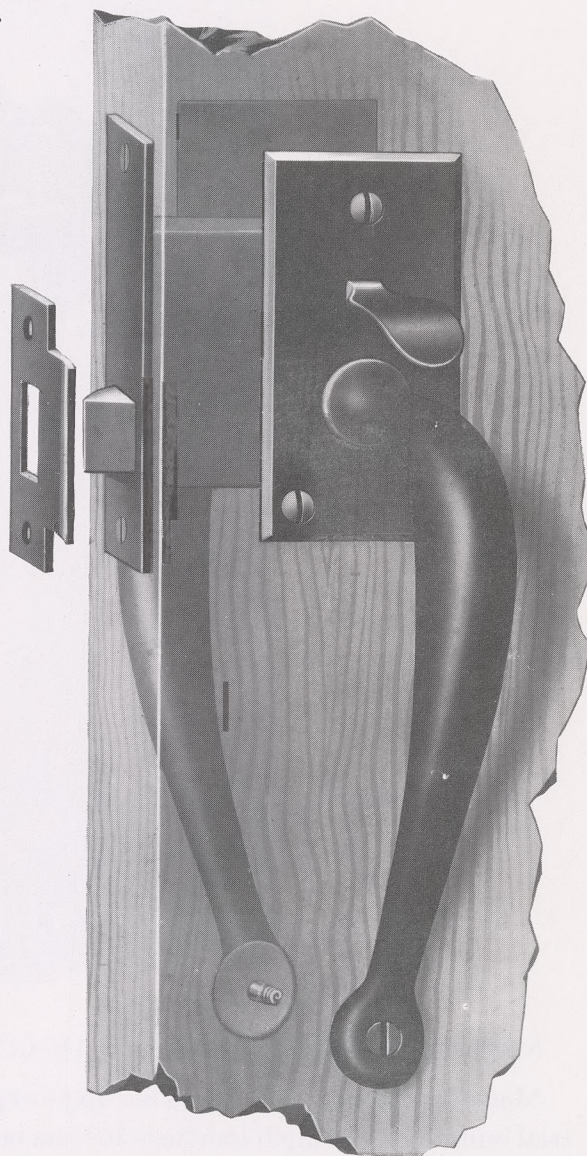
Reversible for right- or left-hand door.

Thumb pieces, handles and plates sherardized before plating. Latch part zinc coated before plating.

Adjustable for doors $1\frac{1}{8}$ to $2\frac{1}{4}$ inches thick.

Packed one complete Latch, with $1\frac{1}{4}$ x 10 flat- and oval-head screws, in a neat, strong box. One dozen in a case.

Finished regularly as follows: Sherardized Japan, Sherardized Dead Black, Sherardized Zinc, Sherardized and plated any finish, and Hot Galvanized.

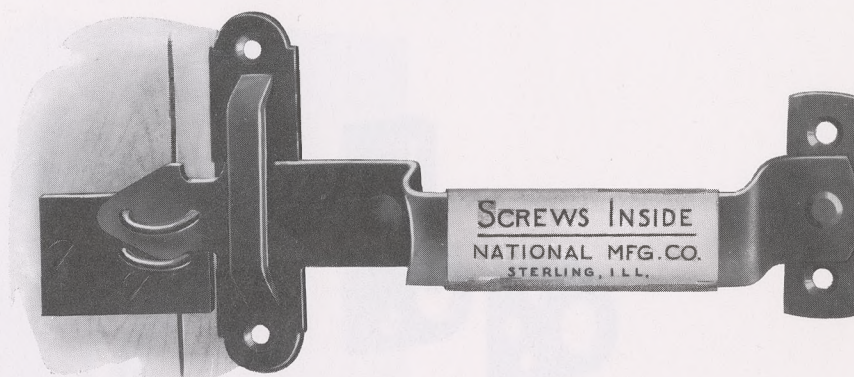


Weight, per each, $3\frac{1}{2}$ pounds.



No. 28 "Washburne" Sliding Door Latch

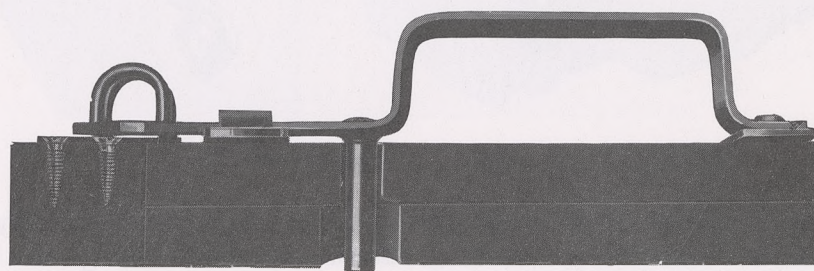
Japanned



This Latch is made entirely of steel, and is adapted for use on either right- or left-hand sliding doors.

It is so constructed that it is flush with the door on the inside, so that the door can be opened full width.

A new style of plate staple is supplied which permits placing the Latch so that the bar extends over edge of door only $\frac{3}{4}$ inch.



Section of door showing "Washburne" Latch attached. Note that the pin is flush with inside of door.

The small hole through which pin extends is bored with $\frac{1}{2}$ -inch bit; the large holes for handhold with a 1-inch bit, through inside thickness of lumber only.

Furnished in Japan or Hot Galvanized.

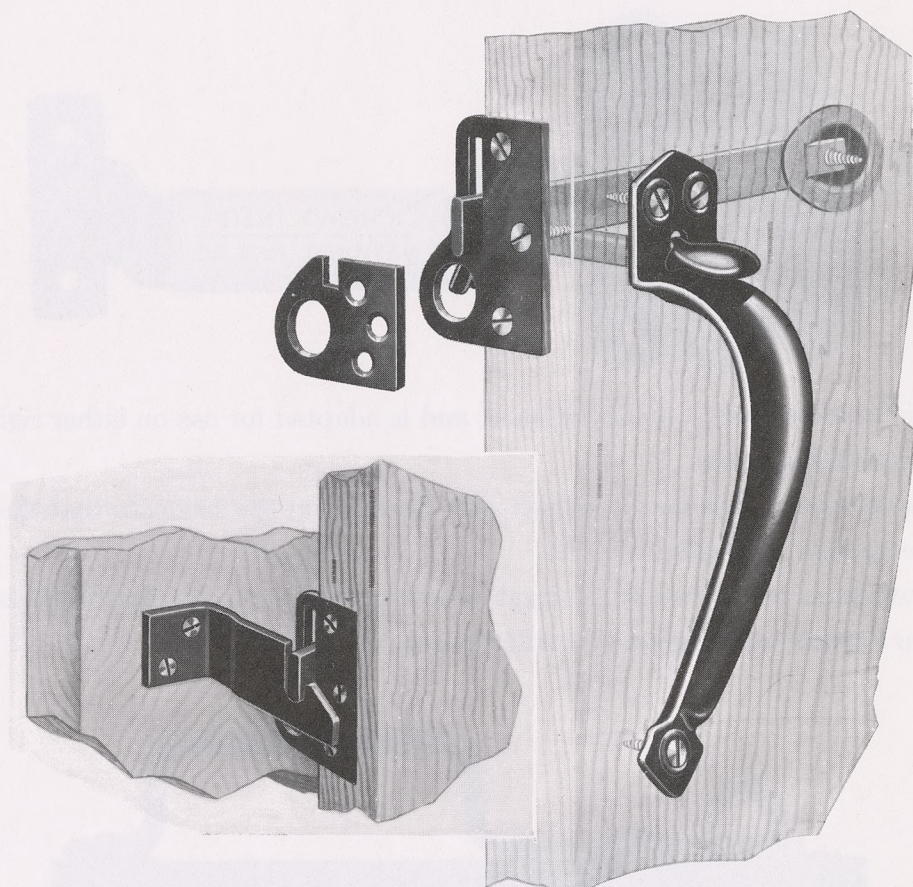
Envelope with 1 x 10 flat-head screws packed with each Latch.

Packed one-half dozen in a box. Six dozen in a case.

Weight, per dozen, 10 pounds.

No. 29 All-Steel Latch

Japanned



As the name implies, this Barn and Garage Door Latch is made entirely of steel. The door can be locked by inserting shackle of padlock through slot in strike and slide. Length of handle overall, 8 $\frac{3}{8}$ inches.

Each Latch is supplied with a catch to hold the door open. (See smaller illustration above.)

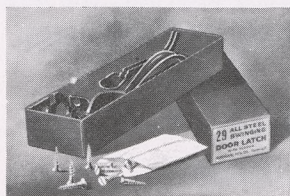
Flush strikes can be furnished when ordered.

Envelope with 1 x 9 oval-head screws packed with each Latch.

Furnished regularly as follows: Japan, Bond. Dead Black, Zinc and Hot Galvanized.

Packed one in a box. (See the illustration at left.) Three dozen in a case.

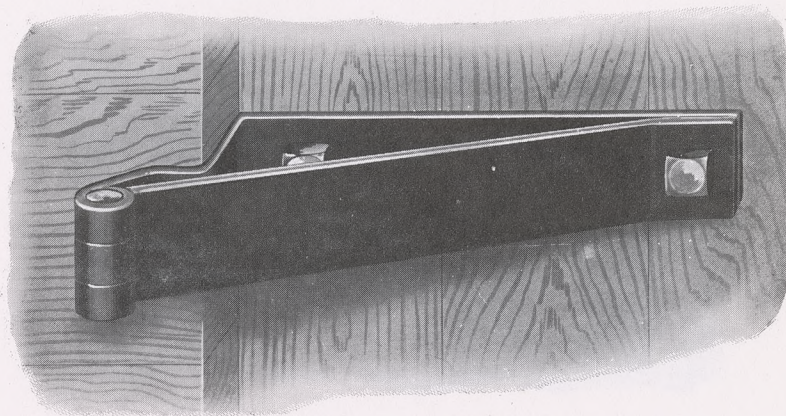
Weight, per dozen, 13 $\frac{1}{4}$ pounds.



Method of packing



No. 16 Barn Door Bumper



A good, substantial Barn Door Bumper, placed in the proper position on the building, is very essential in securing the best results with sliding barn door hangers.

Bumpers made of wood do not stand the hard usage and soon become of no value.

To meet the demand for a Barn Door Bumper that will stand the strain, we have placed on the market the one illustrated above.

It is made of $1\frac{1}{2}$ x $\frac{5}{32}$ -inch steel.

The Bumper is attached to the building 3 inches above the center of the door with two 2 x $\frac{3}{8}$ -inch lag-screws.

The construction of this Bumper is such that it holds the door close against the building.

It has a hinged joint, which provides a convenient method for inserting the first lag-screw.

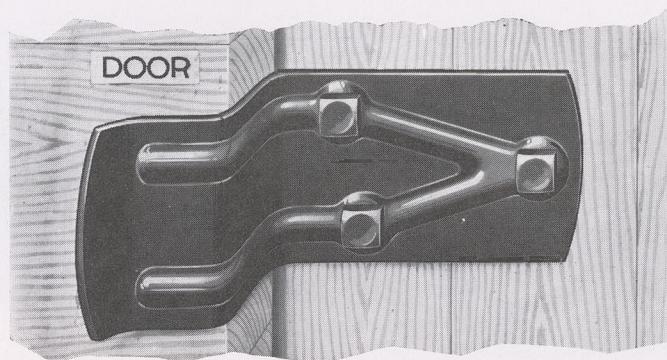
This Bumper will save the time and labor required to make an inferior article of wood, and one should be used with every pair of hangers.

Finishes: Japan and Hot Galvanized.

Packed two in a box, with lag-screws.

Weight, per dozen, 20 pounds.

No. 17 Barn Door Bumper



A strong, sturdy pressed-steel Barn Door Bumper. The two extra heavy embossed ribs add materially to the strength of the Bumper. Simple in construction and easy to attach.

Packed one dozen in a box, with 2 x $\frac{5}{16}$ -inch lag-screws.

Finishes: Japan and Hot Galvanized.

Weight, per dozen, 9½ pounds.

No. 19 Barn Door Bumper

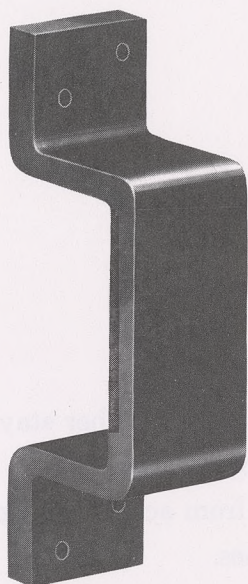
Same design as No. 17 Bumper except that it is not embossed. Made of $\frac{3}{8}$ -inch thick steel for doors 2¾ inches thick. Packed one-half dozen in a box, with ½-inch lag-screws.

Finishes: Japan and Hot Galvanized.

Weight, per dozen, 30 pounds.



Bar Holders



No. 14 Bar Holder

For use in holding garage doors shut with a wooden bar. Opening suitable for 2 x 4.

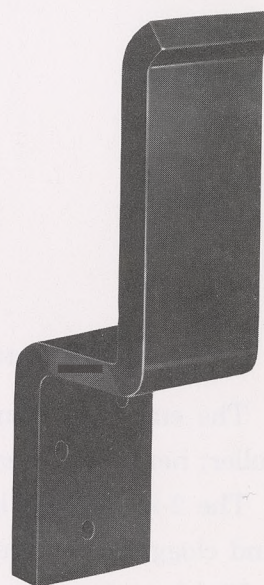
No. 14 made from $1\frac{1}{2}$ x $\frac{3}{16}$ -inch hot rolled steel.

No. 15 made from $1\frac{1}{2}$ x $\frac{1}{4}$ -inch hot rolled steel.

Packed one dozen in a box, with $1\frac{1}{4}$ x 12 round-head screws.

Finishes: Bright Steel, Japan and Hot Galvanized.

Weight, per dozen: No. 14, 10 pounds; No. 15, 10 pounds.



No. 15 Bar Holder

Adjustable Floor Guides

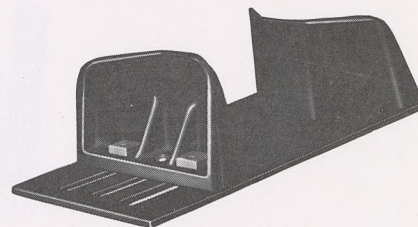
Can be furnished for single doors or for two or three parallel doors.

Creosote blocks are furnished for attaching them to concrete floors.

Adjustable for doors from $1\frac{1}{4}$ to 3 inches thick.

Finishes: Japan and Hot Galvanized.

Packed two in a box.

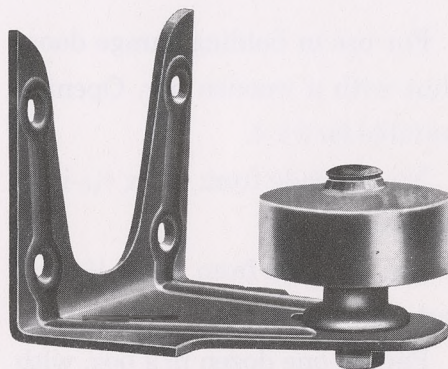


No. 20 -For single doors. Weight, two only, $4\frac{1}{2}$ pounds.

No. 20-2-For double doors. Weight, two only, $6\frac{1}{2}$ pounds.

No. 20-3-For triple doors. Weight, two only, $7\frac{5}{8}$ pounds.

Stay Rollers



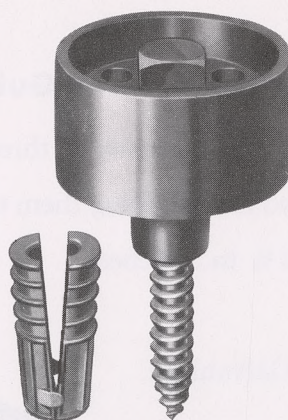
No. 18 Reversible and Adjustable—Cut one-half size

The embossed frame has double the space between screws of any other stay roller; hence has greater bracing strength, and screws will not pull out.

The 2-inch wheel has a rounded top, which prevents dirt from accumulating and clogging the wheel. Adjustment for doors up to 2½ inches.

Finishes: Japan and Hot Galvanized.

Weight, per dozen, 11 pounds.



No. 319 Heavy Duty—Cut one-half size

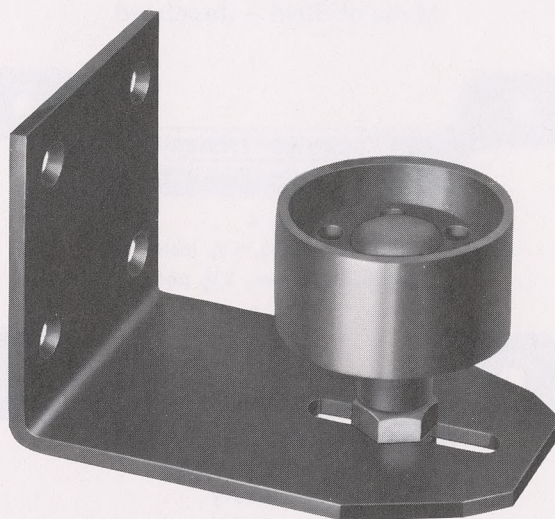
With ½-inch lag-screw and expansion shield. Cast-iron wheel, 2½-inch diameter.

Finishes: Japan and Hot Galvanized.

Weight, per dozen, 13¾ pounds.



Stay Rollers

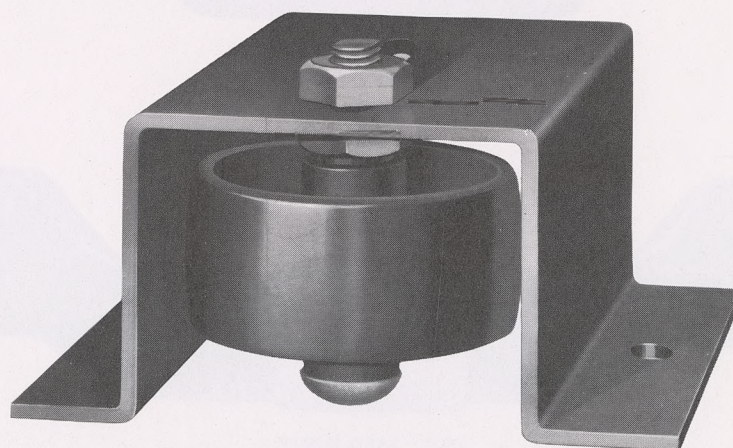


No. 318 Heavy Duty—Cut one-half size

Steel frame, cast-iron wheel, 2½-inch diameter. Slot in frame provides adjustment for doors up to 3 inches. Reversible.

Finishes: Japan and Hot Galvanized.

Weight, per dozen, 28½ pounds.



No. 320 Heavy Duty—Cut one-half size

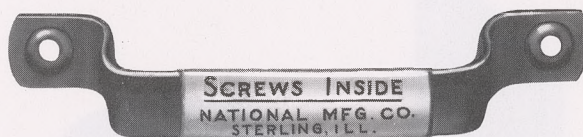
Steel frame, cast-iron wheel, 3½-inch diameter. Slot in frame provides adjustment. Axle ⅝-inch diameter.

Finishes: Japan and Hot Galvanized.

Weight, per dozen, 45½ pounds.

Door Pulls

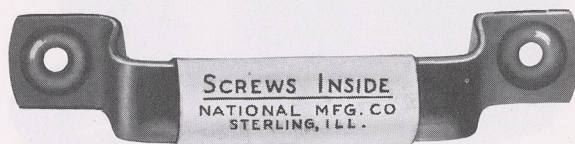
Made of Steel — Japanned



No. 4

Length, over all, $6\frac{1}{2}$ inches

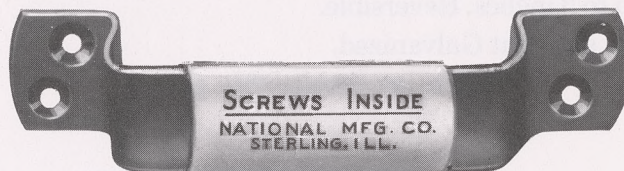
Weight, per dozen, $2\frac{1}{2}$ pounds.



No. 5 Heavy

Length, over all, $6\frac{1}{2}$ inches

Weight, per dozen, $3\frac{1}{4}$ pounds.



No. 6 Extra Heavy

Length, over all, $6\frac{3}{4}$ inches

Weight, per dozen, $4\frac{3}{4}$ pounds.



No. 7 Extra Heavy

Length, over all, 10 inches

Weight, per dozen, $10\frac{1}{4}$ pounds.

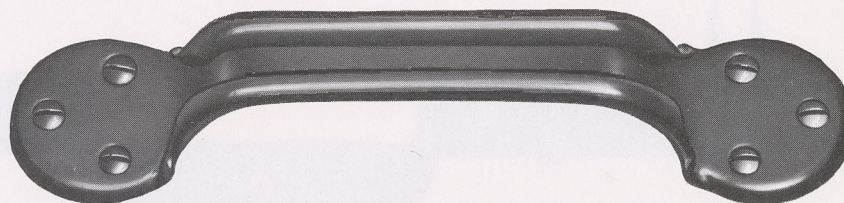
Envelope with screws attached to each Pull.

Nos. 4, 5 and 6 packed one dozen in a paper box, with 1 x 10 flat-head screws.

No. 7 packed one-half dozen in a paper box with $1\frac{1}{2}$ x 12 oval-head screws.



No. 8 Pressed Steel Door Pull



Made of cold rolled steel.

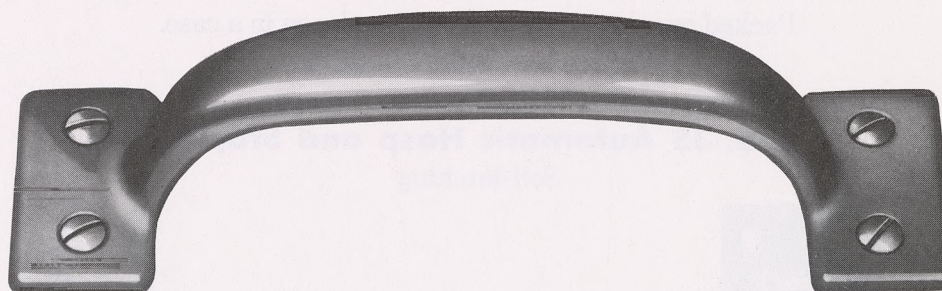
Length, over all, $10\frac{3}{4}$ inches.

Packed one-half dozen in a box with $1\frac{1}{2}$ x 12 oval-head screws. Envelope with screws attached to each Pull.

Furnished in Japan or Bond. Dead Black.

Weight, per dozen, $11\frac{1}{2}$ pounds.

No. 171 Pressed Steel Door and Drawer Pull



Made of cold rolled steel.

Size
Inches
 $6\frac{1}{2}$

Size of Screws
Oval-Head
1 x 8

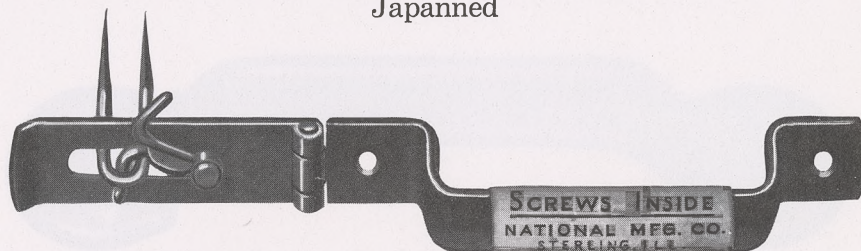
Weight
per Dozen
Pounds
 $2\frac{3}{4}$

Packed one dozen in a box. Envelope with screws attached to each Pull.

Any finish desired. For list of finishes, see page 12.

Handle Hinge Hasp and Staple

Japanned



No. 2. With hook. Width, 1 1/8 inches. Made of steel.

Envelope with screws and staple attached to each Handle.

Packed one dozen in a box, twenty dozen in a case.

Weight, per dozen, 6 pounds.



No. 3. With hook. Width, 1 3/8 inches. Extra heavy. Has two screw-holes in each end. Made of steel.

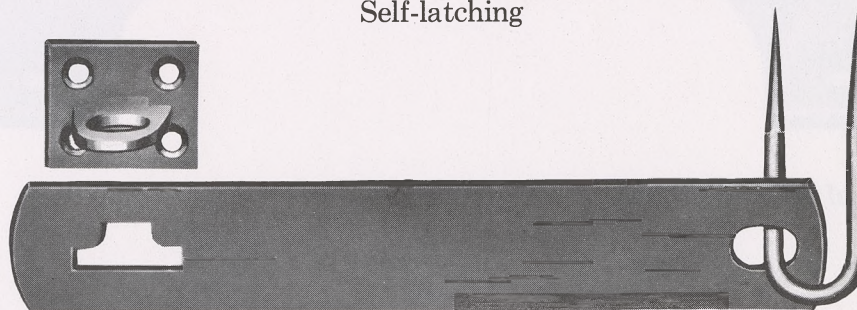
Envelope with screws and staple attached to each Handle.

Packed one dozen in a box, twelve dozen in a case.

Weight, per dozen, 8 pounds.

No. 35 Automatic Hasp and Staple

Self-latching



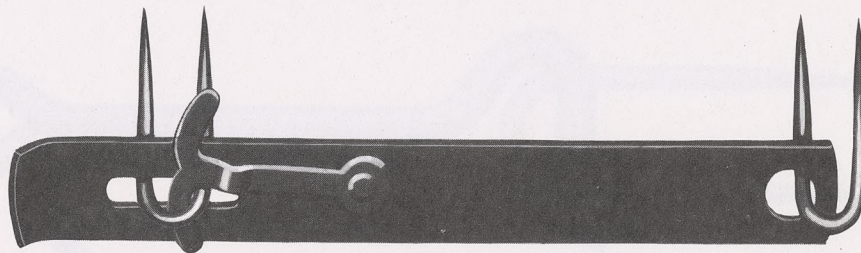
The screws are covered when Hasp is locked. Length, 8 inches. Made of steel.

Packed one dozen in a box, with screws and staples.

Weight, per dozen, 5 1/2 pounds.



No. 37 Hasps, Hooks and Staples

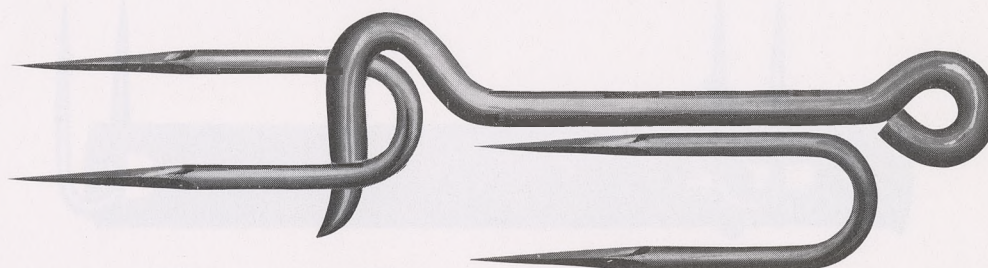


Inches	Size of Staples Inches	Units in Box	Weight per Box Pounds
5	2	10	2 $\frac{1}{2}$
6	2 $\frac{1}{4}$	10	2 $\frac{3}{4}$
8	2 $\frac{1}{2}$	10	3 $\frac{3}{4}$
10	3	10	5 $\frac{1}{2}$

Made of steel.

Packed one dozen in a box.

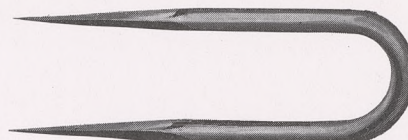
No. 75 Gate Hooks and Staples



Length Inches	Diameter Inches	Size of Staples Inches	Weight per Gross Pounds
4	$\frac{1}{4}$	2	20
5	$\frac{5}{16}$	$2\frac{1}{2}$	34
6	$\frac{5}{16}$	$2\frac{1}{2}$	$37\frac{1}{2}$

Packed one-quarter gross in a box.

No. 39 Steel Staples



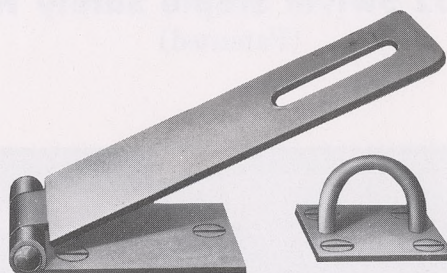
Length Inches	Units in Box	Weight per Box Pounds	Length Inches	Units in Box	Weight per Box Pounds
1	100	$\frac{1}{2}$	$2\frac{1}{2}$	50	$1\frac{1}{2}$
$1\frac{1}{4}$	100	$\frac{3}{4}$	$2\frac{3}{4}$	50	2
$1\frac{1}{2}$	100	$1\frac{1}{4}$	3	50	$2\frac{1}{4}$
$1\frac{3}{4}$	100	$1\frac{1}{2}$	$3\frac{1}{2}$	50	$2\frac{1}{2}$
2	100	2	4	50	$3\frac{3}{4}$
$2\frac{1}{4}$	50	$1\frac{1}{4}$			

Sizes 1-inch to 3-inch are packed one gross in a box; $3\frac{1}{2}$ -inch and 4-inch, one-half gross in a box.

Also packed one gross each size in a case; weight, 45 pounds.



No. 30 Safety Hasp



No. 30—Without hook. Cut half size of 4½-inch

Length of Strap Inches	Width of Joint Inches	Size of Flat-head Screws	Size of Staple Inches	Weight per Dozen Pounds	Number Dozen in Case	Shipping Weight per Case, Pounds
2½	1	¾ x 6	1⅜ x 1	1½	24	37
3¼	1½	¾ x 7	1½ x 1⅛	3	12	36
4½	1½	¾ x 7	1½ x 1⅛	4	12	46
6	1¾	1 x 9	1¾ x 1⅜	7	6	41
7	2½	1¼ x 11	2¼ x 1¾	18	—	—

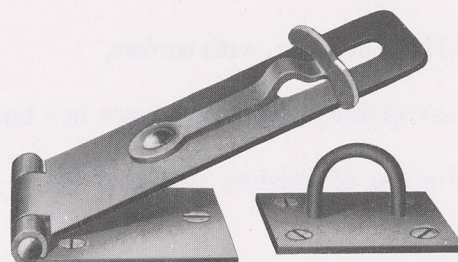
Made of cold rolled steel.

These Hasps are made with extra large slots cut the long way of the strap. This leaves more metal around the slot and gives extra strength.

The hook on the No. 31 is of special advantage, as it holds the door closed when the padlock is not in use.

Any finish desired. For list of finishes, see page 12.

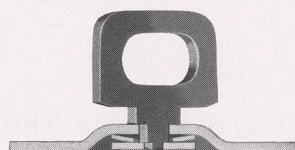
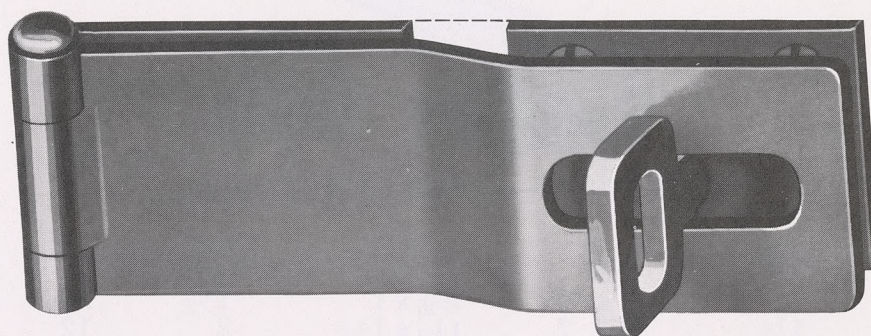
Sizes up to and including 6-inch packed one in a box, with flat-head screws; 7-inch packed one-fourth dozen in a box, with flat-head screws.



No. 31—With hook. Cut half size of 4½-inch

Length of Strap Inches	Width of Joint Inches	Size of Flat-head Screws	Size of Staple Inches	Weight per Dozen Pounds
4½	1½	¾ x 7	1½ x 1⅛	4¾
6	1¾	1 x 9	1¾ x 1⅜	7½

No. 32 Swivel Staple Safety Hasp (Patented)



Sectional view showing
spring washer

Made of cold rolled steel.

This Hasp is bent at such an angle that when the swivel staple is closed the door is held very securely, preventing rattling.

The swivel staple is securely attached to staple plate. A special spring washer between the staple plate and bottom washer holds the swivel staple in a fixed position at all times. Staple has eye for padlock.

When Hasp is closed all screws are covered and cannot be removed.

Packed one complete Hasp in a box, with screws.

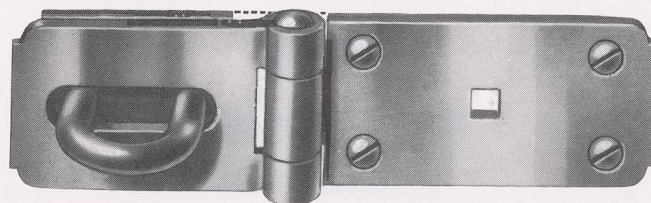
Plate staples only are available packed two dozen in a box.

Any finish desired. For list of finishes, see page 12.

Length of Strap Inches	Width of Joint Inches	Size of Screws		Size of Staple Inches	Weight per Dozen Pounds	Number Dozen In Case	Shipping Weight per Case, Pounds
		Plate Staple Oval-head	Hasp Flat-head				
3 1/4	1 1/2	1 x 8	3/4 x 7	1 9/16 x 1 9/16	4	12	45
4 1/2	1 1/2	1 x 8	3/4 x 7	1 9/16 x 1 9/16	4 3/4	12	54
6	1 3/4	1 x 8	1 x 9	1 9/16 x 1 9/16	7 1/4	6	41



No. 33 Extra Heavy Hinge Hasp



Made of Steel.

Especially adapted for use on heavy doors, such as front and rear store doors, warehouse doors, etc.

The Hasp is offset to allow for the thickness of the staple plate.

Hardened plate staple, size $2\frac{1}{4} \times 1\frac{3}{4}$ inches.

Besides the countersunk screw-holes it has a square hole for a carriage bolt, affording an unusually strong method of attaching.

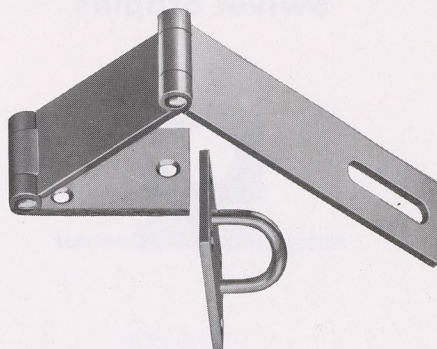
Finishes: Bright Steel, Japan, Sherardized with Steel Pin, Sherardized with Brass Pin, Hot Galvanized with Brass Pin.

Packed one in a box, with $1\frac{1}{4} \times 10$ oval-head screws.

Length, over all, $7\frac{1}{4}$ inches; width, $1\frac{7}{8}$ inches, thickness, $1\frac{1}{64}$ inch.

Weight, per dozen, $11\frac{3}{4}$ pounds.

No. 34 Double-Hinge Safety Hasp



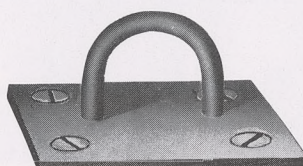
For use on lockers, tool chests, cabinets, boxes, etc. Made of cold rolled steel. All screws are covered when the Hasp is locked.

Packed one in a box, with screws.

Any finish desired. For list of finishes, see page 12.

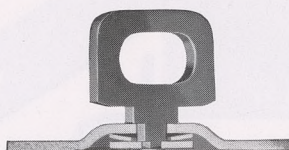
Length of Strap Inches	Size of Screws		Size of Staples Inches	Weight per Dozen Pounds
	Plate Staple Flat-head	Hasp Flat-head		
$3\frac{1}{4}$	$\frac{3}{4} \times 7$	$\frac{3}{4} \times 7$	$1\frac{1}{2} \times 1\frac{1}{8}$	$4\frac{1}{2}$
$4\frac{1}{2}$	1×9	$\frac{3}{4} \times 7$	$1\frac{3}{4} \times 1\frac{3}{8}$	6

Plate Staples



	Size Inches	For Use With	Projection of Staple Inches	Weight per Box with Screws Pounds	Weight per Box without Screws Pounds
30-S	$1\frac{3}{16} \times 1$	$2\frac{1}{2}$ " No. 30 Hasps	$\frac{7}{16}$	1	$\frac{3}{4}$
	$1\frac{1}{2} \times 1\frac{1}{8}$	$3\frac{1}{4}$ " and $4\frac{1}{2}$ " No. 30, $3\frac{1}{2}$ " No. 34, and 3" and 4" No. 288 Hasps	$\frac{9}{16}$	$1\frac{1}{2}$	$1\frac{1}{4}$
	$1\frac{3}{4} \times 1\frac{3}{8}$	6" No. 30, $4\frac{7}{8}$ " No. 34, and 6" and 8" No. 288 Hasps	$\frac{5}{8}$	$2\frac{1}{2}$	2
33-S	$2\frac{1}{4} \times 1\frac{3}{4}$	7" No. 30 and No. 33 Hasps (Spl. hardened to Brt. S.)	$\frac{7}{8}$	$3\frac{3}{4}$	3

Swivel Staples



	Size Inches	For Use With	Weight per Box with Screws Pounds	Weight per Box Without Screws Pounds
32-S	$1\frac{9}{16} \times 1\frac{9}{16}$	$3\frac{1}{4}$ ", $4\frac{1}{2}$ " and 6" No. 32 Hasps	$2\frac{3}{4}$	$2\frac{1}{4}$

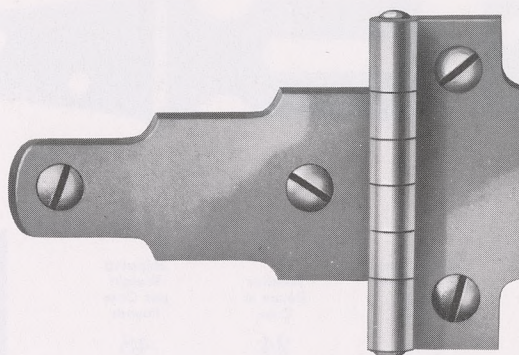
No. 30-S and 32-S Plate Staples are packed two dozen in a box.

No. 33-S Plate Staples are packed one dozen in a box.

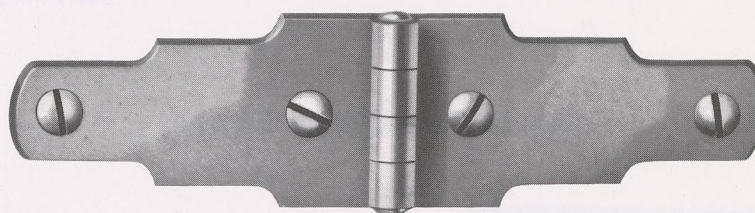
Bright Steel Staples are furnished without screws. Zinc and Galvanized Staples are supplied with screws.



Light Ornamental Strap and "T" Hinges



No. 274 Light "T"



No. 270 Light Strap

Made of cold rolled steel, in 2-inch size only.

Packed with $\frac{5}{8}$ x 5 oval-head screws, one pair in an envelope, one dozen pairs in a box. Can also be furnished in bright steel, without screws.

Any finish desired. For list of finishes, see page 12.

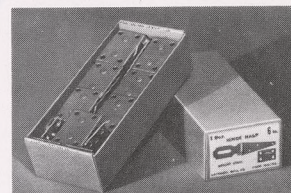
Weight, per dozen pairs, with screws, $1\frac{3}{4}$ pounds.

Weight, per dozen pairs, without screws, $1\frac{1}{2}$ pounds.

No. 288 Hinge Hasps

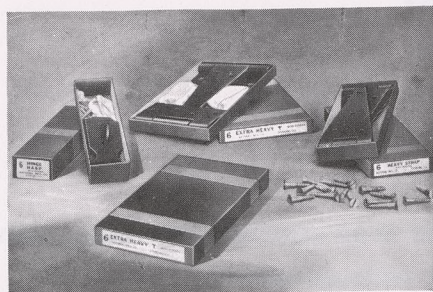


Length of Strap Inches	Number Dozen Hasps in Box	Weight per Box without Screws Pounds	Number Dozen in Case	Shipping Weight per Case Pounds
3	1	1 $\frac{3}{4}$	24	48
4	1	2	24	58
6	1	4 $\frac{1}{2}$	12	62
8	$\frac{1}{2}$	3 $\frac{3}{4}$	6	52



Method of packing in boxes without screws

No. SC288 Hinge Hasps



Method of packing one pair in a box with screws

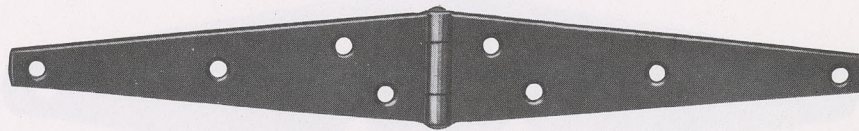
Length of Strap Inches	Size of Flat Head Screws Inches	Number of Hasps in Box	Number of Hasps in Case Boxed	Shipping Weight per Hundred with Screws Pounds
3	$\frac{3}{4}$ x 6	1	200	17 $\frac{1}{2}$
4	$\frac{3}{4}$ x 7	1	200	20
6	$\frac{7}{8}$ x 8	1	100	42
8	1 x 9	1	100	67 $\frac{1}{2}$

Packed, if desired, one in a box, with screws.

Finishes: Bright Steel, Japan, Zinc Steel Pin, Hot Galvanized Brass Pin.

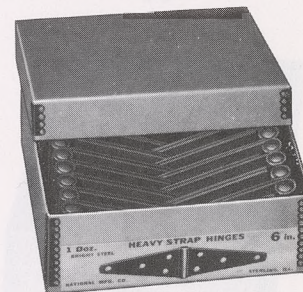


No. 280 Light Strap Hinges



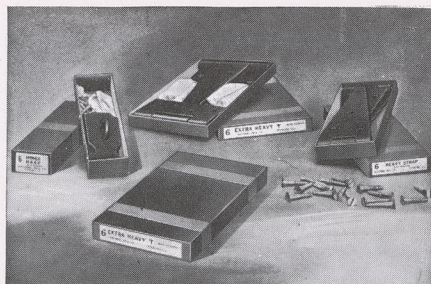
Size Closed Inches	Length of Joint Inches	Number of Screw-holes	Size of Flat-head Screws
2	1	6	$\frac{5}{8}$ x 5
3	$1\frac{1}{8}$	6	$\frac{3}{4}$ x 6
4	$1\frac{1}{8}$	6	$\frac{3}{4}$ x 7
5	$1\frac{3}{8}$	8	$\frac{7}{8}$ x 8
6	$1\frac{9}{16}$	8	$\frac{7}{8}$ x 8
8	$1\frac{7}{8}$	8	1 x 9

Size Closed Inches	Number Dozen Pairs in Box	Shipping Weight per Box without Screws Pounds	Dozen Pairs in Case	Shipping Weight per Case Pounds
2	2	$1\frac{1}{2}$	24	33
3	2	$4\frac{3}{4}$	24	60
4	2	$6\frac{1}{2}$	16	56
5	1	$5\frac{1}{4}$		
5	2	$10\frac{1}{2}$	10	56
6	1	$7\frac{1}{4}$		
6	2	$14\frac{1}{2}$	6	46
8	1	14	3	43



Method of packing in boxes without screws

No. SC280 Light Strap Hinges



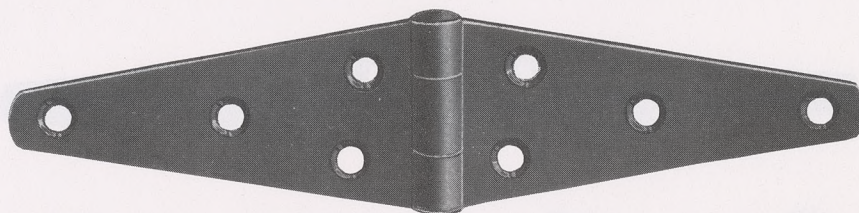
Method of packing one pair in a box with screws

Size Closed Inches	Number of Pairs in Box	Number of Pairs in Case—Boxed	Shipping Weight per Case with Screws Pounds
2	12		14
3	1	100	26
4	1	100	35
5	1	50	28
6	1	50	36
8	1	25	38

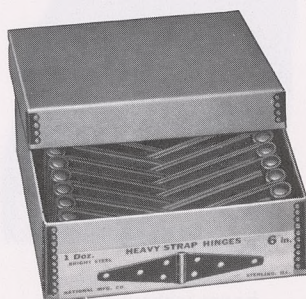
Sizes up to 6-inch made of cold rolled steel.

Finishes: Bright Steel, Japan, Zinc Steel Pin, Hot Galvanized Brass Pin.

No. 282 Heavy Strap Hinges



Size Closed Inches	Length of Joint Inches	Number of Screw-holes	Size of Flat-head Screws
4	$1\frac{1}{2}$	6	1 x 9
5	$1\frac{3}{4}$	8	1 x 9
6	$2\frac{1}{2}$	8	$1\frac{1}{4}$ x 11
8	$2\frac{15}{16}$	8	$1\frac{1}{4}$ x 12
10	$3\frac{7}{16}$	8	$1\frac{1}{2}$ x 14
12	4	10	$1\frac{3}{4}$ x 16
14	4	10	$1\frac{3}{4}$ x 16

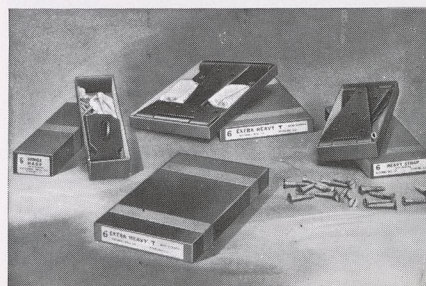


Method of packing in boxes without screws

Size Closed Inches	Number Dozen Pairs in Box	Shipping Weight per Box, without Screws Pounds	Dozen Pairs in Case	Shipping Weight per Case Pounds
4	2	$11\frac{1}{4}$	10	57
5	2	$18\frac{1}{2}$	5	50
6	1	$17\frac{1}{4}$	4	70
8	$\frac{1}{2}$	$16\frac{1}{2}$	2	63
10	$\frac{1}{2}$	26	1	49
12	$\frac{1}{4}$	$20\frac{3}{4}$	$\frac{1}{2}$	41

No. SC282 Heavy Strap Hinges

Size Closed Inches	Number of Pairs in Box	Number of Pairs in Case—Boxed	Shipping Weight per Case with Screws Pounds
4	1	50	28
5	1	50	46
6	1	25	41
8	1	25	70
10	1	10	45
12	1	10	75

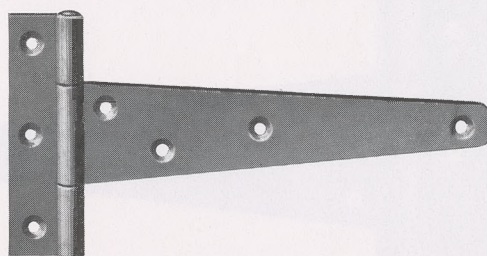


Method of packing one pair in a box with screws

Size 14-inch are packed in bundles only. Weight, per dozen pairs, $94\frac{1}{2}$ pounds.
Finishes: Bright Steel, Japan, Zinc Steel Pin, Hot Galvanized Brass Pin.

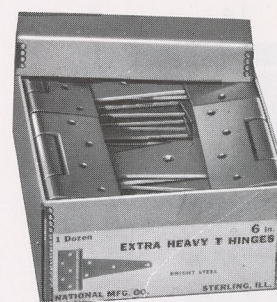


No. 284 Light "T" Hinges

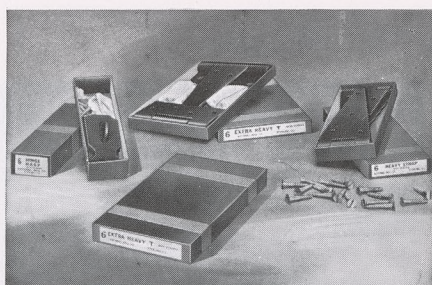


Length of Strap Inches	Length of Joint Inches	Width of Strap at Joint Inches	Narrow Width of Pad Inches	Number of Screw-holes	Size of Flat-head Screws
2	2	1	$1\frac{1}{2}$	6	$\frac{5}{8}$ x 5
3	$2\frac{3}{8}$	1	$\frac{3}{4}$	6	$\frac{3}{4}$ x 6
4	$2\frac{1}{2}$	$1\frac{1}{8}$	$\frac{7}{8}$	6	$\frac{3}{4}$ x 7
5	$3\frac{1}{4}$	$1\frac{5}{16}$	1	7	$\frac{7}{8}$ x 8
6	$3\frac{1}{4}$	$1\frac{5}{16}$	1	7	$\frac{7}{8}$ x 8
8	4	$1\frac{3}{4}$	$1\frac{1}{16}$	7	1 x 9
10	$4\frac{1}{2}$	$1\frac{11}{16}$	$1\frac{3}{16}$	8	1 x 10

Size Closed Inches	Number Dozen Pairs in Box	Shipping Weight per Box without Screws Pounds	Dozen Pairs in Case	Shipping Weight per Case, Pounds
2	2	$2\frac{3}{4}$	24	35
3	2	$5\frac{1}{4}$	24	68
4	2	$6\frac{1}{2}$	16	56
5	1	5		
5	2	10	10	52
6	1	6		
6	2	12	10	66
8	1	$11\frac{3}{4}$	5	53
10	1	15	3	45



Method of packing in boxes without screws



Method of packing one pair in a box with screws

No. Sc284 Light "T" Hinges

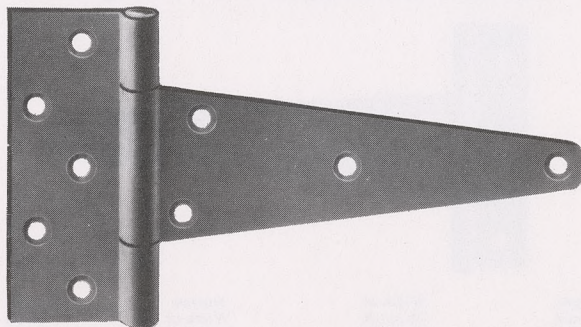
Length of Strap Inches	Number of Pairs in Box	Number of Pairs in Case—Boxed	Shipping Weight per Case with Screws, Pounds
2	12	96	14
3	1	100	29
4	1	100	35
5	1	50	26
6	1	50	31
8	1	25	29
10	1	25	37

Sizes up to 6-inch made of cold rolled steel.

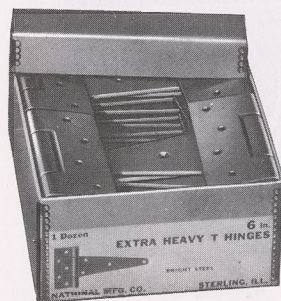
All Bonderized Dead Black Light Tee Hinges packed with oval head screws.

Finishes: Bright Steel, Japan, Zinc Steel Pin, Hot Galvanized Brass Pin.

No. 286 Extra Heavy "T" Hinges



Length of Strap Inches	Length of Joint Inches	Width of Strap at Joint Inches	Narrow Width of Pad Inches	Number of Screw-holes	Size of Flat-head Screws
4	3 1/2	1 11/16	1 1/8	6	1 x 9
5	3 15/16	1 7/8	1 7/16	8	1 x 10
6	4 1/2	2 1/8	1 3/4	8	1 1/4 x 11
8	5 1/2	2 1/2	2 1/4	9	1 1/4 x 12
10	7	3 3/8	2 5/16	9	1 1/2 x 14
12	8	3 5/16	2 3/4	10	1 3/4 x 16
14	8	3 5/16	2 3/4	10	1 3/4 x 16

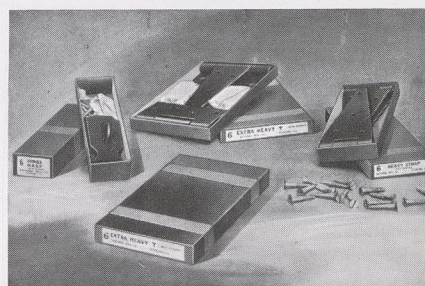


Method of packing in boxes without screws

Size Closed Inches	Number Dozen Pairs in Box	Shipping Weight per Box, without Screws Pounds	Dozen Pairs in Case	Weight per Case Pounds
4	2	14	10	73
5	1	13 1/4		
5	2	26 1/2	5	64
6	1	20 1/2	3	61
8	1 1/2	18	2	70
10	1 1/2	28 3/4	1	54
12	1 1/4	19 1/4	1 1/2	40

No. SC286 Extra Heavy "T" Hinges

Length of Strap Inches	Number of Pairs in Box	Number of Pairs in Case—Boxed	Shipping Weight per Case with Screws Pounds
4	1	50	35
5	1	50	61
6	1	25	47
8	1	25	79
10	1	10	49
12	1	10	70



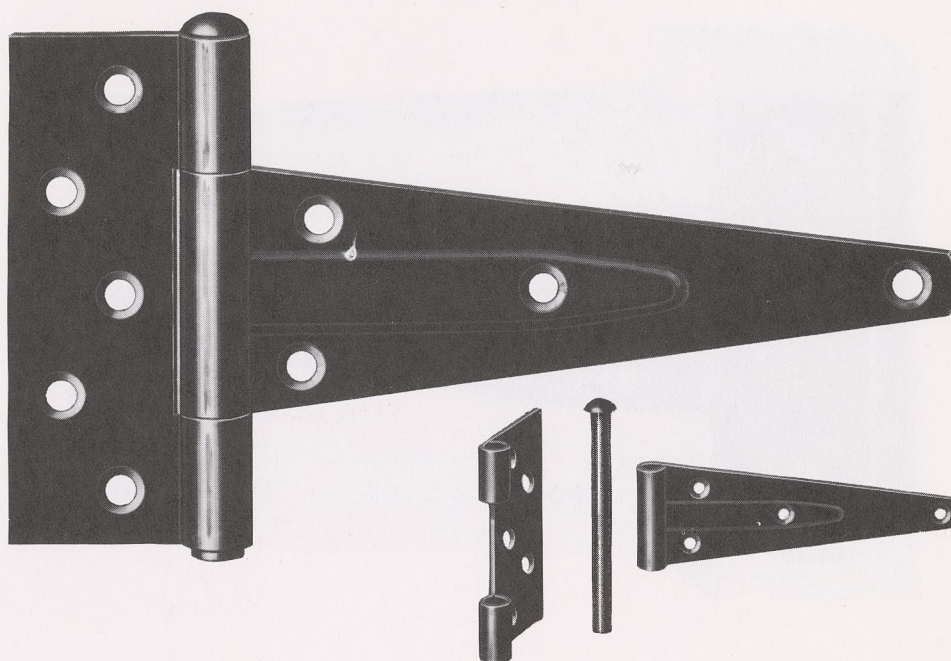
Method of packing one pair in a box with screws

Size 14-inch are packed in bundles only. Weight, per dozen pairs, 80 pounds.
Finishes: Bright Steel, Japan, Zinc Steel Pin, Hot Galvanized Brass Pin.



No. 840 Reversible "T" Hinge

For Garage Doors



This hinge is made especially for use on garage doors. It has a loose pin and can be reversed and used as a full surface hinge or mortised into the jamb when brick construction is used.

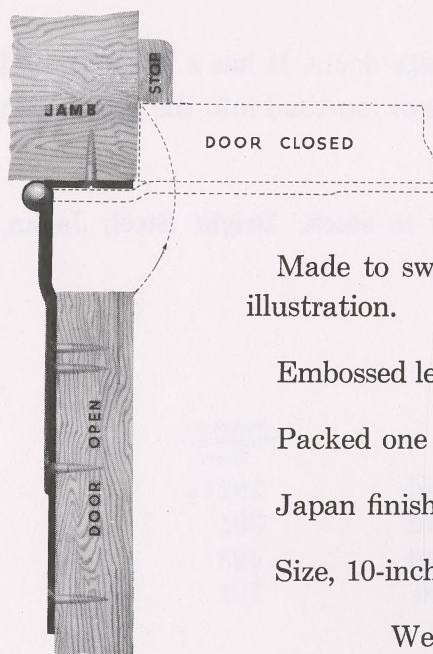
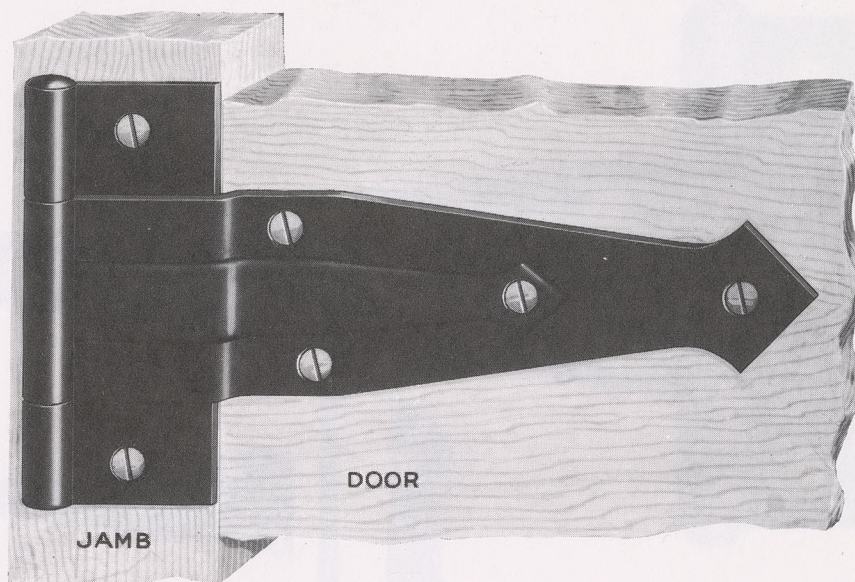
The following finishes are carried regularly in stock: Bright Steel, Japan, Bond. Dead Black, Sherardized with Steel Pin.

Packed one pair in a box with screws.

Size Inches	Size of Screws	Weight per Hundred Pairs Pounds
6	1 ¹ / ₄ x 10 Oval Head	191 ¹ / ₂
8	1 ¹ / ₄ x 10 Oval Head	301
10	1 ¹ / ₂ x 12 Oval Head	483
12	1 ³ / ₄ x 16 Flat Head	701

Size 12-inch is not embossed.

No. 841 Offset "T" Hinge



Made to swing doors entirely clear of opening. See lower illustration.

Embossed leaf adds to attractiveness and strength of hinge.

Packed one pair in a box with 1½x12 oval head screws.

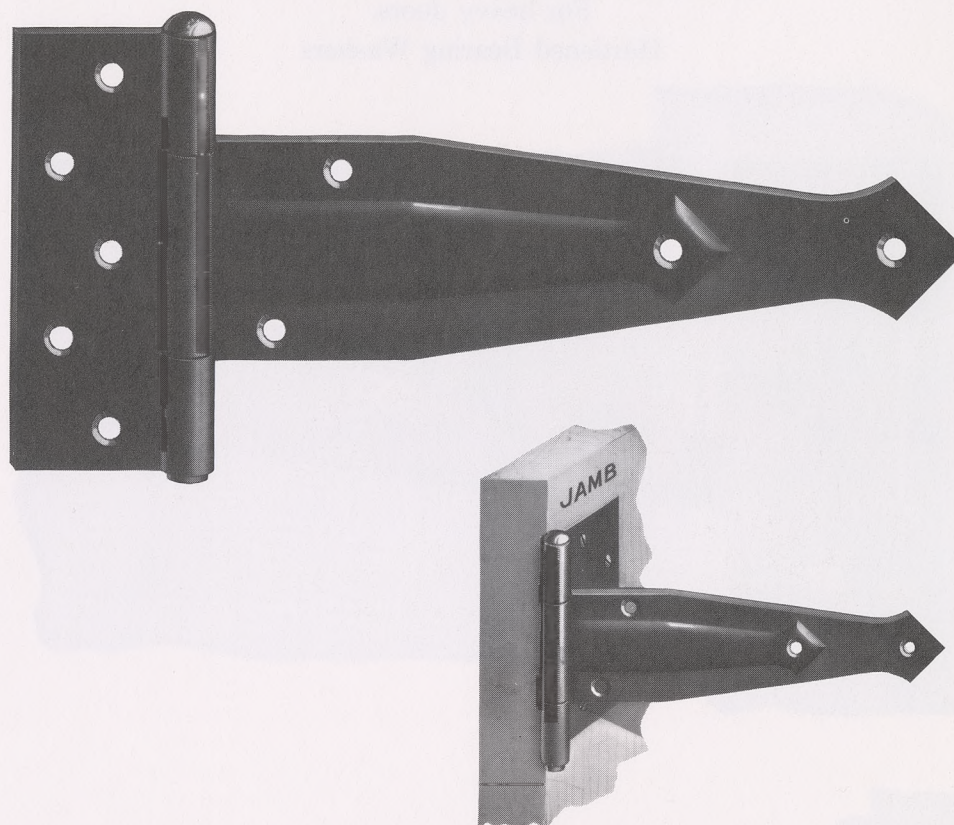
Japan finish only.

Size, 10-inch.

Weight, per hundred pairs, 360 pounds.



No. 842 Reversible "T" Hinge



Made with a loose pin so that the "T" part can be reversed and used as a full surface hinge or mortised into the jamb when brick construction is used.

The embossed leaf adds to the attractiveness and strength of the hinge.

Can be used for garage doors or rustic construction.

After hinge is placed in position, the end of pin can be slightly riveted to prevent its removal.

Packed one pair in a box with screws.

Japan and Bonderized Dead Black finishes only.

Size
Inches

6
8
10

Size Screws
Oval Head

$1\frac{1}{4}$ x 10
 $1\frac{1}{4}$ x 10
 $1\frac{1}{2}$ x 12

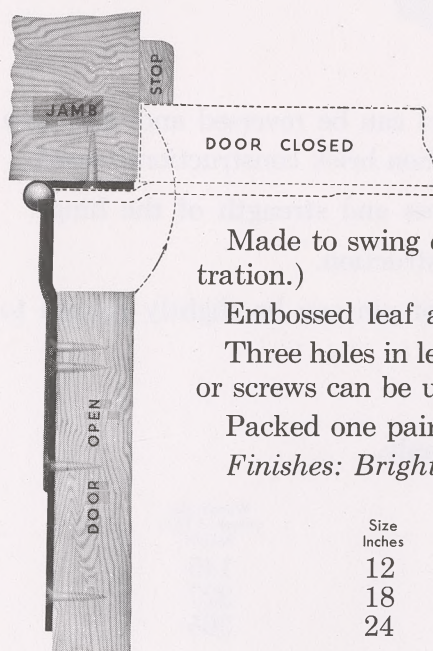
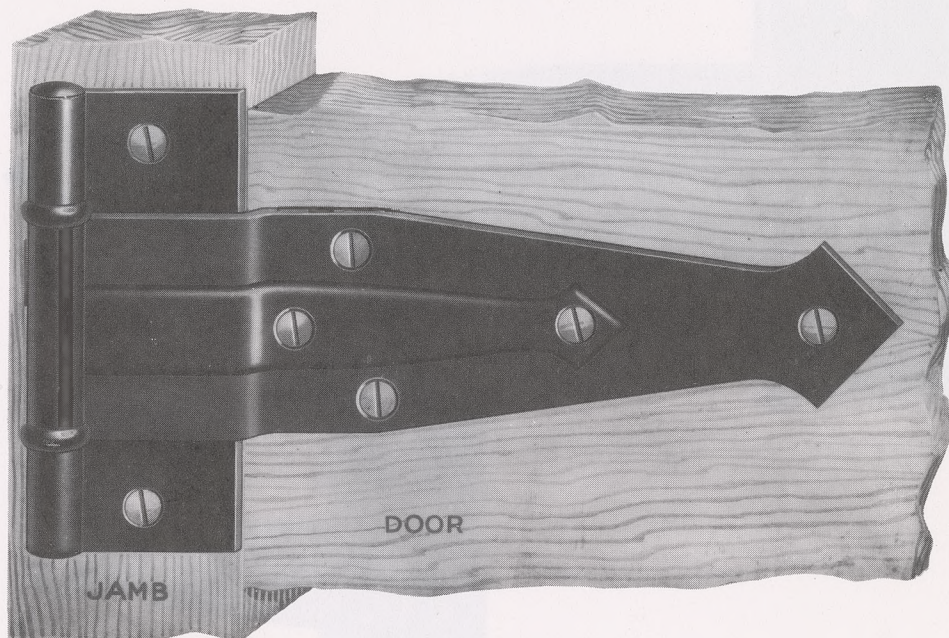
Weight per
Hundred Pairs
Pounds

145
227
365

No. 843 Offset "T" Hinge

For heavy doors.

Hardened Bearing Washers



Made to swing doors entirely clear of opening. (See lower illustration.)

Embossed leaf adds to attractiveness and strength of hinge.

Three holes in leaf are punched square and countersunk so bolts or screws can be used as desired.

Packed one pair in a box with screws.

Finishes: Bright Steel, Japan or Bond. Dead Black.

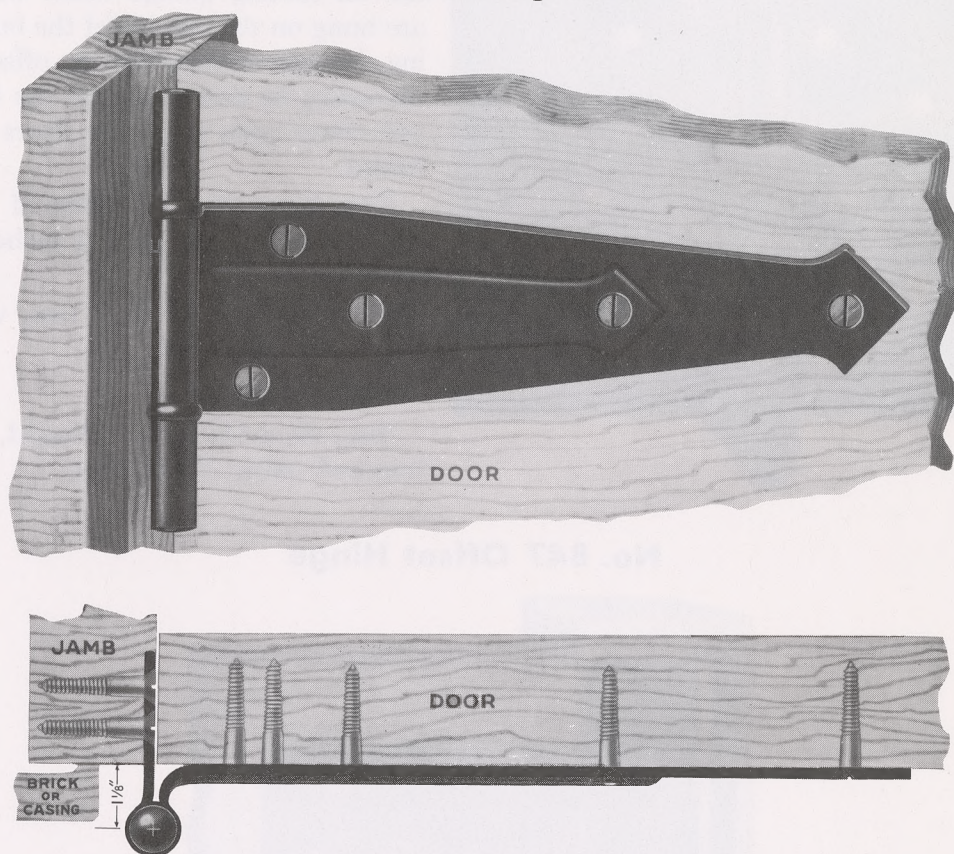
Size Inches	Size Screws Flat Head	Weight per Pair Pounds
12	1 ³ / ₄ x 16	6 ¹ / ₂
18	1 ³ / ₄ x 16	8 ¹ / ₄
24	1 ³ / ₄ x 16	10



No. 844 Half Surface "T" Hinge

For heavy doors.

Hardened Bearing Washers



Made with an offset. Can be used on either brick or frame construction.

The embossed leaf adds to the attractiveness and strength of the hinge.

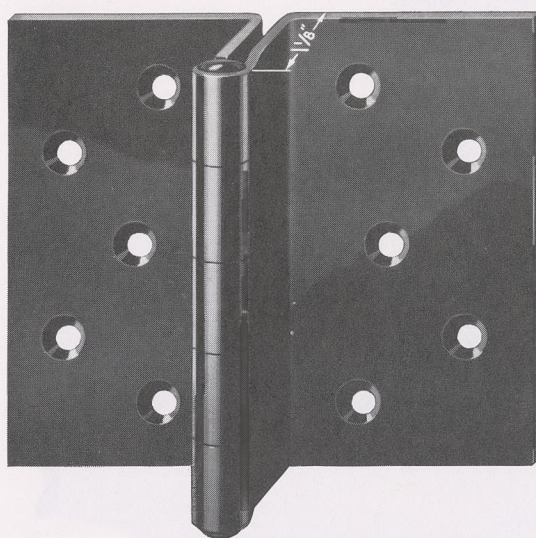
Three holes in leaf are punched square and countersunk so bolts or screws can be used as desired.

Packed one pair in a box with screws.

Finishes: Bright Steel, Japan or Bond. Dead Black.

Size Inches	Offset Inches	Throw Inches	Size Screws Flat Head	Weight per Pair Pounds
12	1 ¹ / ₈	2 ¹ / ₄	1 ³ / ₄ x 16	6 ¹ / ₂
18	1 ¹ / ₈	2 ¹ / ₄	1 ³ / ₄ x 16	8
24	1 ¹ / ₈	2 ¹ / ₄	1 ³ / ₈ x 16	10 ¹ / ₄

No. 846 Offset Surface Hinge



The No. 846 Hinge is suitable for use on folding garage doors which are hung on the outside of the building. In such construction an offset is necessary to accommodate the foot and chain bolts when the doors are folded.

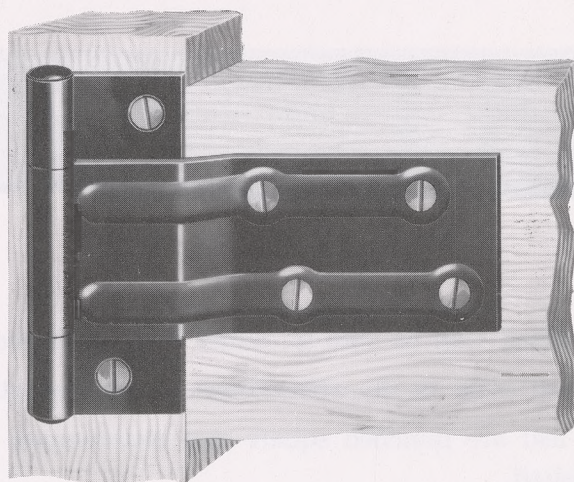
This hinge has an offset of $1\frac{1}{8}$ inches and a throw of $2\frac{1}{4}$ inches is produced.

Packed one pair in a box, with $1\frac{1}{4}$ x 10 inch screws.

Japan finish only.

Size, $4\frac{1}{2}$ x $5\frac{1}{4}$ inches. Weight, per hundred pairs, 275 pounds.

No. 847 Offset Hinge



Made to swing doors entirely clear of opening.

The embossed leaf adds to the strength of the hinge.

Packed one pair in a box with $1\frac{1}{4}$ x11 screws.

Japan finish only.

Size, 6 inches.

Weight, per hundred pairs, 225 pounds.

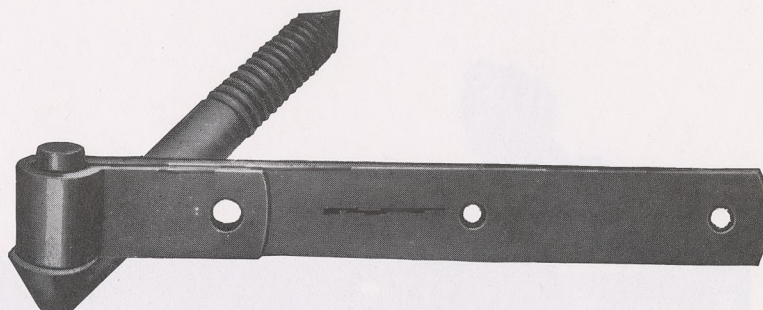


No. 290 Screw Hook and Strap Hinges

Plain Steel

Rolled Threads

Cold Rolled Joints



Comparative test for tensile strength, from a test made by United States Government Official:

Hot rolled soft steel, average pounds per square inch, 60,000

Cold rolled soft steel, actual pounds per square inch, 99,510

Length of Strap Inches	Number of Holes	Size of Bolt Holes	Approximate Weight per Dozen Pairs Pounds	Number of Dozen Pairs in Case	Shipping Weight per Case Pounds	Length of Strap Inches	Number of Holes	Size of Bolt Holes	Approximate Weight per Dozen Pairs Pounds
6	2	$\frac{5}{16}$ "	22½	1	23	18	4	$\frac{3}{8}$ "	93½
8	3	$\frac{5}{16}$ "	25½	1	26	20	4	$\frac{3}{8}$ "	99½
10	3	$\frac{3}{8}$ "	39¼	1	40	22	4	$\frac{3}{8}$ "	137
12	3	$\frac{3}{8}$ "	48	1	50	24	4	$\frac{3}{8}$ "	143
14	3	$\frac{3}{8}$ "	74	½	37	30	5	$\frac{1}{2}$ "	163
16	3	$\frac{3}{8}$ "	80	½	40	36	5	$\frac{1}{2}$ "	184

Sizes 18 inch through 36 inch packed in bundles.

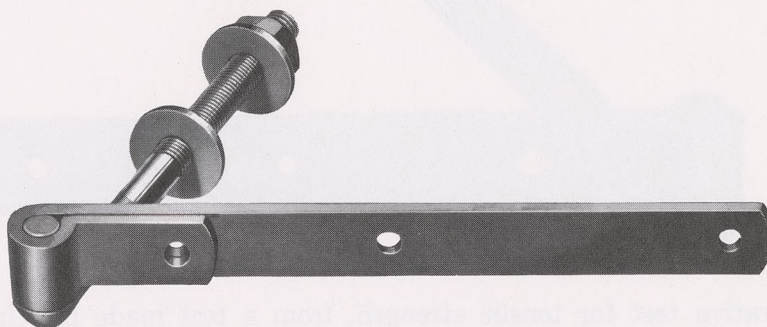
No. 291 Steel Screw Hooks

Rolled Threads

Extra Good Points

Diameter Inches	Length Inches	Weight Each, Pounds	For Screw Hook and Strap Hinges Inches
$\frac{1}{2}$	4	$\frac{1}{4}$	6, 8
$\frac{5}{8}$	5	$\frac{1}{2}$	10, 12
$\frac{3}{4}$	6	1	14, 16, 18, 20
$\frac{7}{8}$	7½	1¾	22, 24, 30, 36

No. 292 Strap and Bolt Hinges



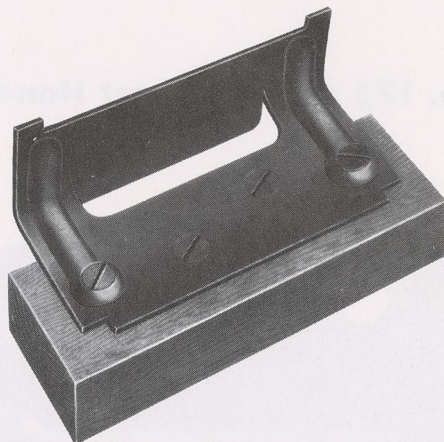
Length of Strap Inches	Number of Holes	Approximate Weight per Pair Pounds	Length of Strap Inches	Number of Holes	Approximate Weight per Pair Pounds
6	2	2 $\frac{1}{2}$	18	4	9 $\frac{3}{4}$
8	3	2 $\frac{3}{4}$	20	4	10
10	3	4 $\frac{1}{2}$	22	4	14
12	3	5 $\frac{1}{4}$	24	4	14 $\frac{1}{2}$
14	3	8	30	5	16 $\frac{1}{4}$
16	3	8 $\frac{1}{2}$	36	5	17 $\frac{3}{4}$

No. 293 Bolt Hooks

Diameter Inches	Length Inches	For Strap and Bolt Hinges Inches	Weight Each, Pounds
$\frac{1}{2}$	6	6, 8	$\frac{3}{4}$
$\frac{5}{8}$	8	10, 12	1 $\frac{1}{4}$
$\frac{3}{4}$	10	14, 16, 18, 20	2
$\frac{7}{8}$	10	22, 24, 30, 36	3



No. 61 "Self-Cleaner" Pressed Steel Foot Scraper



This Scraper extends out over the end of the step, so that the dirt will drop down and not gather around the Scraper.

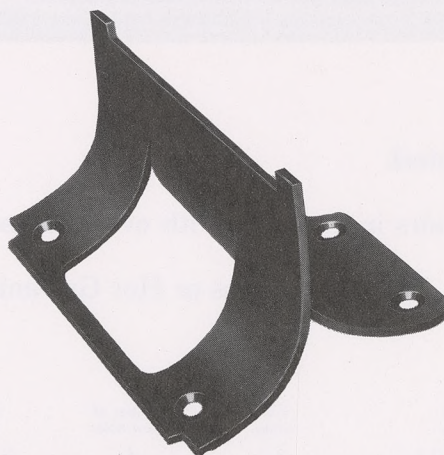
Furnished in Zinc, Bond. Dead Black or Hot Galvanized.

Envelopes with screws attached to each Scraper.

Packed one dozen in a box.

Weight, per dozen, 6¾ pounds.

No. 62 "Upright" Pressed Steel Foot Scraper



Can be used on wood or embedded in cement.

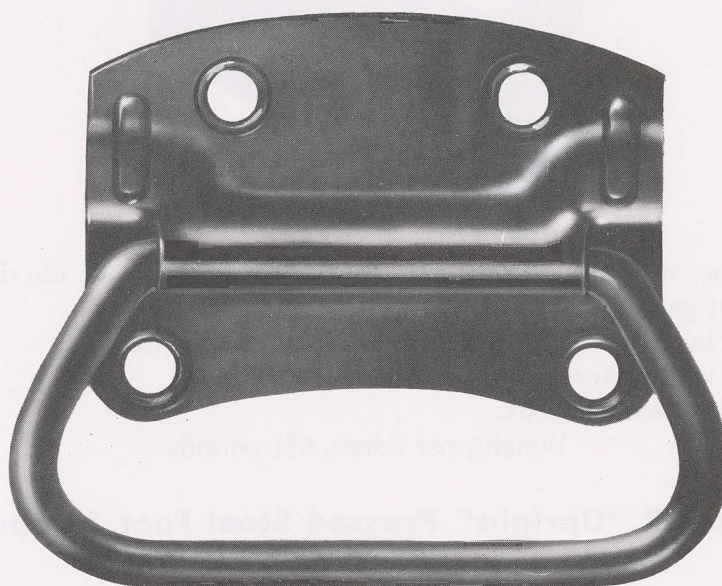
Furnished in Zinc, Bond. Dead Black or Hot Galvanized.

Envelope with screws attached to each Scraper.

Packed one dozen in a box.

Weight, per dozen, 7¼ pounds.

No. 175 Surface Chest Handle



Made of cold rolled steel.

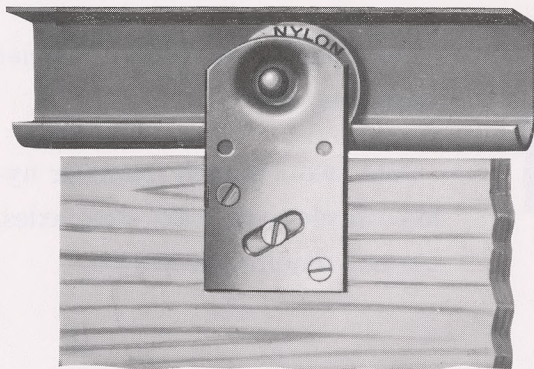
Packed one dozen pairs in a carton, with oval-head screws.

Furnished in Japan, Zinc, Dull Brass or Hot Galvanized finishes.

Size Inches	Plate Inches	Bail Inches	Number of Screw-holes	Size of Screws	Weight per Dozen Pairs Pounds
3 1/2	3 1/2 x 2 5/8	3/8	4	3/4 x 10	10 1/4
4	4 x 3	3/8	4	3/4 x 10	13 1/4



No. 182 Interior Sliding Door Hanger



For use with No. 180 Interior Sliding Door Rail.

Hangers are zinc plated.

So constructed that it cannot jump the rail.

Has $1\frac{3}{8}$ inch diameter nylon wheel with solid steel axle. Does not require lubrication.

Has slotted screw hole for vertical adjustment.

Both Hanger and Rail serve all thicknesses of doors from $\frac{3}{4}$ inch to $1\frac{3}{4}$ inch.

Hangers can be bought separately or in sets No. 182-S2 contents of which are listed below:

No. 182-S2

For 2 Doors $\frac{3}{4}$ " to $1\frac{3}{4}$ " thick

2 Pair No. 182 Hangers

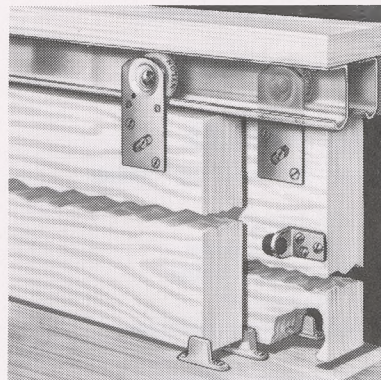
2 only No. 190 Side Guides

1 only No. 191 Center Guide

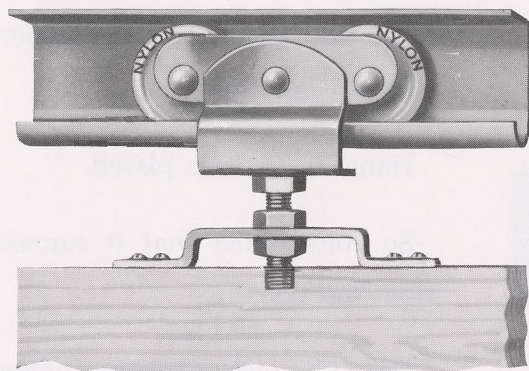
1 only No. 188 Bumper with screws for above and rail.

Weight per set, 14 ounces.

No. 182 Hanger, weight per dozen pairs, $4\frac{3}{4}$ pounds.



No. 185 Interior Sliding Door Hanger



For use with No. 180 Interior Sliding Door Rail.

Hangers are zinc plated.

So constructed that it cannot jump the rail.

Has two $1\frac{3}{8}$ inch diameter nylon wheels with solid steel axles. Do not require lubrication.

Has vertical adjustment.

Both Hanger and Rail serve all thicknesses of doors from $\frac{3}{4}$ inch to $1\frac{3}{4}$ inch.

So constructed that weight of door is equally distributed over the whole axle.

Contents of sets No. 185-S1 and No. 185-S2 are listed below.

No. 185-S1

For 1 Door $\frac{3}{4}$ " to $1\frac{3}{4}$ " thick

- 1 Pair No. 185 Hangers
- 2 only No. 190 Side Guides
- 1 only wrench. Screws for above and rail.

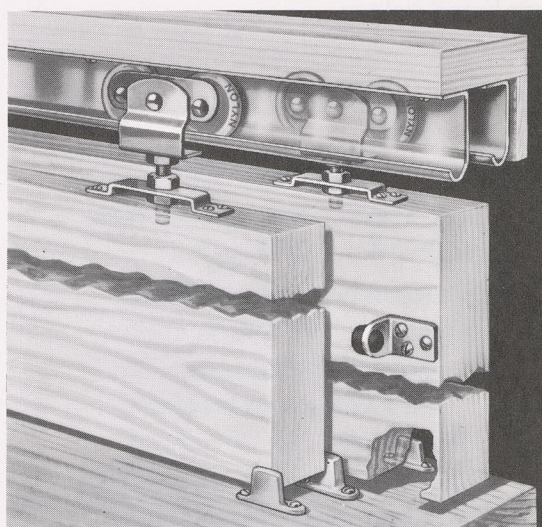
Weight, per set, $1\frac{1}{8}$ pounds

No. 185-S2

For 2 Doors $\frac{3}{4}$ " to $1\frac{3}{4}$ " thick

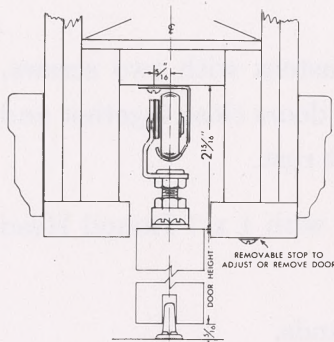
- 2 Pair No. 185 Hangers
- 2 only No. 190 Side Guides
- 1 only No. 191 Center Guide
- 1 only No. 188 Bumper
- 1 only wrench. Screws for above and rail.

Weight, per set, 2 pounds

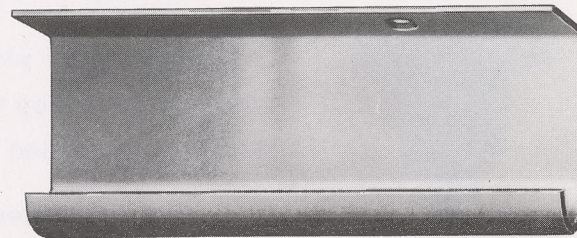




No. 180 Interior Sliding Door Rail



Cross section Pocket Installation



Rail is hot galvanized to prevent rust.

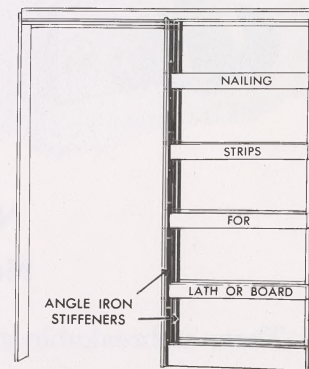
Made of 18-gauge steel. It is very rigid and cannot be damaged in transit or handling, and is so designed that Hanger cannot jump the rail.

Serves every thickness of door from $\frac{3}{4}$ inch to $1\frac{3}{4}$ inch.

Screw holes are slotted for lateral adjustment.

Each length packed 12 pieces in an individual case with contents clearly stenciled on it. The Rail is removed or sold and the balance remains as perfect and clean as when it leaves our plant.

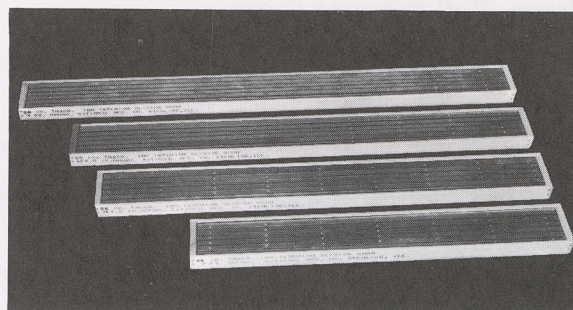
Listed below are the numbers and lengths of Rail required for standard widths of doors.



No. 181 Angle Iron Stiffener

LENGTH OF No. 180 TRACK REQUIRED

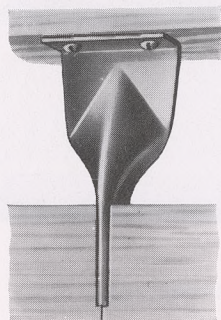
Door Width	1 Door 1 Piece	2 Doors 2 Pieces	4 Doors 4 Pieces	Weight, Pounds, 12 Pieces
2' 0"	44"	44"	44"	27
2' 6"	56"	56"	56"	34
2' 8"	60"	60"	60"	37
3' 0"	68"	68"	68"	40
4' 0"	92"	92"	92"	52



Secure method of packing sliding door rail

No. 187 Center Stop

(for bi-parting doors)



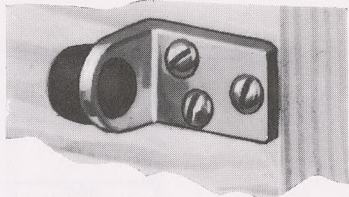
A stout, steel plate that fastens with two screws, acts as a rigid stop where two doors close together end to end. Zinc plated to prevent rust.

Packed one dozen in a box with 1 x 7 Round Head screws.

Weight, per dozen, 1 $\frac{1}{4}$ pounds.

No. 188 Bumper

A sturdy zinc plated stop with rubber button to cushion the halt of by-passing doors.



Packed one dozen in a box with $\frac{3}{4}$ x 7 Round Head screws.

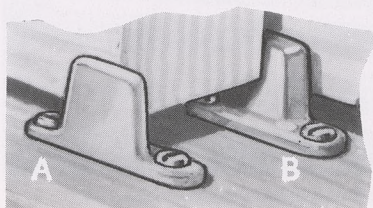
Weight, per dozen, 1 pound.

No. 190 Nylon Side Guide

No. 191 Nylon Center Guide

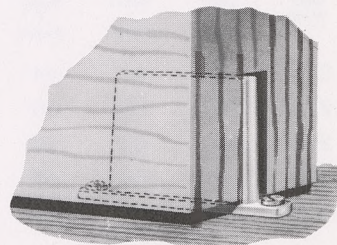
These unbreakable guides are adjustable and simple to install. "A" style serves as outer guide, "B" style serves as center guide between by-passing doors. Will not mar doors.

Packed one-quarter gross in a box with $\frac{5}{8}$ x 6 Pan Head screws.



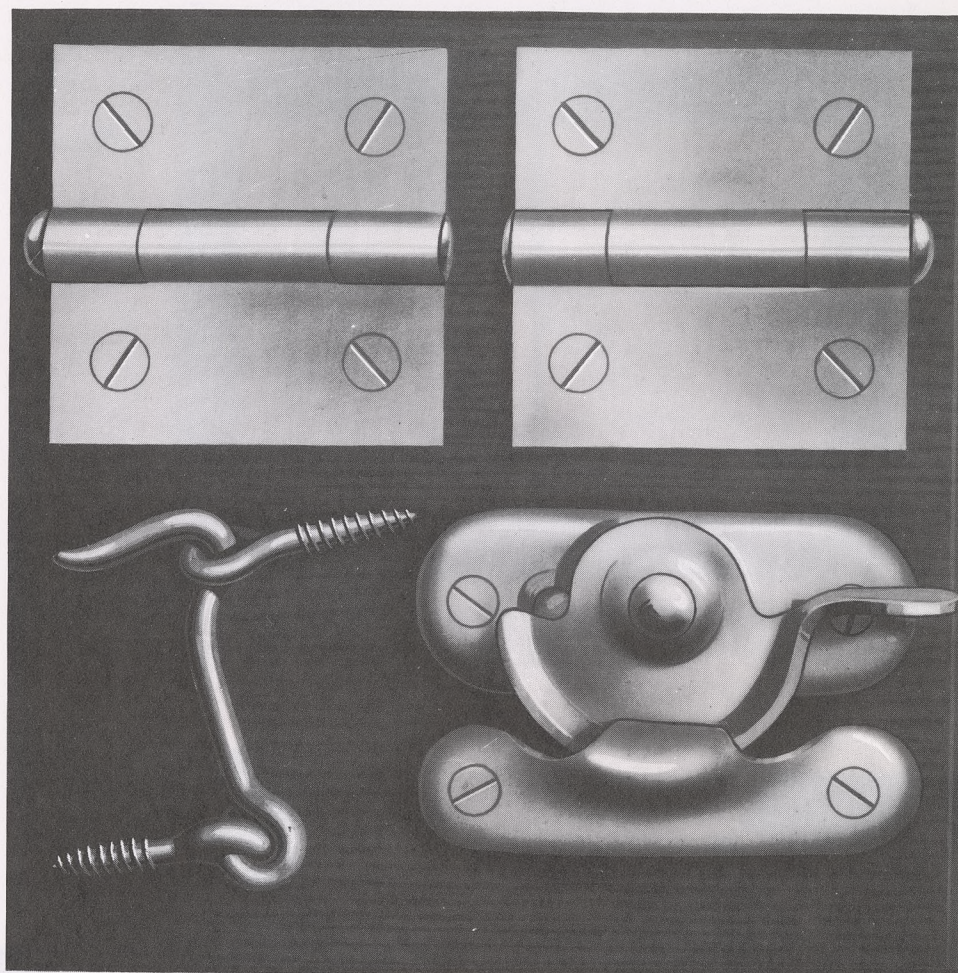
No. 190 weight, per $\frac{1}{4}$ gross, 8 ounces.

No. 191 weight, per $\frac{1}{4}$ gross, 10 ounces.





No. 70 Cellar Window Set



Cut full size

This Set consists of the following articles:

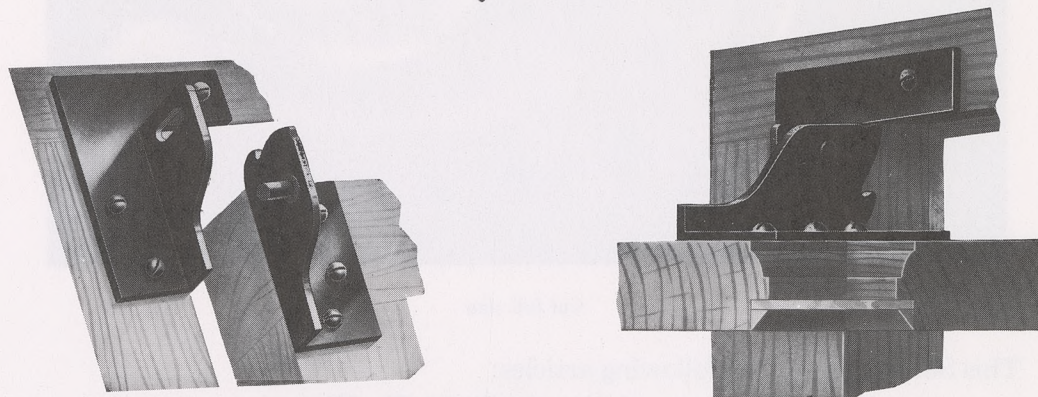
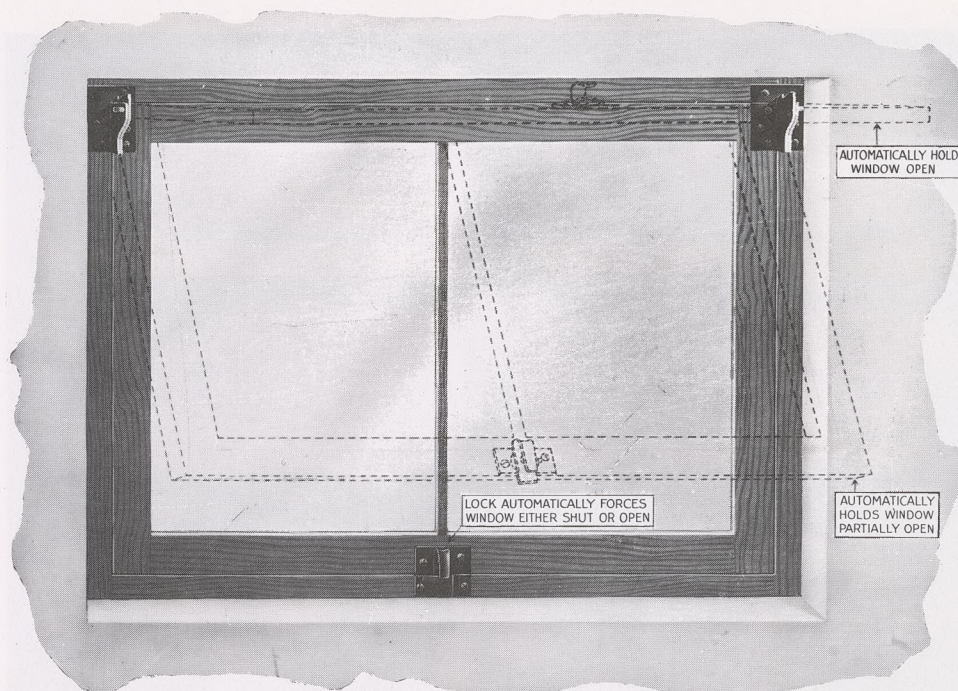
- One pair 2 x 2-inch No. 505 Tight Pin Hinges
- One only 2½-inch Hook and Eye
- One only No. 600 "All-Steel" Sash Lock

All parts are heavily Sherardized to prevent rust. Also furnished in Japan or Zinc finish, when so ordered.

A sample set mounted as illustrated when requested. One set, with screws, is packed in a carton. One dozen sets in a box. Twelve dozen sets in a case.

Weight, per dozen sets, 5¾ pounds.

No. 71 Automatic Cellar Window Set



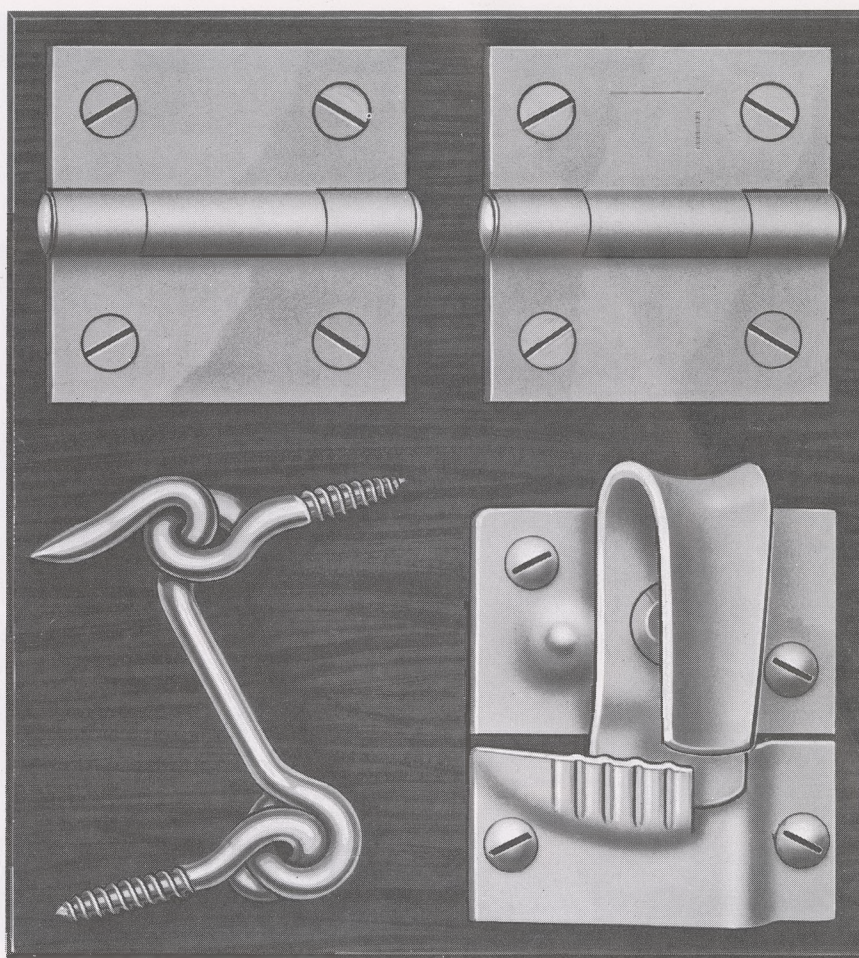
In addition to the good features illustrated, the handle of lock is so formed as to give a liberal handhold to open window.

Furnished either Japanned, Zinc or Hot Galvanized. A sample set mounted when requested. One set, with screws, is packed in a carton. One dozen sets in a box. Twelve dozen sets in a case.

Weight, per dozen sets, 7½ pounds.



No. 72 Cellar Window Set



This Set consists of the following articles:

One pair 2 x 2-inch No. 505 Tight Pin Hinges

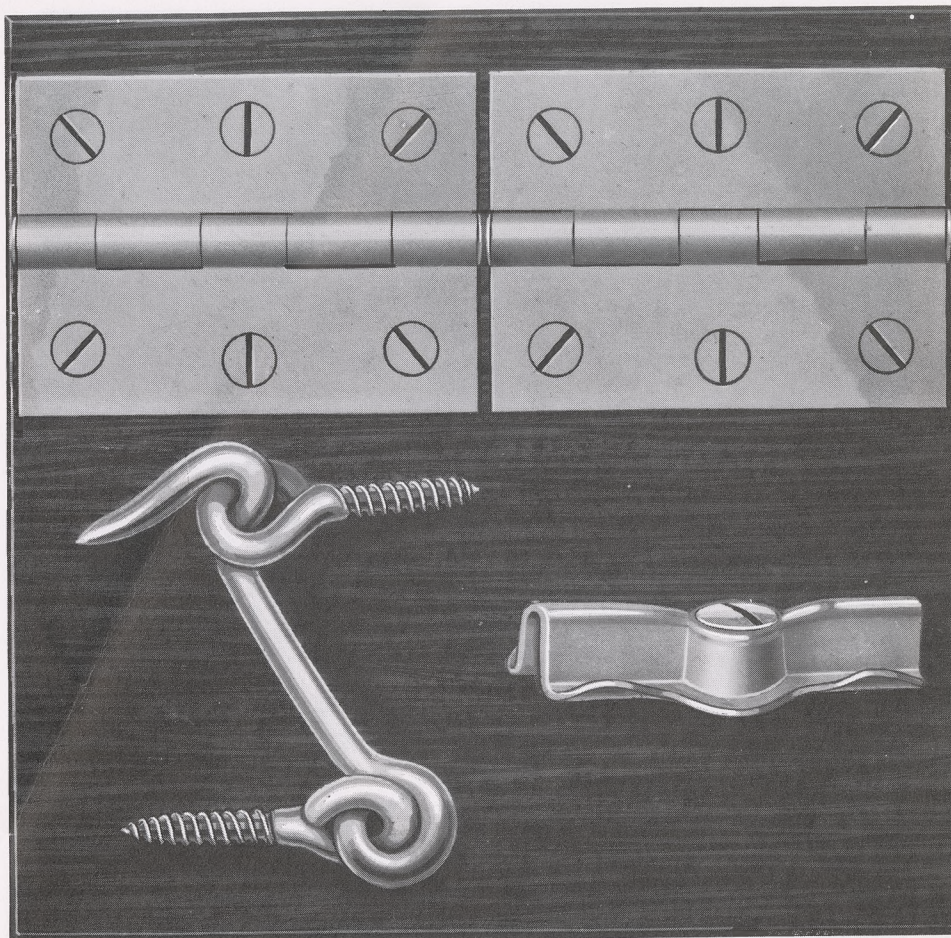
One only 2½-inch Hook and Eye

One only No. 610 Sash Lock

All parts are heavily Zinc plated. Also furnished in Japan and Hot Galvanized finish, when so ordered.

A sample set mounted as illustrated when requested. One set, with screws, is packed in a carton. One dozen sets in a box. Twelve dozen sets in a case.

Weight, per dozen sets, 6½ pounds.

No. 73 Cellar Window Set

Cut full size

This Set consists of the following articles:

One pair 2½-inch No. 518 Tight Pin Light Narrow Hinges

One only 2½-inch Hook and Eye

One only 2-inch No. 83 Turn Button

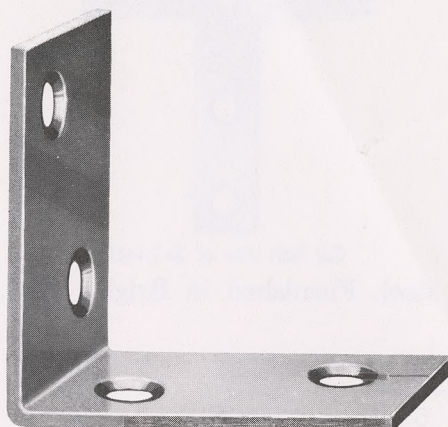
This set is furnished with Japanned Butts, Zinc Plated Turn Button and Hook and Eye, or completely Zinc plated.

A sample set mounted as illustrated when requested. One set, with screws, is packed in a carton. One dozen sets in a box. Twelve dozen sets in a case.

Weight, per dozen sets, 3¾ pounds.



No. 115 Corner Iron



Cut full size of 2x2-inch

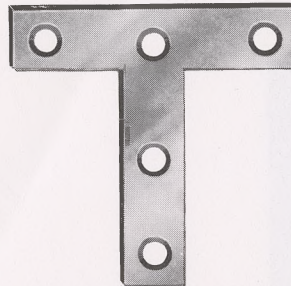
Length Inches	Width Inches	Number of Screw-holes	Size of Flat-head Screws	Number Dozen in Box	Weight per Box without Screws Pounds	Weight per Box with Screws* Pounds
1	$\frac{1}{2}$	2	$\frac{3}{4}$ x 7	3	$\frac{3}{4}$	1
$1\frac{1}{2}$	$\frac{5}{8}$	4	$\frac{3}{4}$ x 7	3	$1\frac{3}{4}$	2
2	$\frac{5}{8}$	4	$\frac{3}{4}$ x 8	3	$2\frac{1}{4}$	$2\frac{3}{4}$
2	$\frac{7}{8}$	4	$\frac{3}{4}$ x 8	3	$3\frac{1}{4}$	$3\frac{3}{4}$
$2\frac{1}{2}$	$\frac{5}{8}$	4	$\frac{3}{4}$ x 8	3	$3\frac{1}{2}$	4
3	$\frac{3}{4}$	4	1 x 9	3	5	6
$3\frac{1}{2}$	$\frac{3}{4}$	4	1 x 9	3	6	7
4	$\frac{7}{8}$	4	1 x 10	3	9	10
5	1	6	$1\frac{1}{4}$ x 11	3	$15\frac{1}{2}$	$17\frac{1}{4}$
6	$1\frac{1}{8}$	6	$1\frac{1}{4}$ x 12	2	15	$16\frac{1}{2}$
8	$1\frac{1}{4}$	6	$1\frac{1}{4}$ x 12	1	$16\frac{1}{2}$	17
10	$1\frac{1}{4}$	10	$1\frac{1}{4}$ x 12	1	$20\frac{1}{2}$	22

*Zinc only packed with screws.

Sizes up to $3\frac{1}{2}$ x $\frac{3}{4}$ -inch made of cold rolled steel.

Finishes: Plain Steel, Hot Galvanized and Zinc plated.

No. 116 "T" Plate



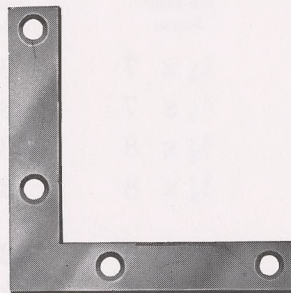
Cut half size of 3x3-inch

Made of cold rolled steel. Furnished in Bright Steel, Zinc plated and Hot Galvanized.

Size Inches	Width Inches	Number of Screw-holes	Size of Flat-head Screws	Number Dozen in Box	Weight per Box without Screws Pounds	Weight per Box with Screws* Pounds
3 x 3	$\frac{5}{8}$	5	$\frac{3}{4}$ x 8	3	$2\frac{1}{4}$	$2\frac{3}{4}$
4 x 4	$\frac{3}{4}$	5	$\frac{3}{4}$ x 8	3	4	$4\frac{1}{4}$

*Zinc only packed with screws.

No. 117 Flat Corner Iron



Cut half size of 3x3x $\frac{1}{2}$ -inch

Length Inches	Width Inches	Number of Screw-holes	Size of Flat-head Screws	Number Dozen in Box	Weight per Box without Screws Pounds	Weight per Box with Screws* Pounds
$1\frac{1}{2}$	$\frac{3}{8}$	4	$\frac{5}{8}$ x 5	3	$\frac{3}{4}$	1
2	$\frac{3}{8}$	4	$\frac{5}{8}$ x 5	3	1	$1\frac{1}{4}$
$2\frac{1}{2}$	$\frac{3}{8}$	4	$\frac{5}{8}$ x 5	3	$1\frac{1}{4}$	$1\frac{1}{2}$
$2\frac{1}{2}$	$\frac{1}{2}$	4	$\frac{3}{4}$ x 6	3	$1\frac{3}{4}$	2
3	$\frac{1}{2}$	4	$\frac{3}{4}$ x 7	3	2	$2\frac{1}{2}$
3	$\frac{5}{8}$	4	$\frac{3}{4}$ x 7	3	$2\frac{1}{2}$	3
$3\frac{1}{2}$	$\frac{1}{2}$	4	$\frac{3}{4}$ x 7	3	$2\frac{1}{2}$	$2\frac{3}{4}$
$3\frac{1}{2}$	$\frac{5}{8}$	4	$\frac{3}{4}$ x 7	3	3	$3\frac{1}{2}$
$3\frac{1}{2}$	$\frac{3}{4}$	4	1 x 8	3	$3\frac{3}{4}$	$4\frac{1}{2}$
4	$\frac{3}{4}$	4	1 x 8	3	$4\frac{1}{4}$	5
5	$\frac{7}{8}$	4	1 x 9	3	6	$6\frac{3}{4}$
6	1	6	1 x 9	3	$8\frac{1}{2}$	10

*Zinc only packed with screws.

All sizes made of cold rolled steel.

Finishes: Plain Steel, Hot Galvanized and Zinc plated.



No. 118 Mending Plate



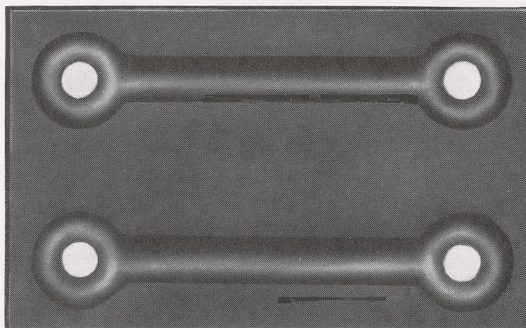
Length Inches	Width Inches	Number of Screw-holes	Size of Flat-head Screws	Number Dozen in Box	Weight per Box without Screws Pounds	Weight per Box with Screws* Pounds
2	$\frac{1}{2}$	2	$\frac{3}{4}$ x 7	3	$\frac{3}{4}$	1
3	$\frac{5}{8}$	4	$\frac{3}{4}$ x 7	3	$1\frac{3}{4}$	2
4	$\frac{5}{8}$	4	$\frac{3}{4}$ x 8	3	$2\frac{1}{4}$	3
4	$\frac{7}{8}$	4	$\frac{3}{4}$ x 8	3	$3\frac{1}{4}$	4
5	$\frac{5}{8}$	4	$\frac{3}{4}$ x 8	3	$3\frac{1}{4}$	4
6	$\frac{3}{4}$	4	1 x 9	3	5	6
8	$\frac{7}{8}$	4	1 x 10	3	6	$6\frac{3}{4}$
10	1	6	$1\frac{1}{4}$ x 11	2	$10\frac{1}{4}$	$11\frac{3}{4}$
12	$1\frac{1}{8}$	6	$1\frac{1}{4}$ x 12	1	$7\frac{3}{4}$	$8\frac{1}{4}$

*Zinc only packed with screws.

Sizes up to 6 x $\frac{3}{4}$ -inch made of cold rolled steel.

Finishes: Plain Steel, Hot Galvanized and Zinc plated.

No. 119 Steel Tie Plate

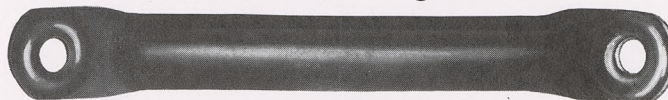


Cut full size of $1\frac{3}{4}$ x $2\frac{3}{4}$ -inch

Plain Steel or Japan

Packed one dozen in a bundle. Weight, per dozen, $\frac{3}{4}$ pound.

No. 120 Steel Angle Brace

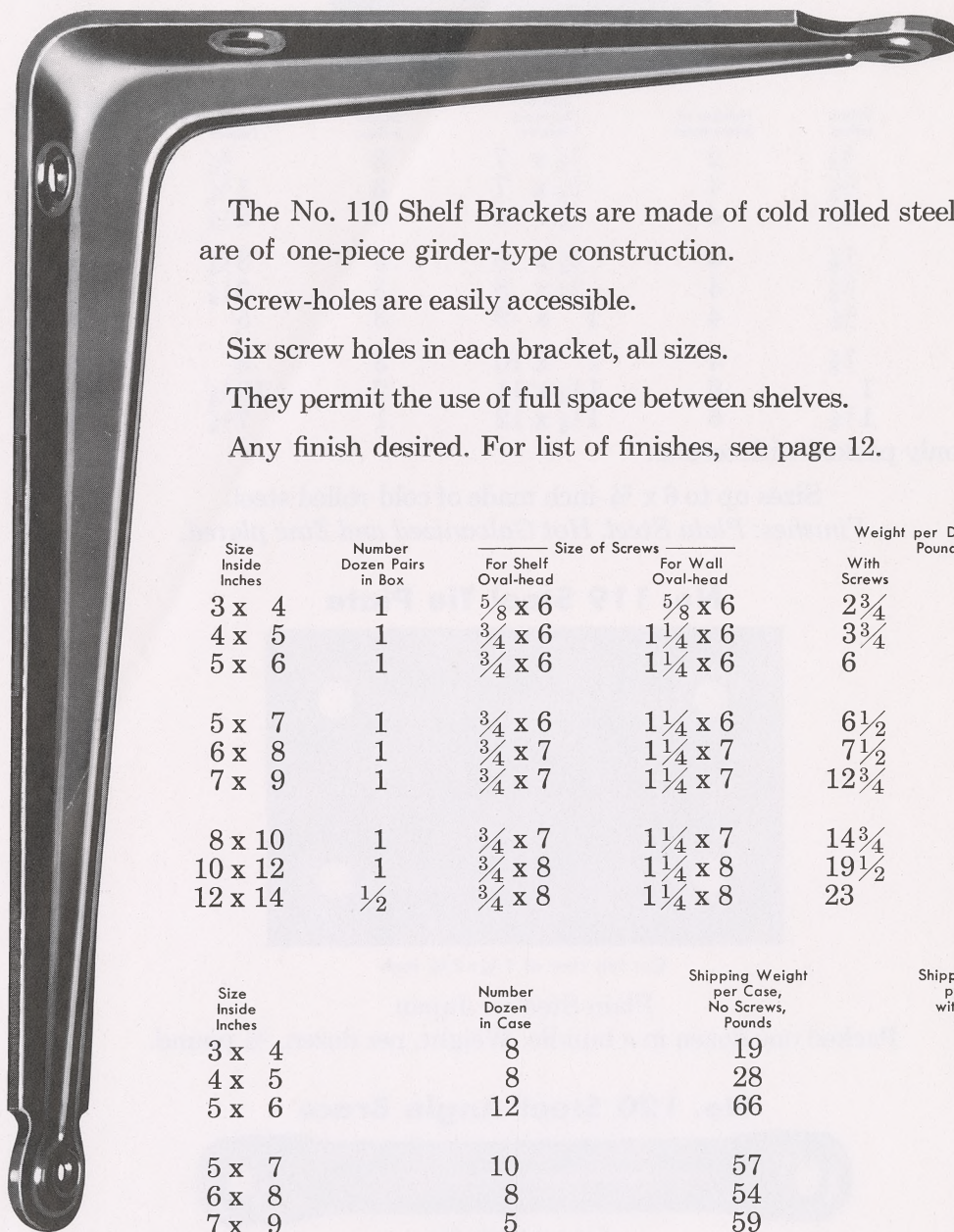


Cut two-thirds size

Plain Steel or Japan

Japanned, packed one dozen in a box. Plain Steel, in bulk.
Weight, per dozen, $\frac{3}{4}$ pound.

No. 110 Shelf Brackets



The No. 110 Shelf Brackets are made of cold rolled steel. They are of one-piece girder-type construction.

Screw-holes are easily accessible.

Six screw holes in each bracket, all sizes.

They permit the use of full space between shelves.

Any finish desired. For list of finishes, see page 12.

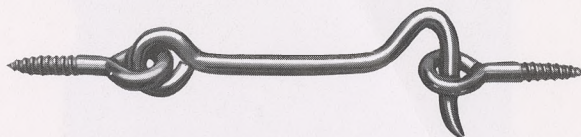
Size Inside Inches	Number Dozen Pairs in Box	Size of Screws		Weight per Dozen Pairs Pounds	
		For Shelf Oval-head	For Wall Oval-head	With Screws	Without Screws
3 x 4	1	$\frac{5}{8}$ x 6	$\frac{5}{8}$ x 6	$2\frac{3}{4}$	$2\frac{1}{2}$
4 x 5	1	$\frac{3}{4}$ x 6	$1\frac{1}{4}$ x 6	$3\frac{3}{4}$	$3\frac{1}{4}$
5 x 6	1	$\frac{3}{4}$ x 6	$1\frac{1}{4}$ x 6	6	$5\frac{1}{2}$
5 x 7	1	$\frac{3}{4}$ x 6	$1\frac{1}{4}$ x 6	$6\frac{1}{2}$	$5\frac{3}{4}$
6 x 8	1	$\frac{3}{4}$ x 7	$1\frac{1}{4}$ x 7	$7\frac{1}{2}$	7
7 x 9	1	$\frac{3}{4}$ x 7	$1\frac{1}{4}$ x 7	$12\frac{3}{4}$	12
8 x 10	1	$\frac{3}{4}$ x 7	$1\frac{1}{4}$ x 7	$14\frac{3}{4}$	$13\frac{3}{4}$
10 x 12	1	$\frac{3}{4}$ x 8	$1\frac{1}{4}$ x 8	$19\frac{1}{2}$	$18\frac{1}{2}$
12 x 14	$\frac{1}{2}$	$\frac{3}{4}$ x 8	$1\frac{1}{4}$ x 8	23	$22\frac{1}{4}$

Size Inside Inches	Number Dozen in Case	Shipping Weight per Case, No Screws, Pounds	Shipping Weight per Case, with Screws, Pounds
3 x 4	8	19	21
4 x 5	8	28	32
5 x 6	12	66	72
5 x 7	10	57	64
6 x 8	8	54	58
7 x 9	5	59	63
8 x 10	5	65	70
10 x 12	3	53	56
12 x 14	2	42	44



No. 74 Wire Hooks and Eyes

Steel or Solid Brass



Length Inches	Units in Box	Weight per Box Pounds	Length Inches	Units in Box	Weight per Box Pounds
1	100	1 1/4	4	50	4
1 1/2	100	2 1/4	5	50	5 3/4
2	50	1 3/4	6	10	1 3/4
2 1/2	50	2 1/4	8	10	2
3	50	3 1/4	10	10	2
3 1/2	50	3 3/4	12	10	2 1/4

Furnished in Bright Steel and Zinc finishes.

No. 76 Perfect Door and Gate Spring

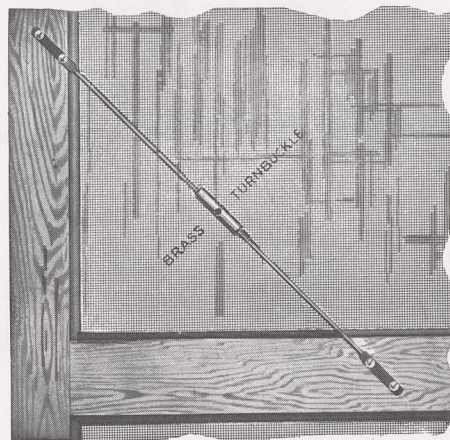
Japanned or Plated



Size	Units in Box	Weight per Box Pounds
1	10	1 1/4
2	10	1 1/2
3	10	2
4	10	2 1/4
5	10	3
6	10	3 1/4
7	10	4 1/4

Size No. 1 is not furnished in plated finishes.

No. 195 Screen Door Turnbuckle



Our Turnbuckles are made extra long, giving additional leverage to raise the door. They can be used on either screen or storm doors. The end pieces are of steel, with a *brass* Turnbuckle in the center. As brass will not rust to steel, our Turnbuckles can be easily operated at any time. They are made with S.A.E. threads.

Size 14½-inch are packed with zinc plated screws, one complete Turnbuckle in a specially printed envelope, one dozen in a box, sixty dozen in a case.

Size 42-inch are packed two dozen in a box.

Available in Japanned or Zinc finish.

Length Inches
14½
42

Weight per Dozen Pounds
1½
3½

No. 196 Screen Door Turnbuckle



Made extra heavy, with S.A.E. threads.

Packed with zinc plated screws, one dozen in a box.

Available in Japanned or Zinc finish.

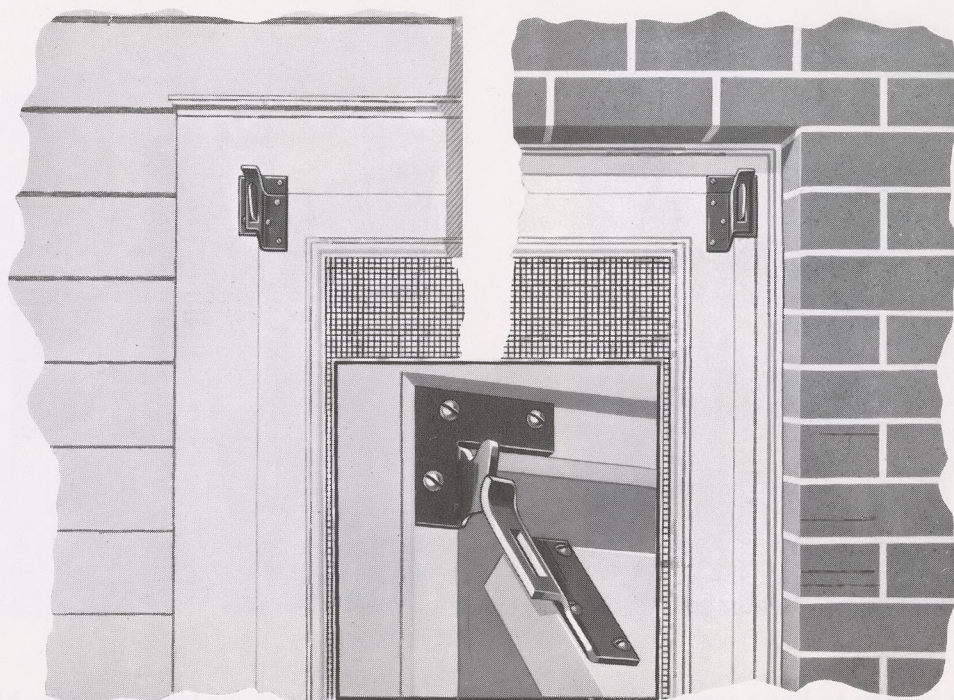
Length Inches
16
50

Weight per Dozen Pounds
2¾
7½

(For Garage Door Turnbuckles, see page 62.)



No. 78 Screen and Storm Sash Hanger
(Patented)



Screen or sash equipped with these hangers are easy to hang. The blind stops inside of casing serve as a guide when sliding hanger up to engage hook on casing. The sections on screen or sash slide over hook on casing and latch automatically. Prevent rattling.

Made of heavy-gauge steel.

Made especially for use on standard brick-mold but work equally well on frame construction.

The hook, or top section, is made in the form of a corner iron and is attached with three screws. It carries weight both at the top and side. It is made narrow so that it may be attached to the narrowest brick-mold.

Screen or sash must be pushed out at bottom to a considerable angle before the hanger is released. Prevents wind from raising sash off the hook.

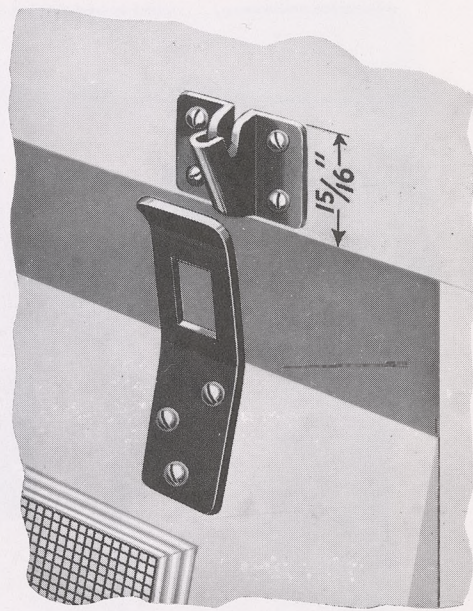
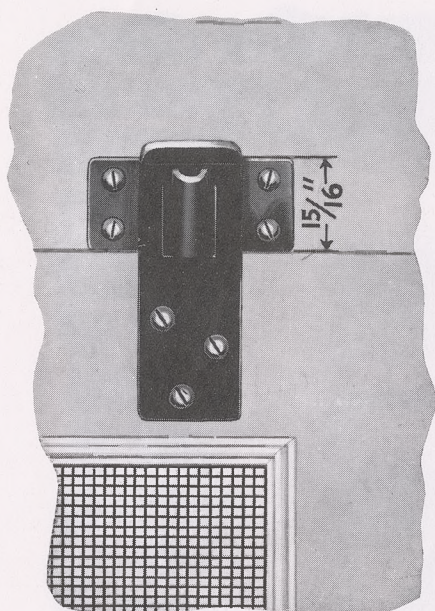
Each set wrapped in a separate package complete with Zinc screws.

The hangers are furnished Japanned, Sherardized, or Zinc.

Packed one dozen sets in a box. Twenty-four dozen in a case.

Weight, per dozen sets, 4 $\frac{3}{4}$ pounds.

No. 79 Screen and Storm Sash Hanger
(Patented)



It is easy to hang screen or storm sash equipped with these Hangers. The blind stops inside of casing serve as a guide when sliding Hanger up to engage hook on casing. The sections on screen or sash slide over hook on casing and latch automatically. Prevents rattling.

Made of heavy-gauge steel.

The lower part of top section extends below the center of the bottom screws and acts as a brace, giving additional strength.

Screen or storm sash must be pushed out at bottom to a considerable angle before the Hanger is released. Prevents wind from raising sash off the hook.

Each set is wrapped in a separate package, complete with Zinc plated screws.

The Hangers are furnished Japanned, Sherardized, Hot Galvanized and Zinc finishes.

Packed one dozen sets in a box. Twenty-four dozen sets in a case.

Weight, per dozen sets, 4 pounds.

Extra bottoms can be furnished, packed two dozen sets in a box with screws.

Weight, extra bottoms, two dozen, 4¾ pounds.

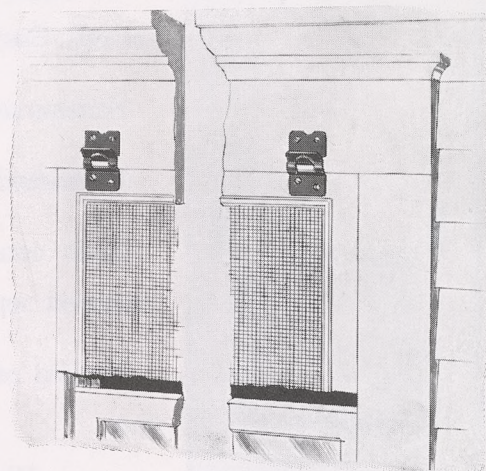
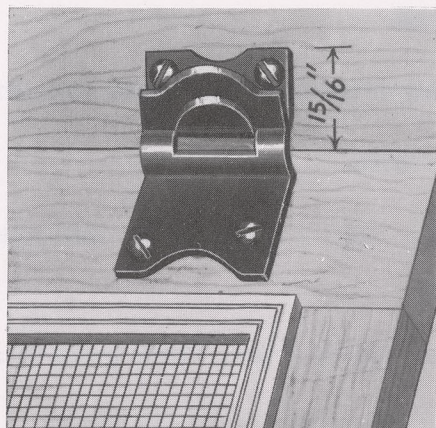
No. 79½, same as above, except packed with only one 1½-inch Zinc plated No. 74 hook and eye. Weight, per dozen sets, 4¾ pounds.



No. 80 Screen and Storm Sash Hanger

(Patented)

Wrought Steel and Solid Brass



The illustrations represent our Screen and Storm Sash Hanger.

First—The top of screen rests against blind-stop inside of casing, which serves as a guide when sliding Hanger up to engage hook on casing at top.

Second—The bottom of screen or sash is pushed out until frame on screen or sash slides over hook on casing and latches automatically.

Third—The Hangers are so constructed that they hold the screen or sash firmly in position and prevent rattling.

To attach the Hangers, first attach the hook on casing, hang bottom section on hook, then drive screws in bottom section.

Each set is wrapped in a separate package, with Zinc plated screws.

Hangers furnished Japanned, Sherardized, Hot Galvanized and Zinc. Packed one dozen sets in a box. Thirty-six dozen sets in a case.

Extra bottoms can be furnished, packed two dozen sets in a box, with screws.

A working model is furnished free with the first order.

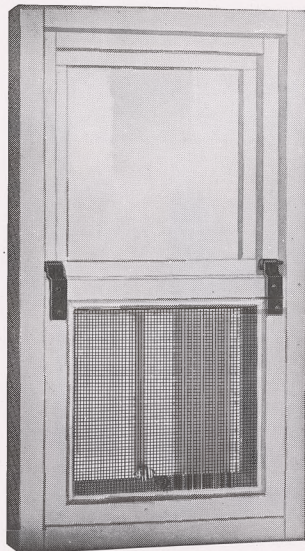
Weight, per dozen sets, $2\frac{3}{4}$ pounds.

Weight, extra bottoms, two dozen, $3\frac{1}{4}$ pounds.

No. 80 $\frac{1}{4}$, same as above, except that it is made with $\frac{5}{16}$ -inch offset. Weight, per dozen sets, $2\frac{1}{2}$ pounds.

No. 80 $\frac{1}{2}$, same as above, except packed with one only $1\frac{1}{2}$ -inch Zinc plated No. 74 hook and eye. Weight, per dozen sets, $2\frac{3}{4}$ pounds.

No. 81 Screen Hanger



A simple, convenient device for hanging half-length screens. Easy to attach.

Screens can be hung or removed from inside of room.

Furnished in Zinc finish.

Each complete set, with 1½-inch hook and eye, wrapped separately.

Packed one dozen sets in a box. Three gross in a case.

Weight, per dozen sets, 1¼ pounds.

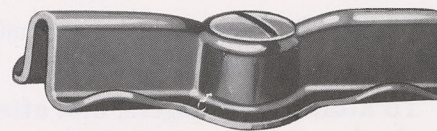
No. 83 Turn Button

(Patent applied for)

This Turn Button is so formed that the only point of contact on the window frame is at the circular base around the screw-hole.

The wings are raised slightly above the base

and the edges are curved up so that in turning it will never gouge into the wood.



Cut full size of 2-inch

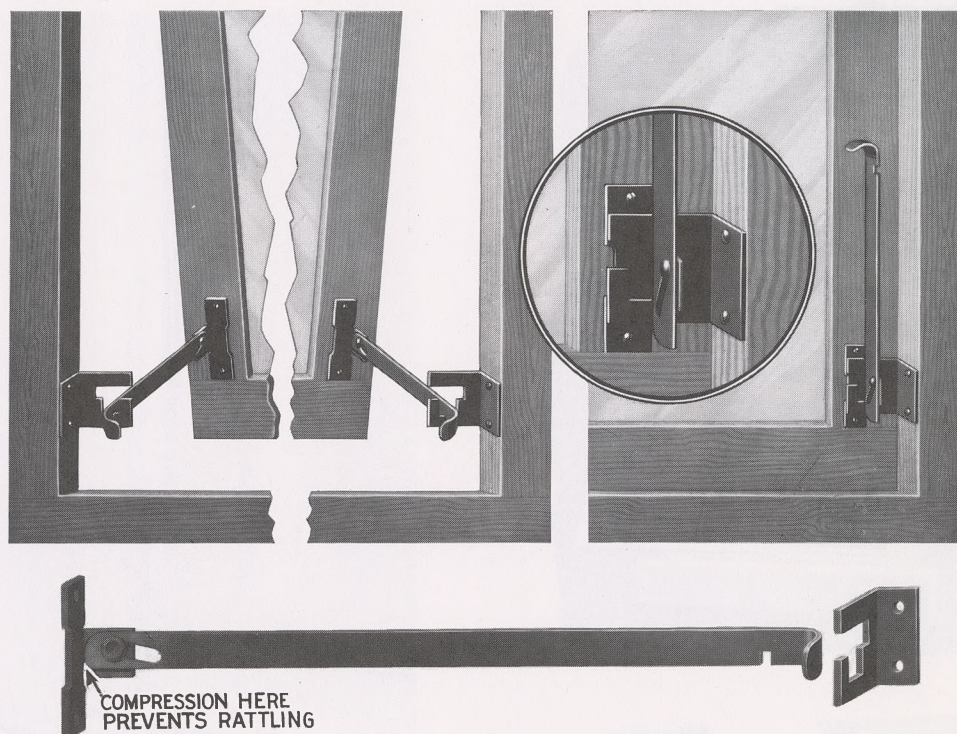
Made in Zinc and Sherardized finishes, which, being rust-resistant, will prevent the appearance of rust streaks on the window frame.

Packed either one gross in a box with 1 x 7 oval-head screws, or one gross in a box without screws. Shipped with screws unless otherwise specified.

Size Inches	Weight per Gross Pounds no Screws	Weight per Gross Pounds with Screws	Number of Gross in Case
1¾	2½	3	18
2	3¼	3¾	20



No. 85 Storm Sash Adjuster



The illustrations show the No. 85 Adjuster in the positions it assumes when sash is opened and closed.

The lower illustration is an enlarged view of the Adjuster, and shows the construction of the joint which prevents rattling.

When closed, the Adjuster locks the sash securely in position.

The slot in bar which holds sash open is wedge-shaped, and keeps sash firmly in position. The more pressure on the bar the firmer the wedge-shaped slot is fixed in position.

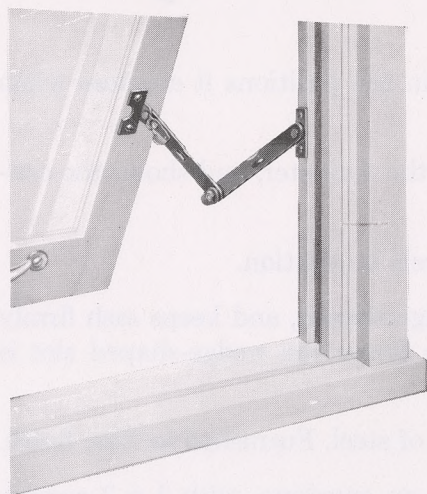
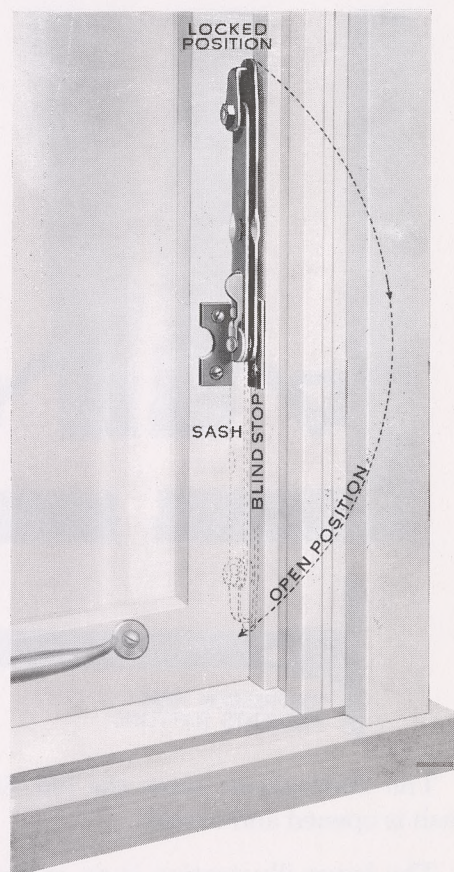
Two sizes, 5-inch and 10-inch. Made entirely of steel. Furnished in Zinc finish.

Packed one pair—one right and one left—in an envelope, with 1 x 7 screws. Envelope printed with illustrated instructions for attaching. One dozen pairs in a box. Twelve dozen pairs in a case.

Weight, per dozen pairs, 5-inch, 4½ pounds.

Weight, per dozen pairs, 10-inch, 6¼ pounds.

No. 86 Nois-Less Storm Sash Adjuster Set



The No. 86 Nois-Less Storm Sash Adjuster holds screen or storm sash firmly and silently in any desired position from completely closed to completely open.

It is made of heavy-gauge cold rolled steel and has a solid brass disengaging lock.

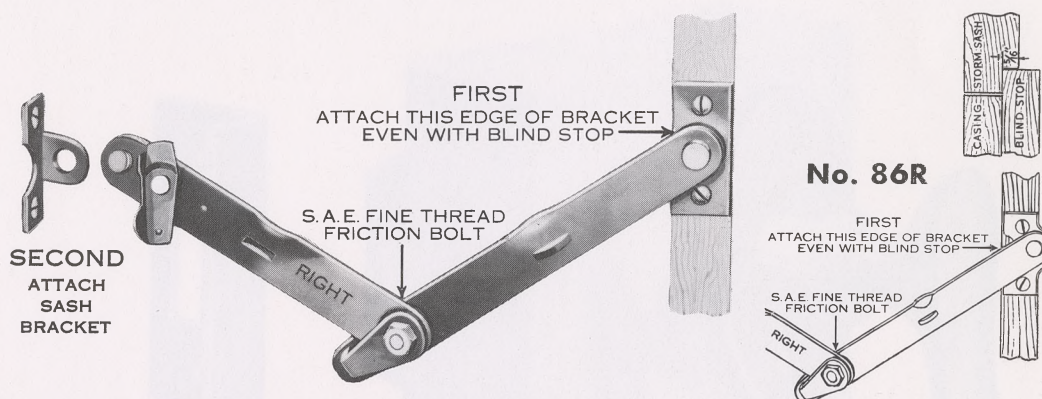
Adjusting bolt has an S.A.E. fine thread.

The friction washers are moisture-proof.

Made right- and left-hand and they are so marked.



No. 86 Nois-Less Storm Sash Adjuster Set



No. 86R. Same as No. 86 Adjuster except furnished with offset sash bracket for rabbeted sash.

When closed, the Adjuster locks the sash securely in position.

Top window sash can be lowered all the way down without interference from the Adjuster.

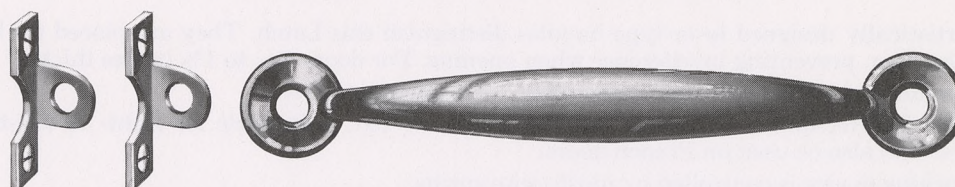
Size, 12 inches over all.

Packed one set in a box with $\frac{3}{4}$ x7 oval-head screws. Each set consists of one pair of No. 86 Nois-Less Storm Sash Adjusters—one right and one left—and one No. 200 Pull. Twelve dozen sets in a case.

Furnished in Zinc finish only.

Weight, per dozen sets, 7½ pounds.

No. 86½ Brackets and Pulls

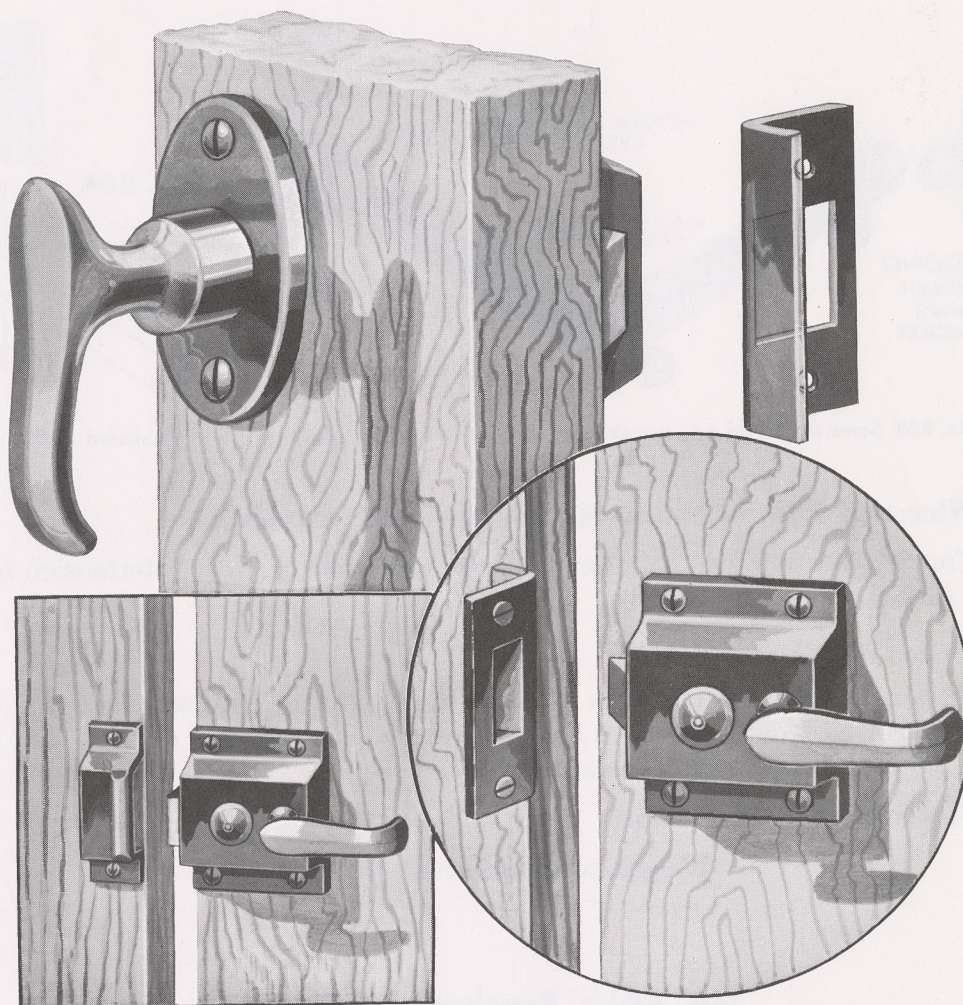


Extra No. 86½ Sash Brackets and No. 200 Pulls are furnished for screens or storm sash.

Packed one set in an envelope, one dozen sets in a box.

Weight, per dozen sets, 8 ounces.

No. 95 Rim Screen Door Latch



Artistically designed lever-type handles distinguish this Latch. They are placed far back on the door, preventing interference when opening. For doors $1\frac{1}{16}$ to $1\frac{3}{8}$ inches thick.

Handle and spindle are cast in one piece; no washers required.

Bolt is reversible for doors swinging either in or out. Adaptable for right- or left-hand doors. Can also be used on French doors.

Locking device is controlled by music-wire spring.

Furnished regularly with surface strikes.

Any finish desired. For list of finishes, see page 12.

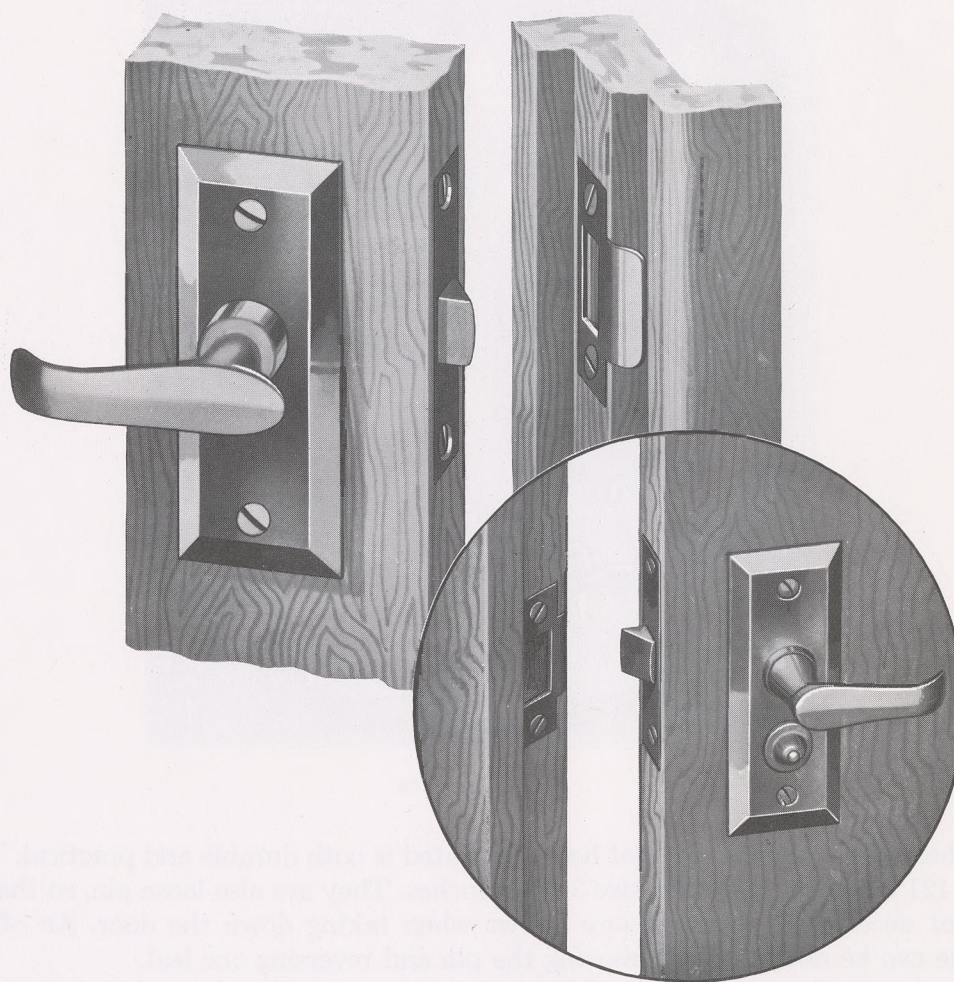
Packed with oval-head screws for latch and escutcheon and with flat-head screws for strike.

Packed one Latch in a box, with screws. Ten dozen in a case.

Weight, per dozen, $8\frac{1}{2}$ pounds.



No. 96 Mortise Screen Door Latch



Artistically designed lever-type handles distinguish this Latch. Has beveled-edge escutcheon plates. For doors $1\frac{1}{16}$ to $1\frac{3}{8}$ inches thick.

Handle and spindle are cast in one piece; no washers required.

For doors swinging in or out. Adaptable for right- or left-hand doors. Can also be used on French doors.

Locking device is controlled by music-wire spring.

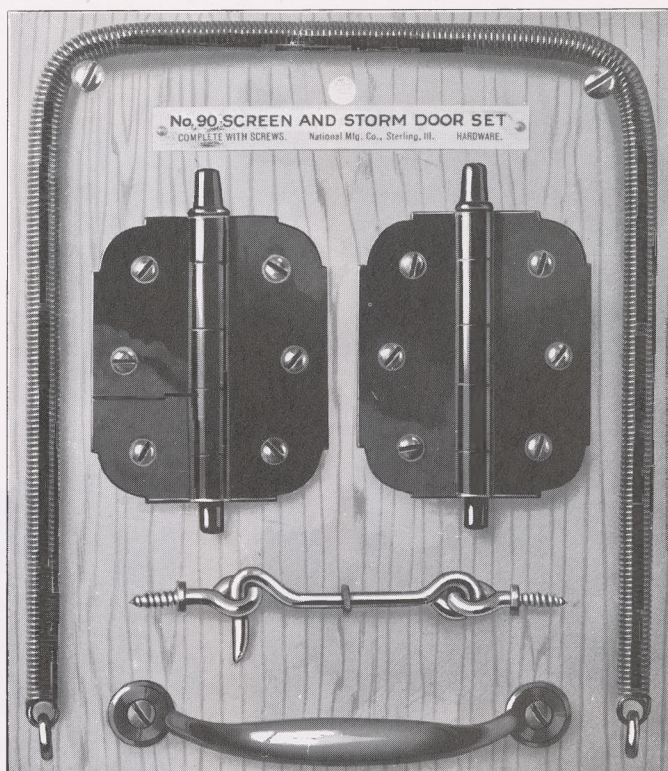
Any finish desired. For list of finishes, see page 12.

Packed with $\frac{3}{4}$ x7 oval-head screws for escutcheons and with $\frac{5}{8}$ x6 flat-head screws for latch and strike.

Packed one Latch in a box, with screws. Ten dozen in a case.

Weight, per dozen, $9\frac{1}{2}$ pounds.

No. 90 Screen and Storm Door Set



Cut one-half size

The combination Screen Set here illustrated is both durable and practical. The No. 121 Hinges are of steel, size 3 x 2½ inches. They are also loose pin, so that it is not necessary to remove any screws when taking down the door. An offset hinge can be obtained by removing the pin and reversing one leaf.

No. 3 Perfect Spring, with loop ends, packed with each set. Zinc plated screws and hooks and eyes are packed with the japanned sets.

No. 200 Door Pull is packed with this set in all finishes.

A sample set mounted as illustrated when requested. One set, with screws, is packed in a carton, and one dozen sets in a box. Twelve dozen sets in a case.

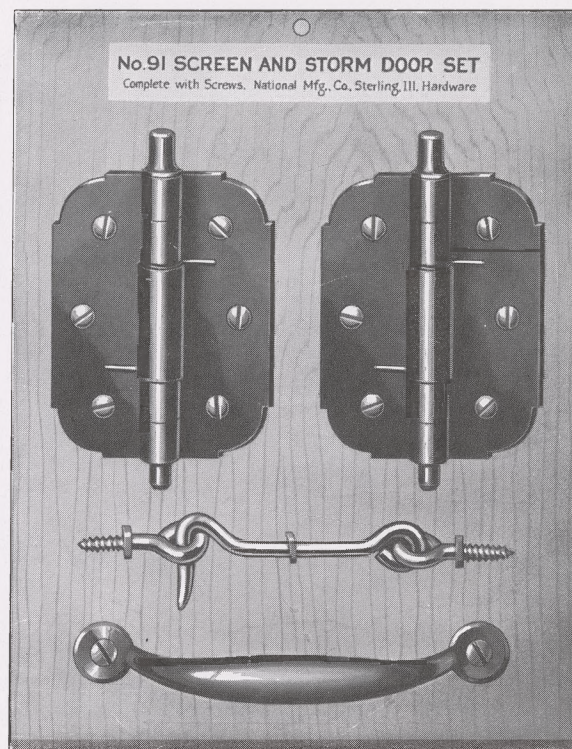
No. 90½ same as above except with No. 121½ Button-Tip Butts.

Any finish desired. For list of finishes, see page 12.

Weight, per dozen sets, 10¾ pounds.



No. 91 Screen and Storm Door Set



This Set consists of the following:

1 pair No. 122 Loose Pin Spring Hinges. Made of steel. Music-wire spring. Hinge operates with or without spring. Door can be taken down without removing screws.

1 only 2½-inch No. 74 Hook and Eye.

1 only No. 200 Pull.

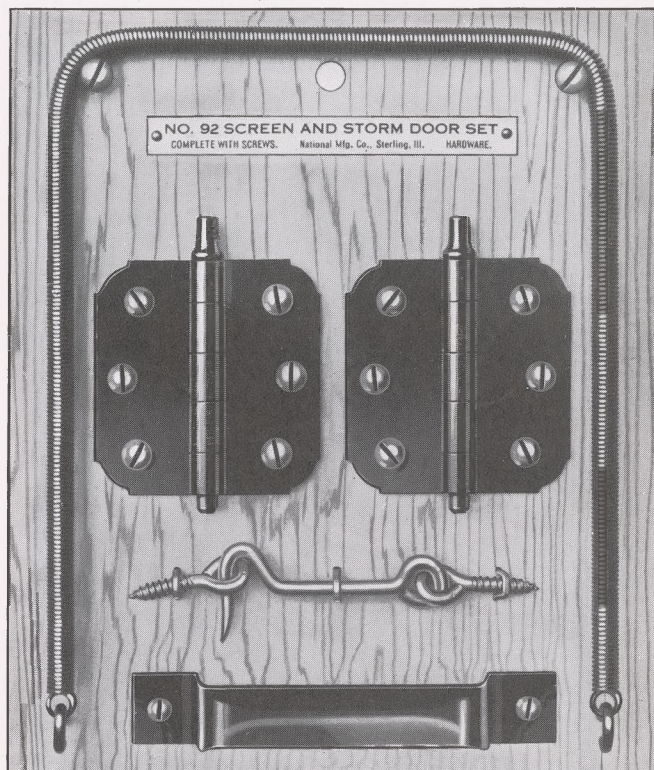
A sample set mounted as illustrated when requested.

Packed one set in a carton, with zinc plated screws, and one dozen sets in a box. Twelve dozen sets in a case.

Any finish desired. For list of finishes, see page 12.

Weight, per dozen sets, 9 pounds.

No. 92 Screen and Storm Door Set



Cut one-half size

The combination Screen Set here illustrated is both durable and practical. The No. 121 Hinges are of steel, size $2\frac{1}{2} \times 2\frac{1}{2}$ inches. They are also loose pin, so that it is not necessary to remove any screws when taking down the door. An offset hinge can be obtained by removing the pin and reversing one leaf.

No. 2 Perfect Spring, with loop ends, packed with each set. Zinc plated screws and hooks and eyes are packed with these sets.

No. 205 Door Pull is packed with this set.

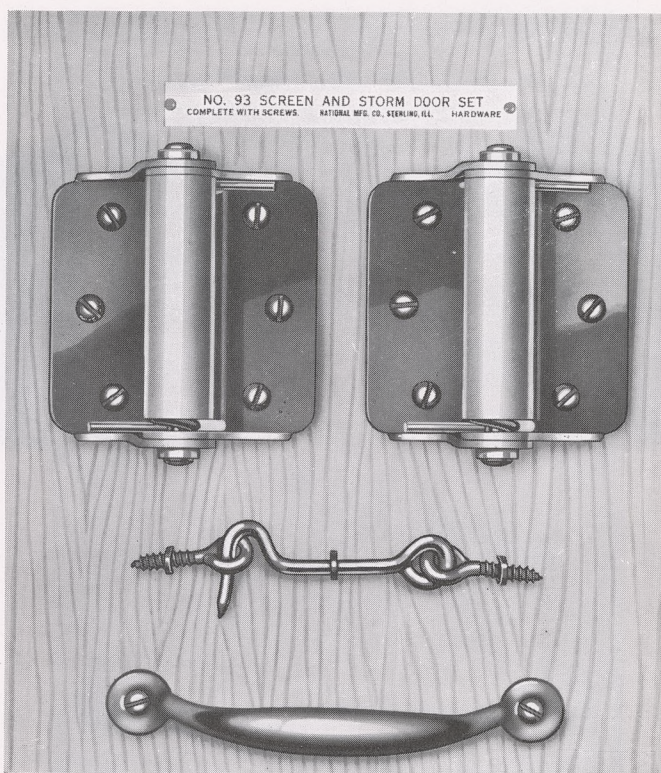
A sample set mounted as illustrated when requested. One set, with screws, is packed in a carton, and one dozen sets in a box. Twelve dozen sets in a case.

Japan and Zinc finishes only.

Weight, per dozen sets, $8\frac{1}{4}$ pounds.



No. 93 Screen and Storm Door Set



Cut one-half size

This Set consists of the following:

- 1 pair No. 123 Spring Hinges. Made of steel. Strong, dependable spring, fully enclosed. Hinge operates with or without spring.
- 1 only 2½-inch Hook and Eye.
- 1 only No. 200 Pull.

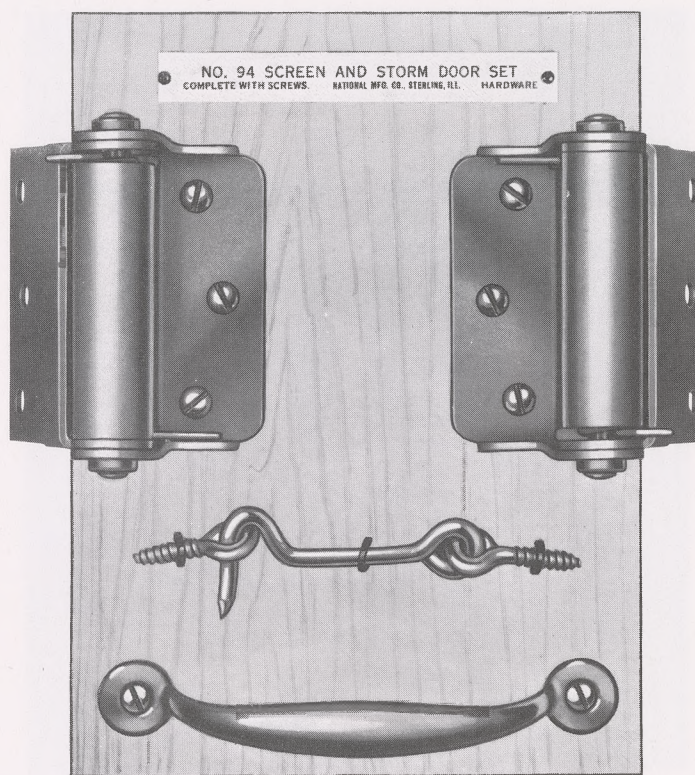
A sample set mounted as illustrated when requested.

Packed one set in a carton, with screws. Twelve dozen sets in a case.

Any finish desired. For list of finishes, see page 12.

Weight, per dozen sets, 12¼ pounds.

No. 94 Screen and Storm Door Set



Cut one-half size

This Set consists of the following:

- 1 pair No. 124 Spring Hinges. Made of steel. Strong, dependable spring, fully enclosed. Hinge operates with or without spring.
- 1 only 2½-inch Hook and Eye.
- 1 only No. 200 Pull.

A sample set mounted as illustrated when requested.

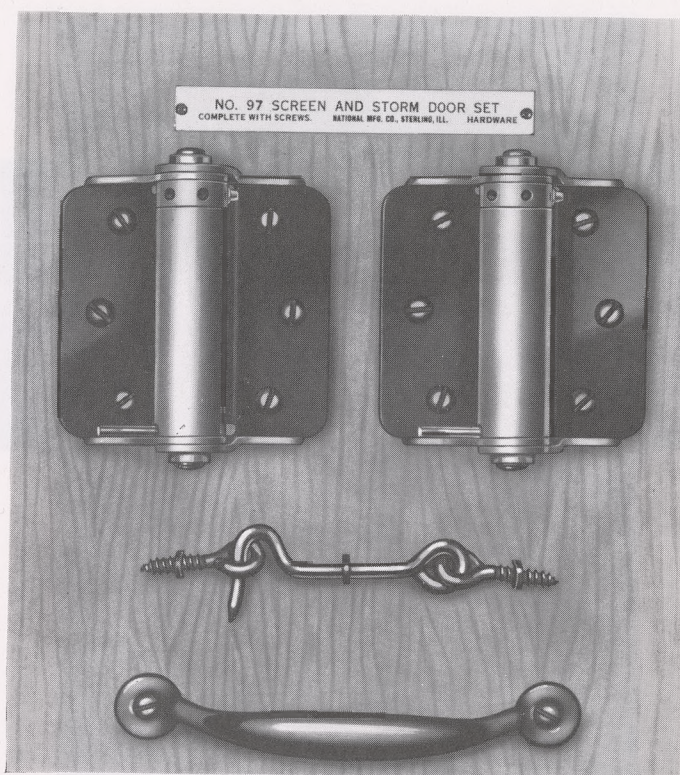
Packed one set in a carton, with screws. Twelve dozen sets in a case.

Any finish desired. For list of finishes, see page 12.

Weight, per dozen sets, 12¼ pounds.



No. 97 Adjustable Screen and Storm Door Set



This set consists of the following:

1 pair No. 125 Adjustable Full Surface Spring Hinges. Made of steel. Strong, dependable spring, fully enclosed. Spring has adjustable tension.

1 only 2½-inch Hook and Eye.

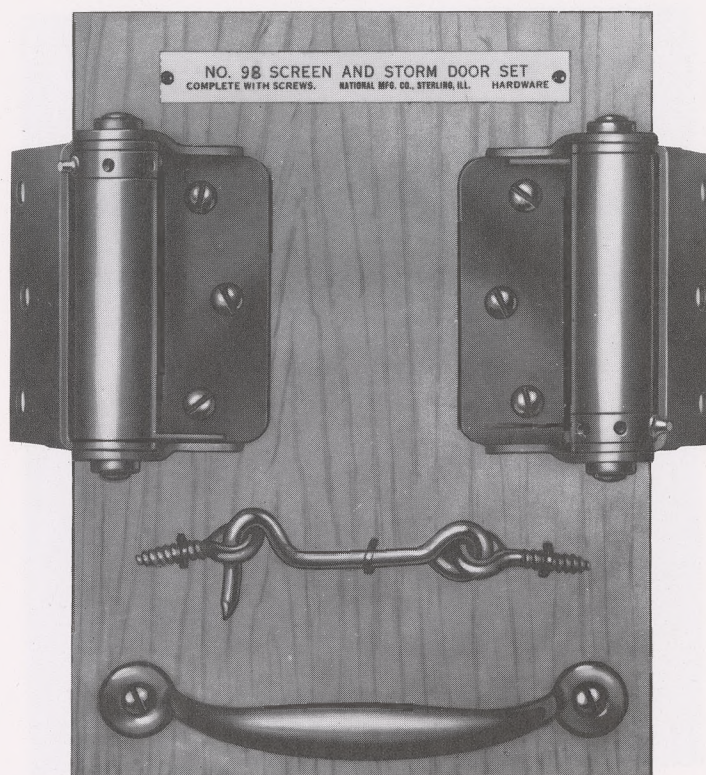
1 only No. 200 Pull.

A sample set mounted as illustrated when requested.

Packed one set in a carton, with screws. Twelve dozen sets in a case.

Any finish desired. For list of finishes, see page 12.

Weight, per dozen sets, 13 pounds.

No. 98 Adjustable Screen and Storm Door Set

This set consists of the following:

- 1 pair No. 126 Adjustable Half Surface Spring Hinges. Made of steel. Strong, dependable spring, fully enclosed. Spring has adjustable tension.
- 1 only 2½-inch Hook and Eye.
- 1 only No. 200 Pull.

A sample set mounted as illustrated when requested.

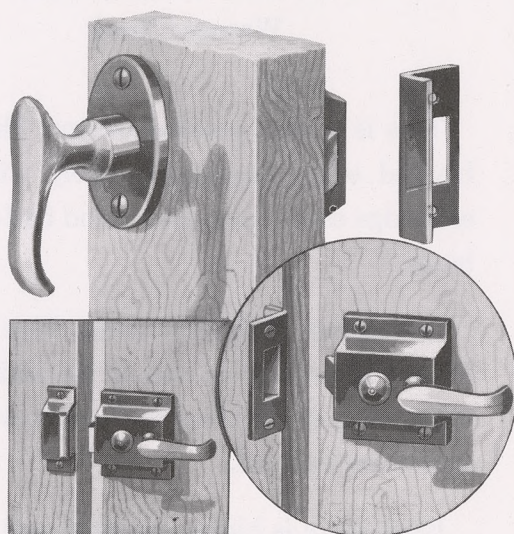
Packed one set in a carton, with screws. Twelve dozen sets in a case.

Any finish desired. For list of finishes, see page 12.

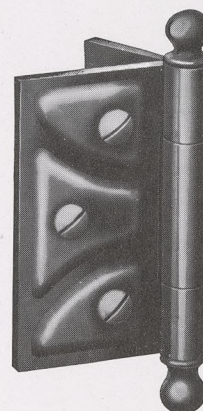
Weight, per dozen sets, 13¼ pounds.



No. 954 Screen and Storm Door Set



No. 95 Latch

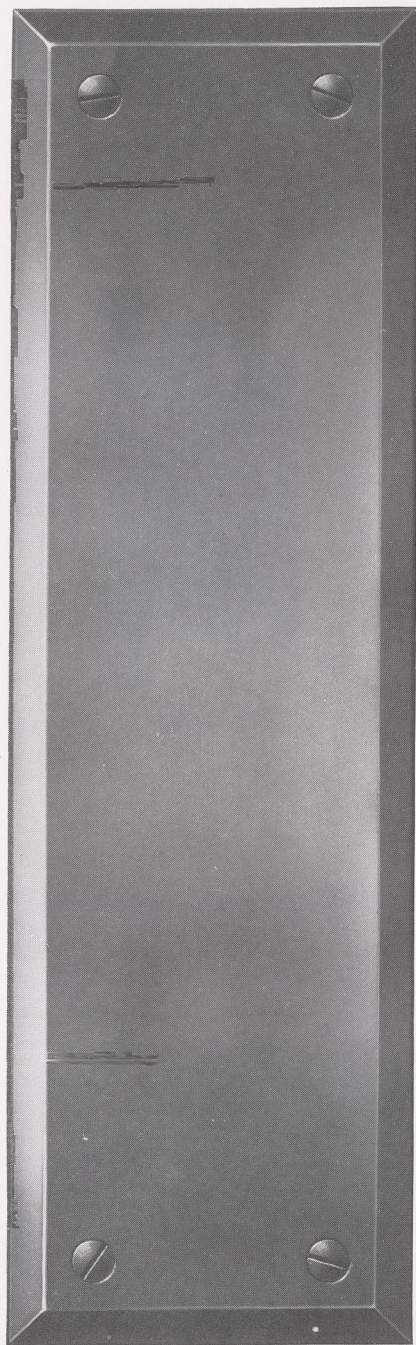


No. 420 1/2 Butt

Packed with three only 2 1/2-inch No. 420 1/2 special Screen Door Butts and one only No. 95 Rim Latch.

Any finish desired. For list of finishes see page 12.

Weight, per dozen sets, 18 1/4 pounds.

**No. 225 Push Plate**

Wrought Steel

This is a very popular design. The wide, beveled edges harmonize nicely with beveled-edge escutcheon plates and half-surface butts.

Each plate is slightly bowed. This feature insures the center as well as the ends of the plate being drawn close to the door when the screws are inserted.

Each plate is highly polished and plated. Any finish desired. For list of finishes, see page 12.

Each plate is wrapped separately in anti-tarnish paper, with $\frac{5}{8}$ x 6 oval-head screws.

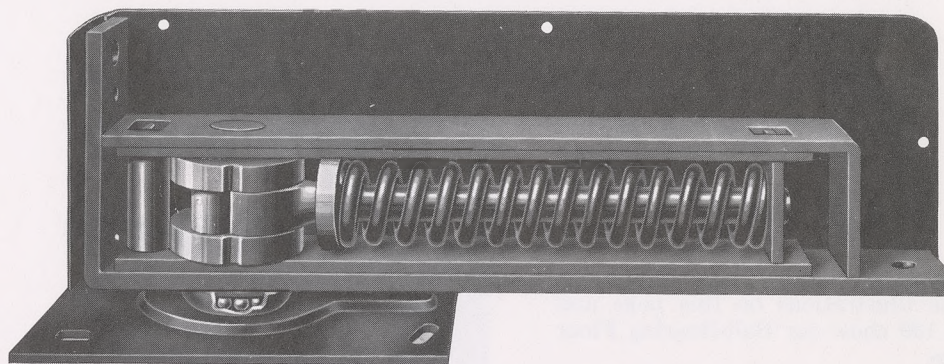
One-half dozen in a box.

Size of plate, 3 x 10 inches.

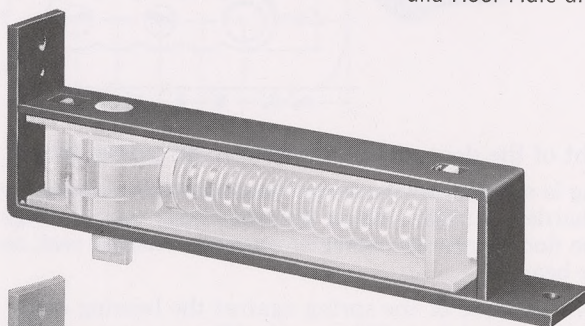
Weight, per dozen, 5 pounds.



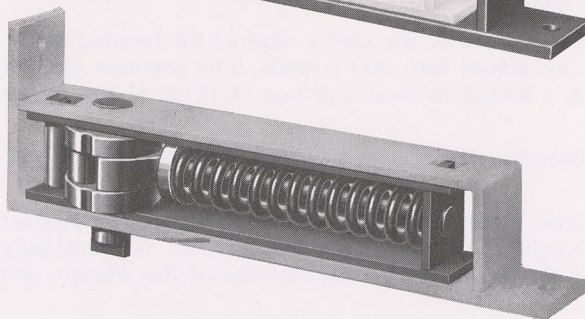
No. 240 Ball-Bearing Floor Hinge



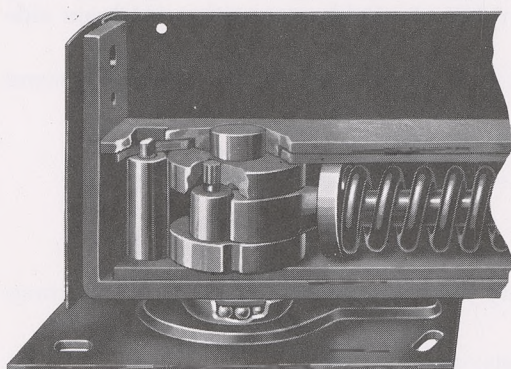
View of Hinge, showing one Side Plate, Back Plate and Floor Plate attached.



Dark part carries the weight of the door independent of the spring-closing feature.



Dark part shows the spring-closing feature independent of the part which carries the weight of the door.

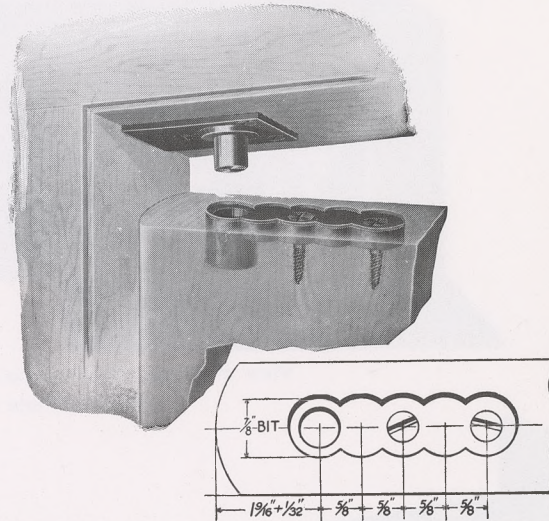


Sectional view, showing construction of bearings and the case-hardened roller at left which absorbs spring pressure.

(For description see page 140)

No. 240 Ball-Bearing Floor Hinge

View showing how pivot for top of door and pivot plate are attached. No chiseling, mortising or measuring required. This is a real time- and labor-saving feature.



The illustrations on this page and page 139 show our Ball-Bearing Floor Hinge.

The construction of this Floor Hinge is radically different from other floor hinges. The part which bears the weight of the door and the spring-closing feature are independent of each other, although necessarily combined.

The spring pressure and not the weight of the door causes the wear in all spring hinges.

In this Hinge the pressure of the spring is not against the hinge bearing which carries the door, but is absorbed by a 1-inch case-hardened roller, which prevents wear on the hinge bearing. This Hinge will always keep the door firmly in center of opening when at rest, as there is no possibility of wear in the hinge bearing.

In the typical floor hinge, the maximum pressure of the spring against the bearing carrying the weight of the door is, we found by actual test, 300 pounds. The pressure on this bearing in our Hinge is about 10 pounds, a saving in wear and tear in favor of our Hinge in the ratio of 30 pounds to one.

The pivot for the top is attached by simply boring five 7/8-inch holes. Requires no chiseling.

The construction of pivot plate for head jamb is unique. Simply placing end against jamb and inserting three screws brings bearing portion into correct position. No mortising or measuring required. This is one of the greatest labor-saving features of this Hinge, and appeals immediately to the contractor.

Reversible side plates are furnished with this Hinge. They avoid the necessity of stocking both right- and left-hand plates in various finishes. Available also with solid brass side plates.

The screw slots in floor plate are so placed as to provide for an adjustment to secure proper alignment.

The door is held open, when swung to either side, 95 degrees.

The spring is oil tempered. Ball bearings of the very best quality are used.

For doors 1 1/8 inches to 2 1/4 inches thick.

Any finish desired. For list of finishes, see page 12.

Packed one complete Hinge, with all necessary parts, in a box with illustrated directions for attaching. One dozen in a case.

Weight, each, 3 3/4 pounds; case, 50 pounds.



No. 240 $\frac{1}{2}$ Ball-Bearing Floor Hinge With Steel Jamb Plates

(For Cement Floors)

View showing how pivot for top of door and pivot plate are attached. No chiseling, mortising or measuring required. This is a real time- and labor-saving feature.

The construction of this Floor Hinge is radically different from other floor hinges. The part which bears the weight of the door and the spring-closing feature are independent of each other, although necessarily combined.

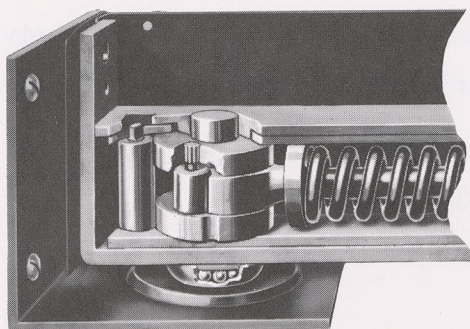
The spring pressure and not the weight of the door causes the wear in all spring hinges.

In this Hinge the pressure of the spring is not against the hinge bearing which carries the door, but is absorbed by a 1-inch case-hardened roller, which prevents wear on the hinge bearing. This Hinge will always keep the door firmly in center of opening when at rest, as there is no possibility of wear in the hinge bearing.

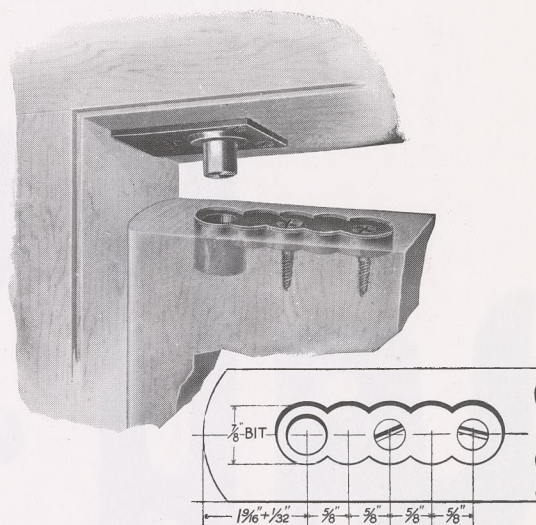
The pivot for the top is attached by simply boring five $\frac{7}{8}$ -inch holes. Requires no chiseling.

The construction of pivot plate for head jamb is unique. Simply placing end against jamb and inserting three screws brings bearing portion into correct position. No mortising or measuring required.

Reversible side plates are furnished with this Hinge. Also available with solid brass side plates.



No. 240 $\frac{1}{2}$ Ball-Bearing Floor Hinge



The door is held open, when swung to either side, 95 degrees.

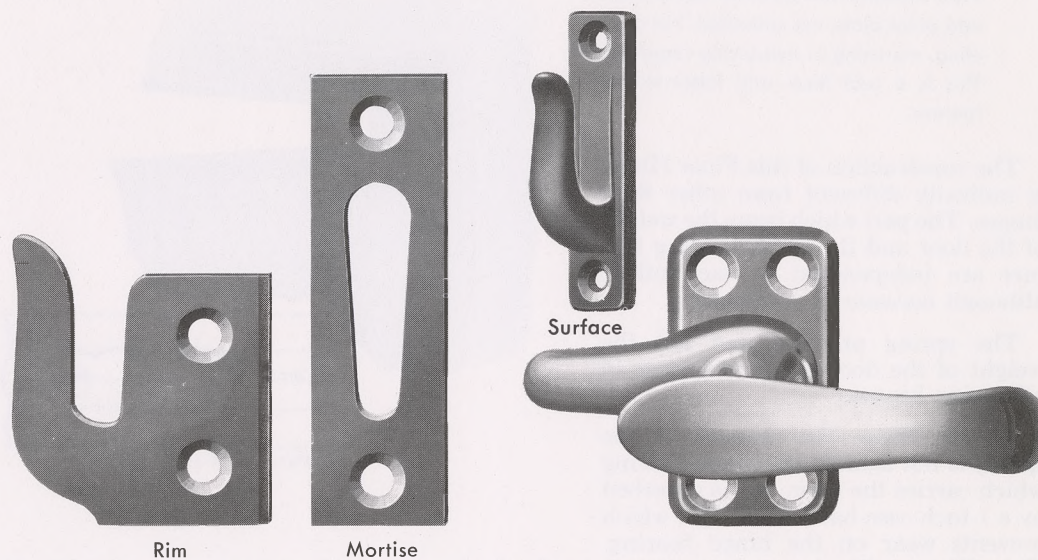
The spring is oil tempered. Ball bearings of the very best quality are used.

For doors $1\frac{1}{8}$ inches to $2\frac{1}{4}$ inches thick.

Any finish desired. For list of finishes, see page 12.

Packed one complete Hinge, with all necessary parts, in a box with illustrated directions for attaching. One dozen in a case.

Weight, each, $3\frac{3}{4}$ pounds; case, 50 pounds.

Casement Window Fastener

750R—with rim strike.

750M—with mortise strike.

750S—with surface strike.

This Fastener is furnished in any finish desired. For list of finishes, see page 12.

Packed regularly with rim strikes, one dozen in a box, with screws. Twenty-four dozen in a case. Mortise or surface strike will be furnished if so specified when ordering.

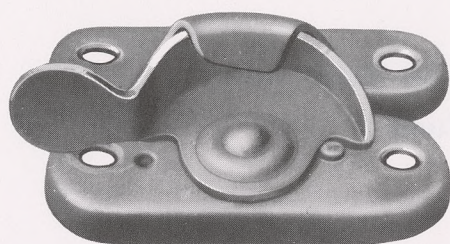
Weight, per dozen, $3\frac{3}{4}$ pounds.



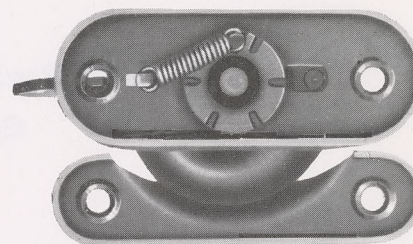
No. 600 Sash Lock

(Patented)

All Steel or Solid Brass



Top view



Bottom view

The Lock is made of cold rolled steel throughout, taking an exceptionally fine finish. Also furnished in solid brass.

The illustration at the right shows the simple construction of this Lock. The coil spring is made of finest piano wire, fully tested. Owing to the peculiar and simple construction of the Lock, friction is reduced to the minimum and the rigidity of the Lock is retained.

Each Lock is wrapped in a separate package, complete with $\frac{3}{4}$ x 6 oval-head screws. Packed one dozen in a box. Thirty-six dozen in a case.

Any finish desired. For list of finishes, see page 12.

Weight, per dozen, $1\frac{3}{4}$ pounds.

No. 610 Sash Lock

Size, $2\frac{1}{8}$ x $2\frac{3}{8}$ inches.

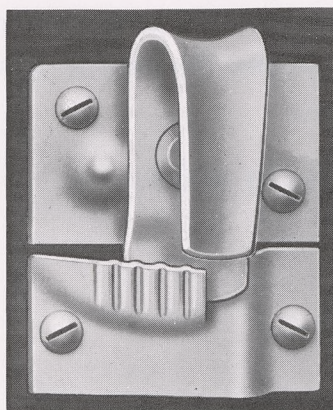
The handle is formed to facilitate ease of operation and permits a full hand-grasp.

The Lock automatically forces the window either shut or open.

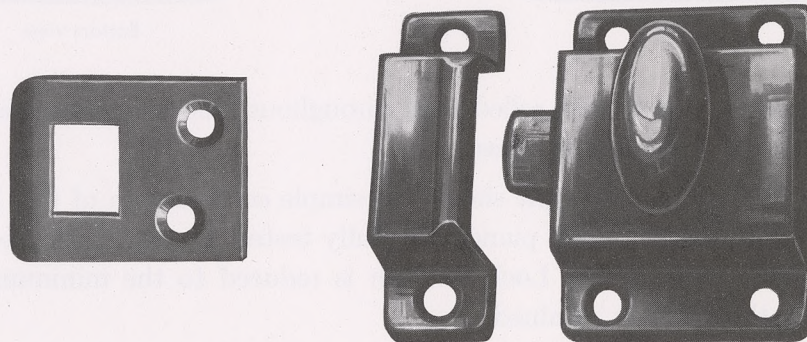
Furnished in Zinc finish only.

Packed one dozen in a box, with $\frac{3}{4}$ x 7 round-head screws.

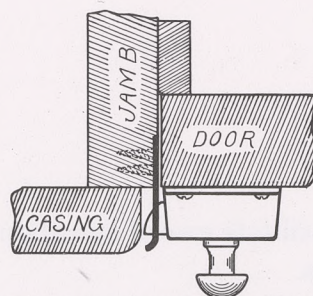
Weight, per dozen, 2 pounds 10 ounces.



**No. 699 Pressed Steel or Solid Brass
Cupboard Turn**



Oval knob—Cut full size



Cross section showing
flat strike attached

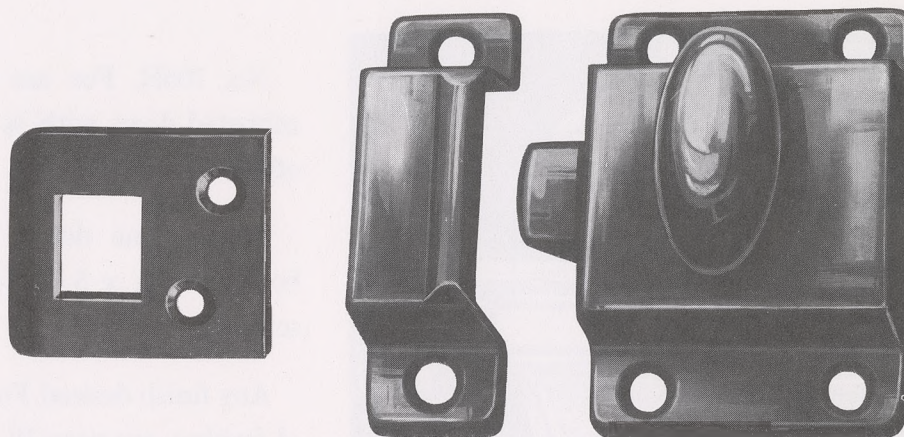
This Turn is the same construction and design as our No. 702 Cupboard Turn illustrated on page 145, but is much smaller.

Each Turn is wrapped in a separate package, complete with $\frac{1}{2}$ x 4 oval-head screws. Packed one dozen in a box. Sixty dozen in a case.

Weight, per dozen, $1\frac{1}{4}$ pounds.



**No. 702 Pressed Steel or Solid Brass
Cupboard Turn**



Oval knob—Cut full size

The above cut, together with the one on page 144, illustrates our two sizes of Cupboard Turns.

Nos. 699 and 702 are made of cold rolled steel; also of solid brass.

Both the No. 699 and No. 702 Pressed Steel Turns have solid brass knobs.

The following are points of merit:

The bolt has a rounded point same as high-grade door locks.

The surface strike has a rounded top, providing a roller-shaped bearing on which bolt works easily.

A flat strike, attached as illustrated on page 144, for use on casings which are not flush with doors, is furnished when specified.

The Turns are simple in construction, having but few parts. They cannot get out of order.

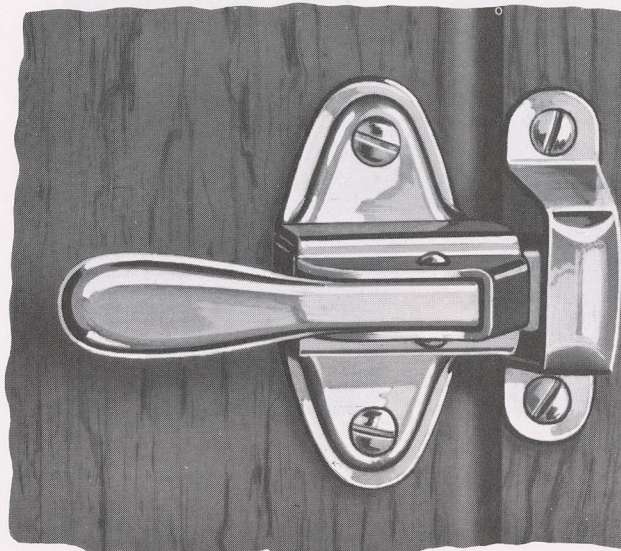
All standard finishes are kept regularly in stock. For list of finishes, see page 12.

Each Turn is wrapped in a separate package, complete with $\frac{5}{8}$ x 5 oval-head screws. Packed one dozen in a box. Forty-eight dozen in a case.

Weight, per dozen, 2 pounds.

Cabinet Door Latches

Steel or Solid Brass



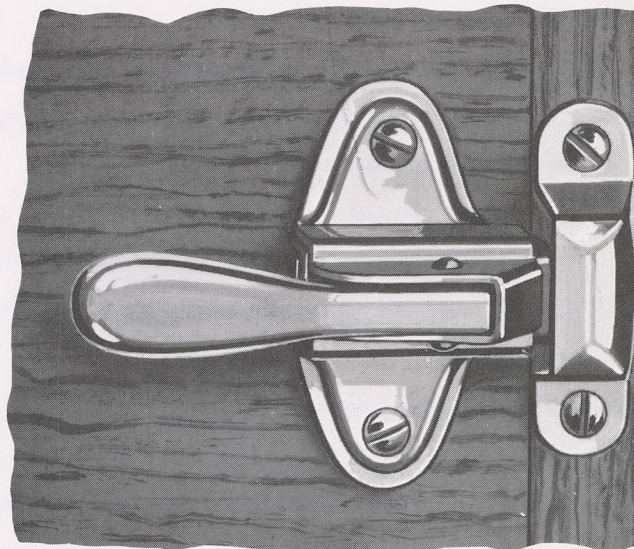
No. 705R. Cut full size

No. 705R. For use with rabbeted doors with $\frac{3}{8}$ -inch offset.

Packed one dozen in a box, with $\frac{5}{8}$ x 5 oval-head screws.

Any finish desired. For list of finishes, see page 12.

Weight, per dozen, 2 lbs.



No. 705S. Cut full size

No. 705S. For use with flush doors.

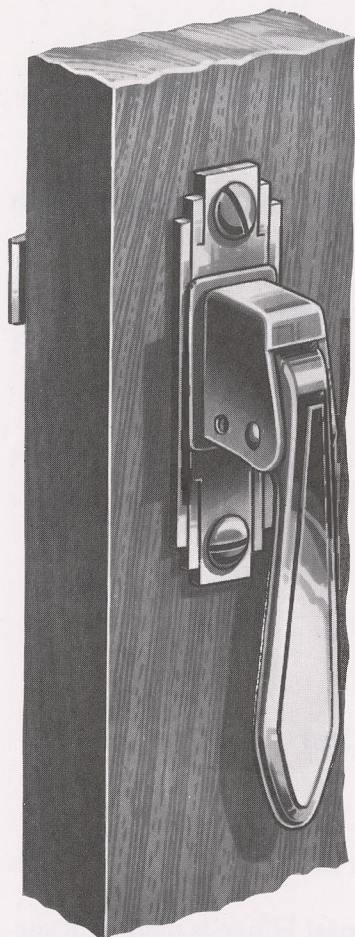
Packed one dozen in a box, with $\frac{5}{8}$ x 5 oval-head screws.

Any finish desired. For list of finishes, see page 12.

Weight, per dozen, 2 lbs.



Cabinet Door Latches



No. 707

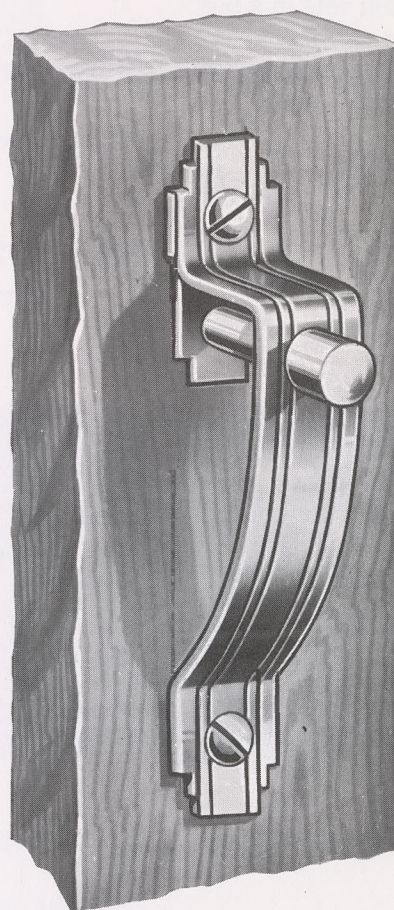
No. 707. For doors $\frac{3}{4}$ to $1\frac{1}{8}$ inches thick.

Made of cold rolled steel with solid brass handle.

Packed one dozen in a box, with $\frac{5}{8}$ x 6 oval-head screws for the handle and $\frac{5}{8}$ x 6 round-head screws for the latch.

Any finish desired. For list of finishes, see page 12.

Weight, per dozen, $2\frac{1}{2}$ pounds.



No. 706

No. 706. For doors $\frac{3}{4}$ to $1\frac{1}{8}$ inches thick.

Made of cold rolled steel with solid brass handle.

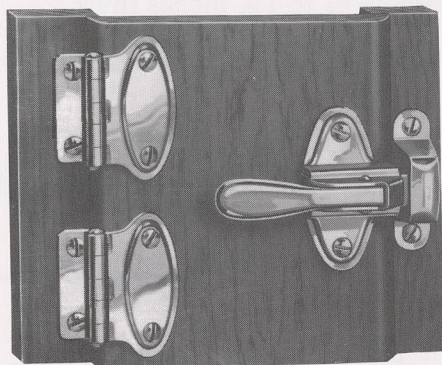
Packed one dozen in a box, with $\frac{5}{8}$ x 7 oval-head screws for handle and $\frac{5}{8}$ x 6 round-head screws for latch.

Any finish desired. For list of finishes, see page 12.

Weight, per dozen, $2\frac{1}{2}$ pounds.

No. 719R Cabinet Door Set

Steel or Solid Brass



For use with rabbeted doors on cupboards.

The Ornamental Hinge is made with $\frac{3}{8}$ -inch offset.

Set consists of one pair No. 487 Offset Ornamental Hinges and one No. 705R Cabinet Latch.

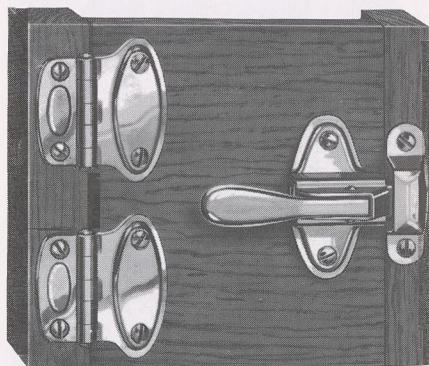
Each set is wrapped in a separate package, with $\frac{5}{8}$ x 5 oval-head screws. One dozen sets in a box.

Any finish desired. For list of finishes, see page 12.

Weight, per dozen sets, $3\frac{3}{4}$ pounds.

No. 719S Cabinet Door Set

Steel or Solid Brass



For use with flush doors on cupboards.

The Ornamental Hinge is made full surface.

Set consists of one pair No. 495 Ornamental Hinges and one No. 705S Cabinet Latch.

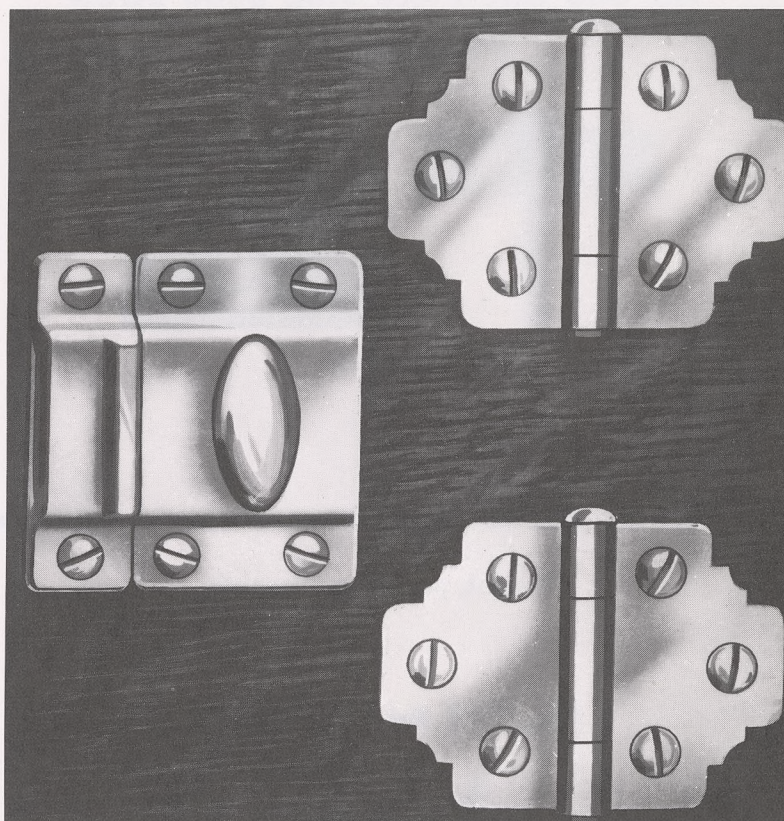
Each set is wrapped in a separate package, with $\frac{5}{8}$ x 5 oval-head screws. One dozen sets in a box.

Any finish desired. For list of finishes, see page 12.

Weight, per dozen sets, $3\frac{1}{2}$ pounds.



No. 725 Cabinet Door Set



Cut full size

This set consists of one pair 1½-inch No. 405 Ornamental Hinges and one only No. 699 Cupboard Turn.

It is suitable for use on medicine cabinets, china cabinets, kitchen cabinets, linen cabinets, etc.

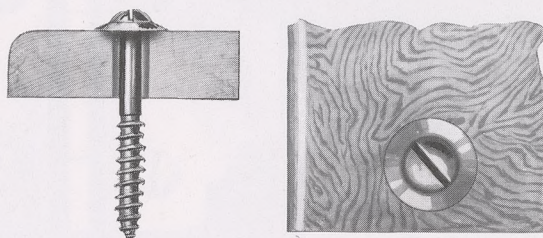
Each set is wrapped in a separate package, with oval-head screws. One dozen sets in a box.

Any finish desired. For list of finishes, see page 12.

Weight, per dozen sets, 3 pounds.

No. 300 One-Piece Stop Bead Screw

Requires no washer

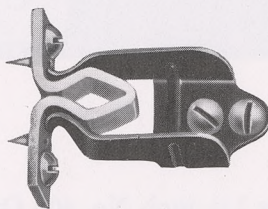


Cut full size

Size, $1\frac{1}{8}$ x 8.

Packed one gross in a box. Any finish desired. For list of finishes, see page 12.

Weight, per gross, 1 pound.

No. 710 Friction Catch

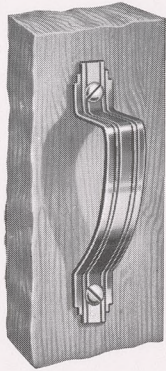
Cut full size

Spring is made of specially tempered steel.

Packed one-quarter gross in a box, with $\frac{1}{2}$ x 6 round-head screws.

Furnished in nickel finish only.

Weight, per gross, 4 pounds.



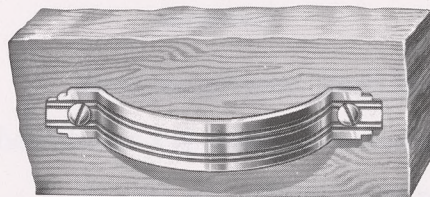
No. 106 Door Pull

Made of solid brass.

Packed one in an envelope, with $\frac{5}{8}$ x 7 oval-head screws. One dozen in a box.

Any finish desired. For list of finishes, see page 12.

Weight, per dozen, 14 ounces.



No. 107 Drawer Pull

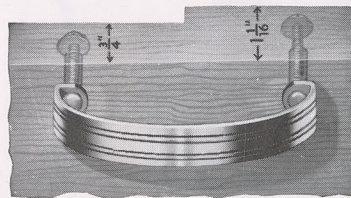
Made of solid brass.

Packed one in an envelope, with $\frac{5}{8}$ x 7 oval-head screws. One dozen in a box.

Any finish desired. For list of finishes, see page 12.

Weight, per dozen, 14 ounces.

No. 108 Drawer Pull



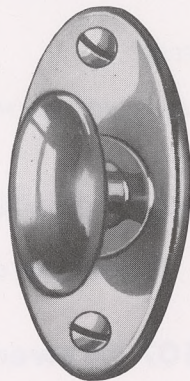
Made of solid brass. Will accommodate material ranging in thickness from $\frac{3}{4}$ to $1\frac{1}{16}$ inches.

Packed one in an envelope, with washer-head machine screws. One dozen in a box.

Any finish desired. For list of finishes, see page 12.

Weight, per dozen, 1 pound 2 ounces.

No. 215 Oval Knob Cabinet Door Pull



Cut full size

Made of cold rolled steel. Solid brass top on knob.

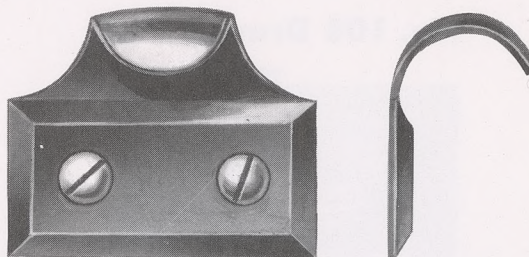
Packed one-quarter gross in a box, with $\frac{5}{8}$ x 5 oval-head screws.

Any finish desired. For list of finishes, see page 12.

Weight, per gross, 8 pounds.

No. 135 Sash Lift

Pressed Steel or Solid Brass



Cut full size

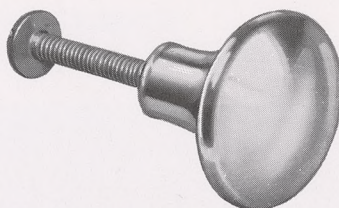
The sectional view at the right shows the liberal projection for the fingers—an unusually valuable feature of this Lift.

Packed one-quarter gross in a box, with $\frac{5}{8}$ x 6 oval-head screws. Eight gross in a case. Any finish desired. For list of finishes, see page 12.

Weight, per gross, $5\frac{1}{4}$ pounds.



No. 216 Round Knob Pull



Cut full size

1 $\frac{1}{8}$ inches in diameter. For material $\frac{3}{4}$ inch to 1 $\frac{1}{16}$ inch.

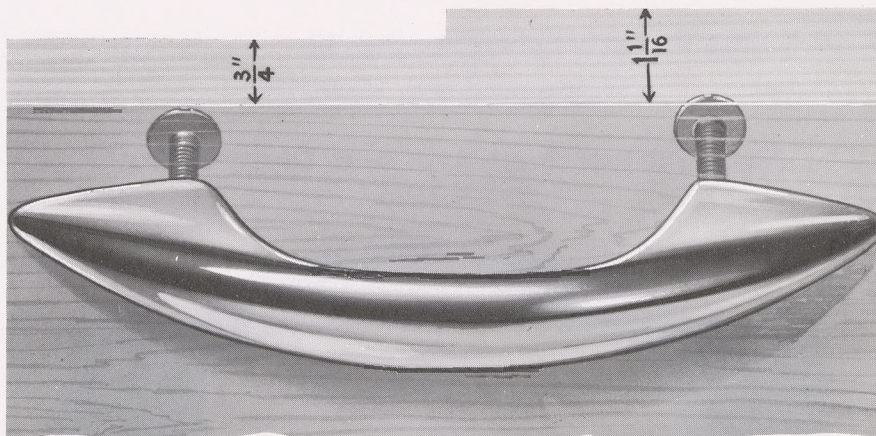
Made of solid brass.

Packed one dozen in a carton. Wrapped individually with washer-head machine screws.

Any finish desired. For list of finishes see page 12.

Weight, per dozen, 1 pound.

No. 217 Door and Drawer Pull



Cut full size

Length 4 $\frac{1}{2}$ inches. For material $\frac{3}{4}$ inch to 1 $\frac{1}{16}$ inch.

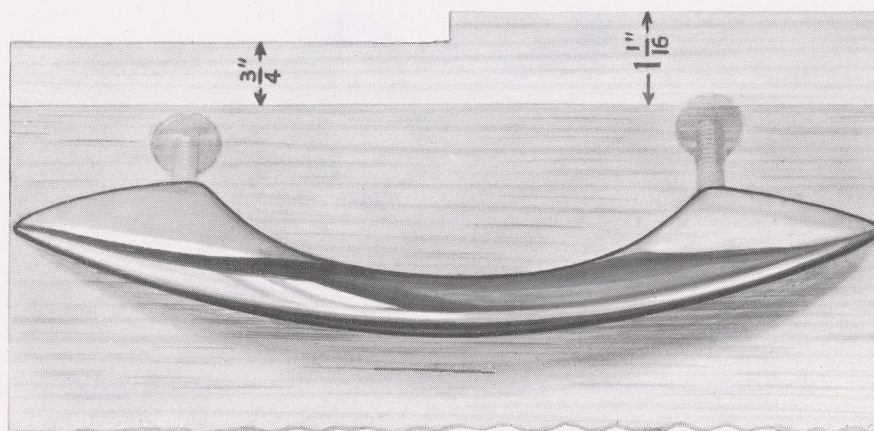
Made of solid brass.

Packed one dozen in a carton. Wrapped individually with washer-head machine screws.

Any finish desired. For list of finishes, see page 12.

Weight per dozen, 1 pound, 8 ounces.

No. 218 Door and Drawer Pull



Cut full size

Length $4\frac{1}{2}$ inches. For material $\frac{3}{4}$ inch to $1\frac{1}{16}$ inch.

Made of solid brass.

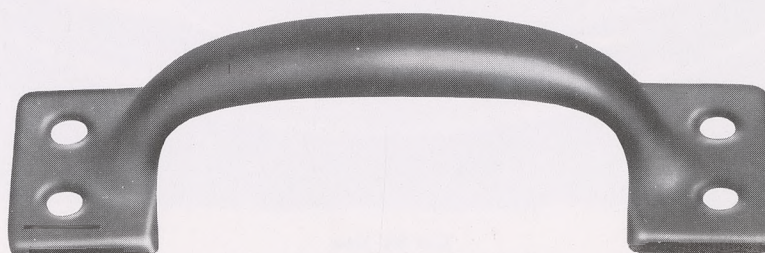
Packed one dozen in a carton. Wrapped individually with washer-head machine screws.

Any finish desired. For list of finishes, see page 12.

Weight per dozen, 14 ounces.

No. 170 Bar Sash Lift and Drawer Pull

Pressed Steel



Cut full size of 4 inch

Made of cold rolled steel.

Size
Inches

4

Size of Screws
Oval-Head

$\frac{5}{8}$ x 5

Weight
per Gross
Pounds

$11\frac{1}{4}$

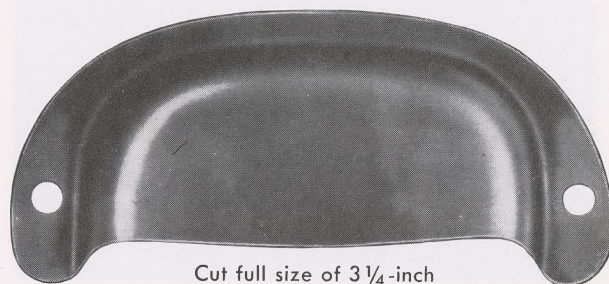
Packed one-quarter gross in a box.

Any finish desired. For list of finishes, see page 12.



No. 105 Crescent Drawer Pull

Pressed Steel or Solid Brass



Cut full size of 3 1/4-inch

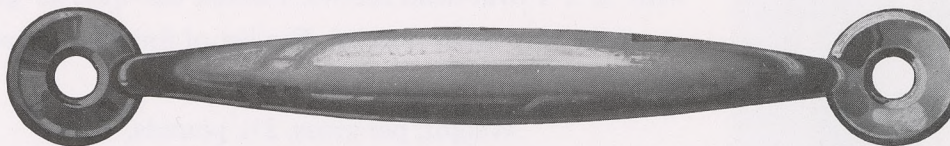
Size Inches	Size of Screws	Steel Weight per Gross Pounds	Brass Weight per Gross Pounds
3 1/4	5/8 x 6	9 3/4	11
3 3/4	5/8 x 6	13 1/4	14 1/2

The 3 1/4-inch size only is available in either steel or solid brass.

Each Crescent Pull is wrapped in a separate package, complete with round-head screws. Packed one-quarter gross in a box. Six gross in a case.

Any finish desired. For list of finishes, see page 12.

No. 200 Pressed Steel Pull



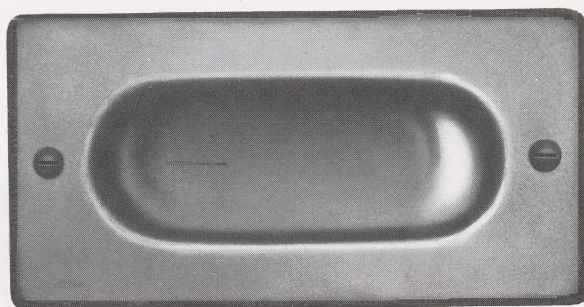
Made of cold rolled steel, highly polished. One size only, 5 inches. Packed one-quarter gross in a box, with 3/4 x 7 oval-head screws.

Any finish desired. For list of finishes, see page 12.

Weight, per gross, 7 1/2 pounds.

No. 140 Flush Sash Lift

Pressed Steel



Cut full size

One size only, 3 inches.

Each Lift is wrapped in a separate package, complete with $\frac{5}{8}$ x 6 oval-head screws. Packed one-quarter gross in a box. Any finish desired. For list of finishes, see page 12.

Weight, per gross, $9\frac{1}{2}$ pounds.

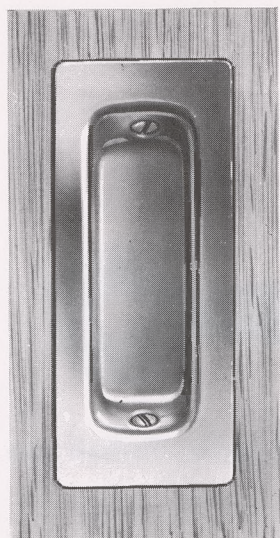
No. 141 Flush Pull

One size only, $3\frac{1}{4}$ inches.

Stamped from heavy-gauge brass and held in place by two screws. Fits snug and trim to the sliding door.

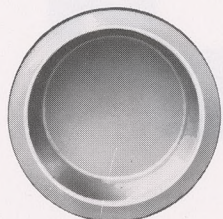
Each lift is wrapped in a separate package complete with $\frac{5}{8}$ x 4 oval-head screws. Packed one-quarter gross in a box. Any finish desired. For list of finishes, see page 12.

Weight, per gross, $2\frac{1}{4}$ pounds.

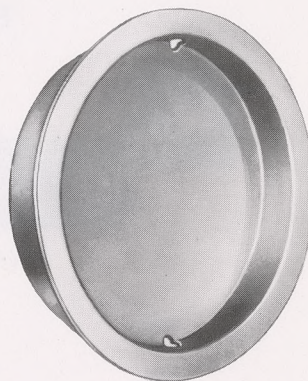




Cup Pulls



No. 142
Diameter hole, $\frac{3}{4}$ inch.



No. 144
Diameter hole, $1\frac{3}{4}$ inches.

Made of solid brass with smooth rounded lip that molds smoothly into the door when installed.

No. 142, packed one gross in a carton.

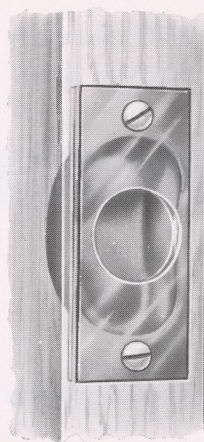
No. 144, packed one dozen in a box, with brads.

Bright Brass and Chromium finishes only.

No. 142. Weight per gross, $\frac{3}{4}$ pound.

No. 144. Weight per dozen, $\frac{1}{2}$ pound.

No. 143 Edge Pull



Size: $2\frac{1}{2}$ inches x 1 inch.

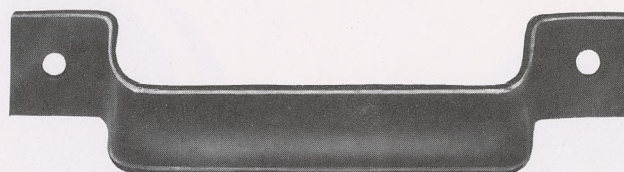
A two-piece assembly of solid brass providing a quick, positive finger grip for operating sliding doors. Packed one dozen in a carton with $\frac{3}{4}$ x 6 oval-head screws.

Any finish desired. For list of finishes see page 12.

Weight per dozen, $\frac{3}{4}$ pound.

No. 205 Drawer Pull

Pressed Steel



Cut full size of 3 1/4-inch

Length Inches	Width Inches	Size of Screws	Weight per Gross Pounds	Number of Gross in Case
2 3/4	1/2	5/8 x 6	5 3/4	5
3 1/4	5/8	5/8 x 6	8	6
4 1/2	3/4	3/4 x 7	13 1/2	5

Packed one-quarter gross in a box, with round-head screws.

Any finish desired. For list of finishes, see page 12.

No. 210 Screen Lift

Pressed Steel



Packed one-half gross in a box, complete with 5/8 x 6 round-head screws.

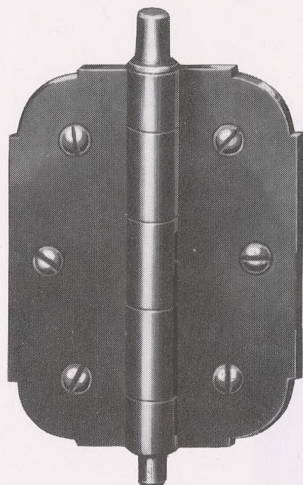
Any finish desired. For list of finishes, see page 12.

Weight, per gross, with screws, 4 1/2 pounds.

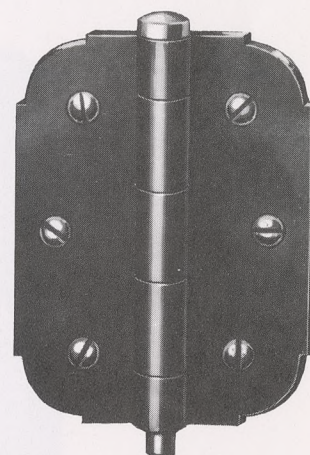
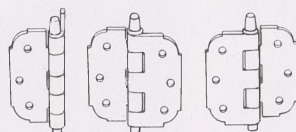
Weight, per M pcs., bulk, no screws, 22 1/2 pounds.



Loose-Pin Screen Door Surface Hinge



No. 121 Loose Pin



No. 121 1/2 Button-Tip

Made of Steel. No. 121 1/2 made in 3-inch size only.
Can be used on doors not flush with joint by reversing one leaf for offset.
Packed one pair in a box, with round-head screws.
Any finish desired. For list of finishes, see page 12.

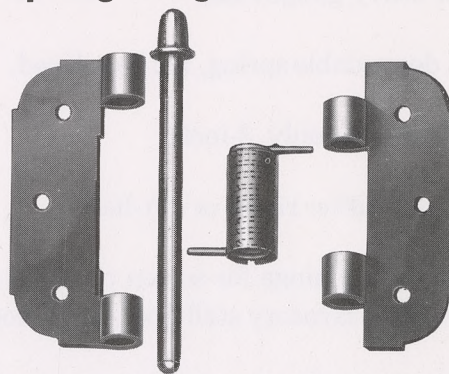
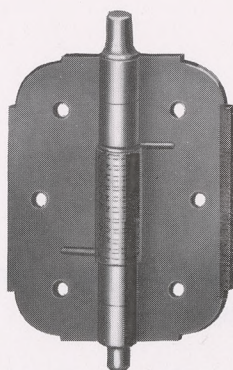
Size
Inches
2 1/2
3

Size of
Screws
3/4 x 7
1 x 9

Weight per
Dozen Pairs
Pounds
5 1/4
7 1/2

Number of
Dozen Pairs
in Case
16
16

No. 122 Spring Hinge



Made of steel. Music-wire spring. Hinge operates with or without the spring.
Loose pin. Door can be taken down without removing screws.

Size 3 x 2 1/2 inch. Packed one pair in a box, with 1 x 9 round-head screws.
Sixteen dozen pairs in a case.

Any finish desired. For list of finishes, see page 12.

Weight, per dozen pairs, 7 1/2 pounds.

No. 123 Heavy Steel Full Surface Spring Hinge

Button Tip

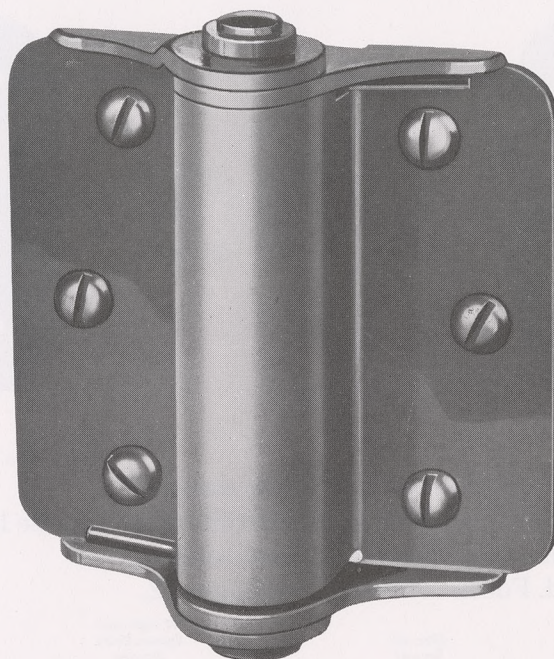


Illustration full size

Made of heavy-gauge steel.

Strong, dependable spring, fully enclosed.

Made in one size only, 3-inch.

Can be used either right- or left-hand.

An ideal spring hinge for screen or storm doors, combination screen and storm doors, and wood lavatory stall doors with wood partitions.

Packed one pair in a box, with 1 x 9 round-head screws. One hundred pairs in a case.

Any finish desired. For list of finishes, see page 12.

Weight, per dozen pairs, 11 pounds.



No. 124 Heavy Steel Half Surface Spring Hinge
Button Tip

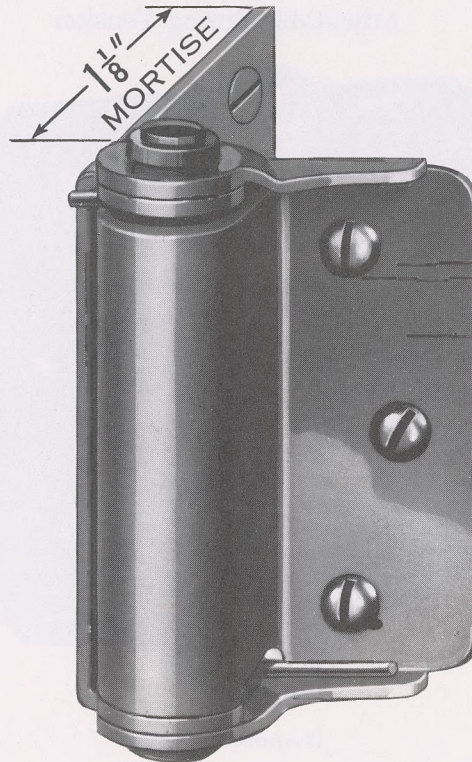


Illustration full size

Made of heavy-gauge steel.

Strong, dependable spring, fully enclosed.

Made in one size only, 3-inch.

Can be used either right- or left-hand.

For use on screen or storm doors, combination screen and storm doors, and wood lavatory stall doors with wood partitions.

The butt part is made of an exact width to fit against jamb when mortise is cut through a standard 1 1/8-inch molding or casing. The butt part is attached first and door is then set in place and surface leaf attached. A labor-saving feature.

Packed one pair in a box with 1 x 9 round-head screws for surface leaf and 1 x 9 flat-head screws for mortise leaf. One hundred pairs in a case.

Any finish desired. For list of finishes, see page 12.

Weight, per dozen pairs, 11 3/4 pounds.

No. 125 Adjustable Full Surface Spring Hinge

Button Tip

Adjustable Spring Tension

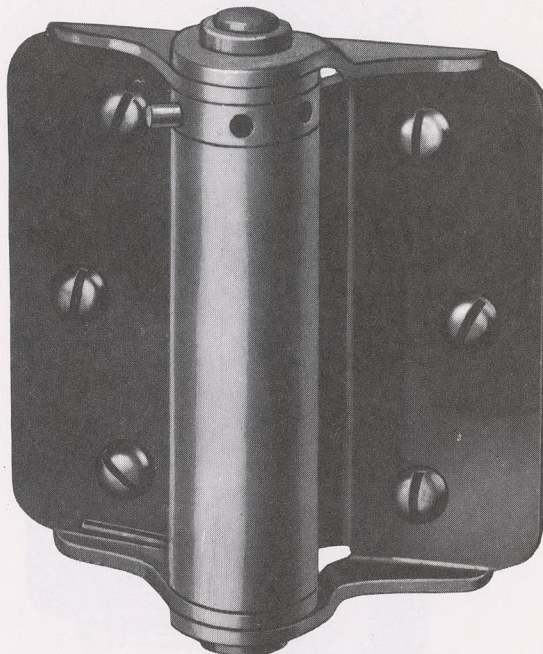


Illustration full size

Made of heavy-gauge steel.

Strong, dependable spring, fully enclosed.

Made in one size only, 3-inch.

Can be used either right- or left-hand.

An ideal spring hinge for screen or storm doors, combination screen and storm doors, and wood lavatory stall doors with wood partitions.

Packed one pair in a box, with 1 x 9 round-head screws. One hundred pairs in a case.

Any finish desired. For list of finishes, see page 12.

Weight, per dozen pairs, 11 pounds.



No. 126 Adjustable Half Surface Spring Hinge

Button Tip
Adjustable Spring Tension

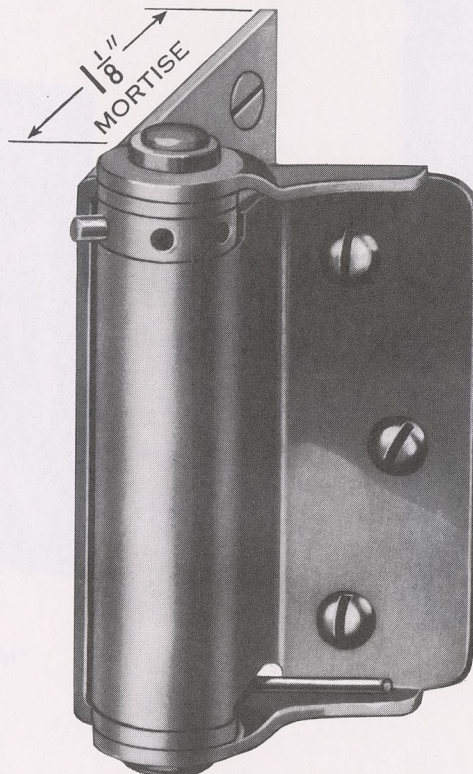


Illustration full size

Made of heavy-gauge steel.

Strong, dependable spring, fully enclosed.

Made in one size only, 3-inch.

Can be used either right- or left-hand.

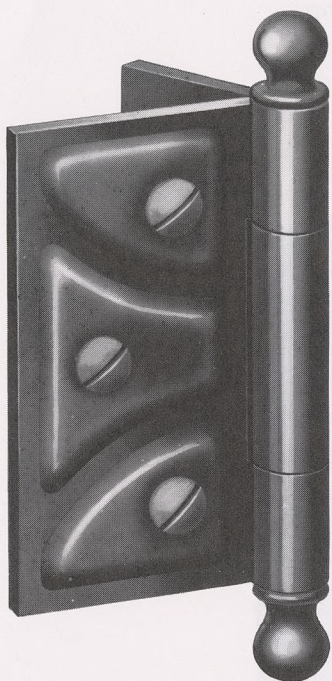
For use on screen or storm doors, combination screen and storm doors, and wood lavatory stall doors with wood partitions.

The butt part is made of an exact width to fit against jamb when mortise is cut through a standard $1\frac{1}{8}$ -inch molding or casing. The butt part is attached first and door is then set in place and surface leaf attached. A labor-saving feature.

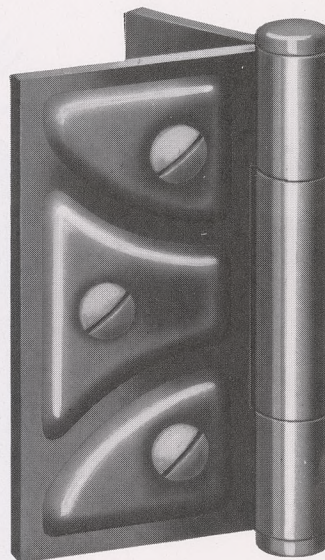
Packed one pair in a box with 1 x 9 round-head screws for surface leaf and 1 x 9 flat-head screws for mortise leaf. One hundred pairs in a case.

Any finish desired. For list of finishes, see page 12.

Weight, per dozen pairs, $11\frac{3}{4}$ pounds.

Half Surface Butts

No. 420 1/2 Ball Tip



No. 422 1/2 Button Tip

Illustration full size

Made of steel.

A half-surface butt, made without offset.

For use on combination screen and storm doors where door and casing are not flush and a full-surface hinge cannot be used.

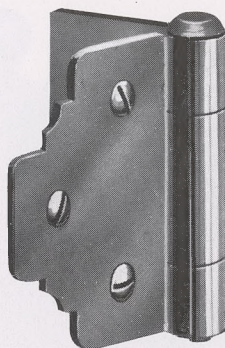
Packed one pair in a carton, with $\frac{3}{4}$ x 7 oval-head screws for door leaf and $\frac{3}{4}$ x 8 flat-head screws for jamb leaf. Any finish desired. For list of finishes, see page 12.

Made in 2 1/2-inch size only.

Weight, per hundred pairs, 65 pounds. One hundred forty-four pairs in a case.



No. 400 Ornamental Cupboard Butt



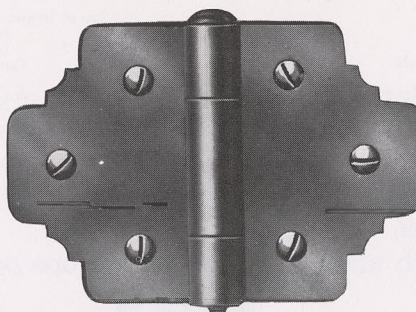
Cut full size of 1 $\frac{3}{4}$ -inch

Size Inches	Kind of Pin	Style	Number of Pairs in Box	Size of Screws		Weight per Dozen Pairs Pounds	Dozen Pairs in Case
				Door Leaf Oval-head	Jamb Leaf Flat-head		
1 $\frac{1}{2}$	Oval-head	Flat	1 dozen	$\frac{5}{8}$ x 5	$\frac{5}{8}$ x 6	2	40
1 $\frac{3}{4}$	Oval-head	Flat	1 dozen	$\frac{5}{8}$ x 5	$\frac{5}{8}$ x 6	2 $\frac{1}{2}$	32
2	Ball-tip	Flat	1 dozen	$\frac{3}{4}$ x 7	$\frac{3}{4}$ x 7	4	18

Made of cold rolled steel.

Packed one pair in an envelope, with screws. (See page 10.)

No. 405 Ornamental Surface Hinge



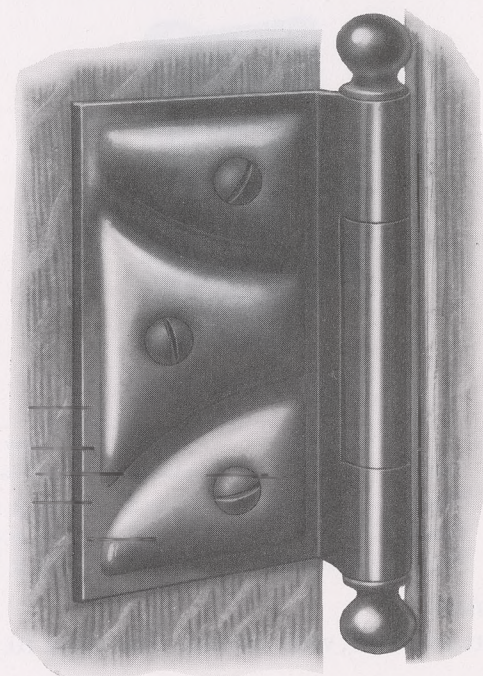
Cut full size of 1 $\frac{1}{2}$ -inch

Size Inches	Kind of Pin	Style	Number of Pairs in Box	Size of Screws	Weight per Dozen Pairs Pounds	Dozen Pairs in Case
1 1/2	Oval-head	Flat	1 dozen	5/8 x 5	2	40
1 3/4	Oval-head	Flat	1 dozen	5/8 x 5	2 3/4	32
2	Ball-tip	Flat	1 dozen	3/4 x 7	4 3/4	18

Made of cold rolled steel.

Packed one pair in an envelope, with oval-head screws; 1 $\frac{3}{4}$ -inch No. 405 Sherardized Tight Brass Pin for wash-tray hinge, with Sherardized screws. (See page 10.)

No. 420 Ornamental Cupboard Butt

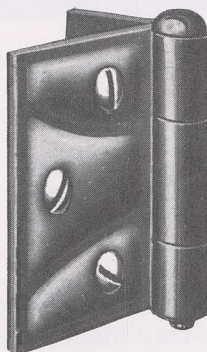


Cut full size of 2 1/2-inch

Size Inches	Kind of Pin	Style	Number of Pairs in Box	Size of Screws		Weight per Dozen Pairs Pounds	Dozen Pairs in Case
				Door Leaf Oval-head	Jamb Leaf Flat-head		
1 1/2	Oval-head	Flat	1 dozen	5/8 x 4	5/8 x 6	2	40
1 3/4	Oval-head	Flat	1 dozen	5/8 x 5	5/8 x 6	2 1/2	32
2	Ball-tip	Flat	1 dozen	3/4 x 7	3/4 x 7	4	18
2 1/2	Ball-tip	Offset	1 pair	3/4 x 7	3/4 x 8	7 1/4	12

Made of cold rolled steel.

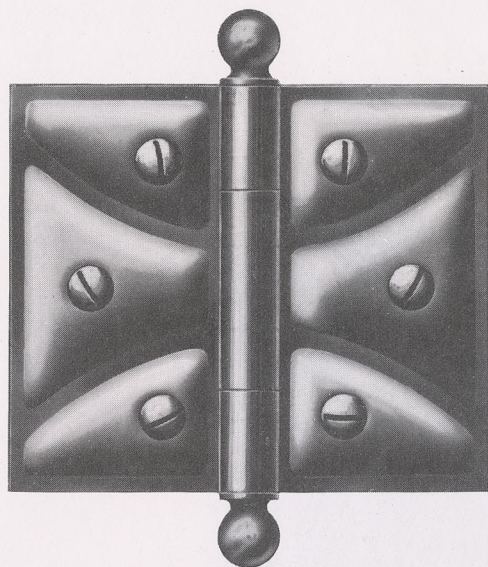
Sizes 1 1/2-inch, 1 3/4-inch and 2-inch are packed one pair in an envelope, with screws. (See page 10.)



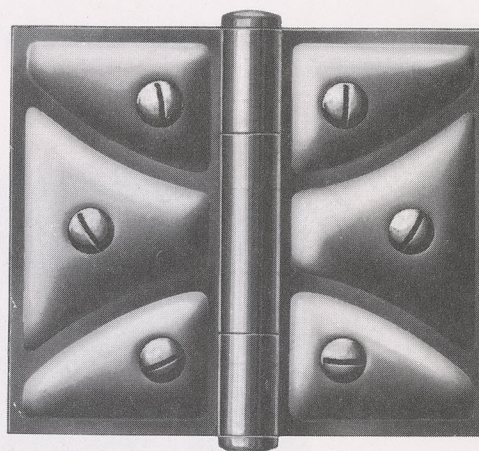
Cut full size of 1 1/2-inch



Ornamental Surface Hinges



No. 425 Ball Tip

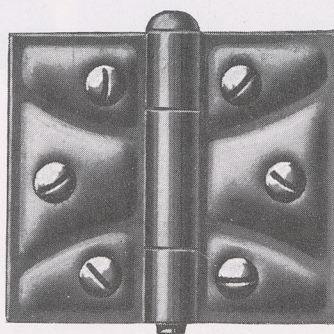


No. 427 Button Tip

Size Inches	Kind of Pin	Style	Number of Pairs in Box	Size of Screws	Weight per Dozen Pairs Pounds	Dozen Pairs in Case
1½	Oval-head	Flat	1 dozen	5/8 x 5	2	40
1¾	Oval-head	Flat	1 dozen	5/8 x 5	2¾	32
2	Ball-tip	Flat	1 dozen	3/4 x 7	4¼	18
2½	Ball-tip	Flat	1 pair	3/4 x 7	7¼	12

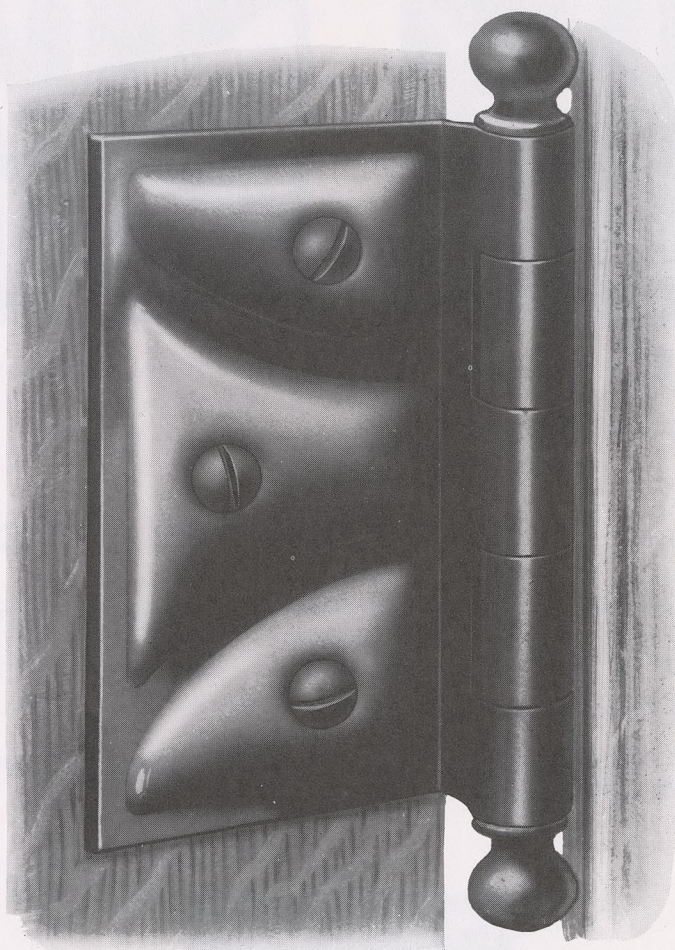
Made of cold rolled steel.

Sizes 1½-inch, 1¾-inch and 2-inch are packed one pair in an envelope, with oval-head screws. (See page 10.)



Cut full size of 1 ½-inch

No. 420 Half Surface Butt



Cut full size of 3 1/2-inch



No. 420 Half Surface Butt

Made of cold rolled steel, richly embossed.

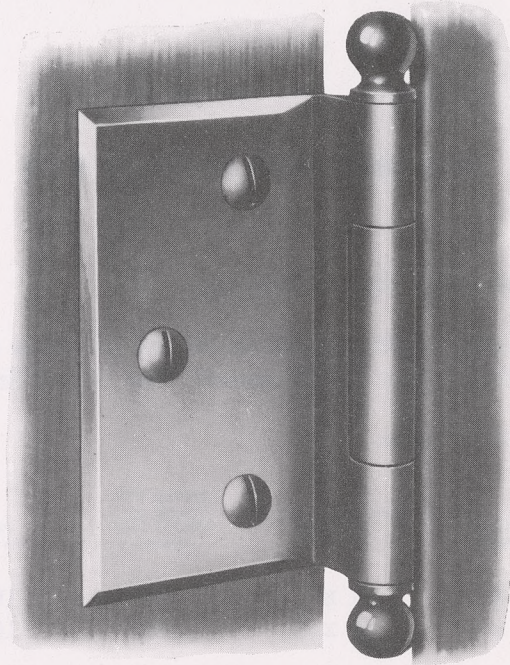
Two-inch, packed one dozen pairs in a carton, all other sizes packed one pair in a carton, with screws. Any finish desired. For list of finishes, see page 12.

Made in the following sizes:

Size Inches	Size of Screws		Average Net Weight per Hundred Pairs Pounds	Pairs in Case	Average Case Weight Pounds
	Door-leaf Oval-head	Jamb-leaf Flat-head			
2	$\frac{3}{4}$ x 7	$\frac{3}{4}$ x 7	33	100	34
2½	$\frac{3}{4}$ x 7	$\frac{3}{4}$ x 8	58	100	60
3	1 x 8	1 x 8	91	50	47
3½	1 x 9	1 x 9	140	50	72
4	1¼ x 10	1 x 10	165	25	43

For smaller sizes, see page 166.

No. 450 Ornamental Cupboard Butt

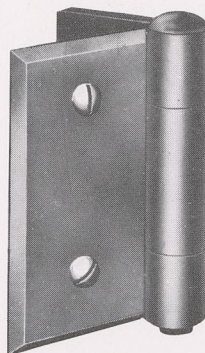


Cut full size of 2 1/2-inch

Size Inches	Kind of Pin	Style	Number of Pairs in Box	Size of Screws		Weight per Dozen Pairs Pounds	Dozen Pairs in Case
				Door Leaf Oval-head	Jamb Leaf Flat-head		
1 1/2	Oval-head	Flat	1 dozen	5/8 x 5	5/8 x 6	2	40
1 3/4	Oval-head	Flat	1 dozen	5/8 x 6	5/8 x 6	2 1/2	32
2	Ball-tip	Flat	1 dozen	3/4 x 7	3/4 x 7	3 3/4	18
2 1/2	Ball-tip	Offset	1 pair	3/4 x 7	3/4 x 8	7	12

Made of cold rolled steel.

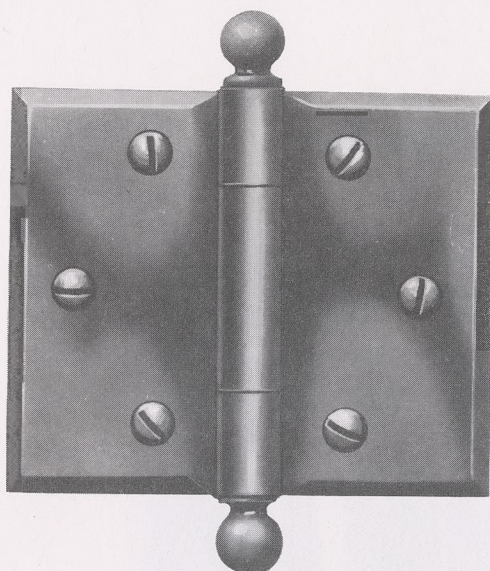
Sizes 1 1/2-inch, 1 3/4-inch and 2-inch are packed one pair in an envelope, with screws. (See page 10.)



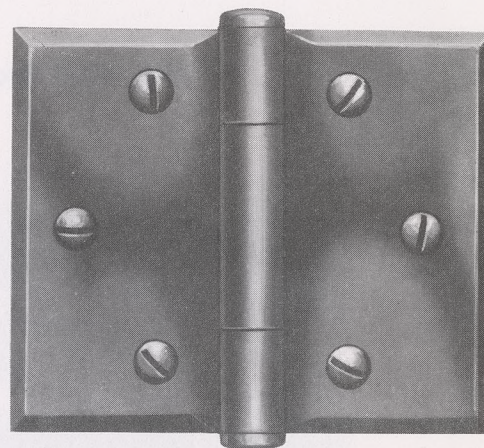
Cut full size of
1 1/2-inch



Ornamental Surface Hinges



No. 455 Ball Tip

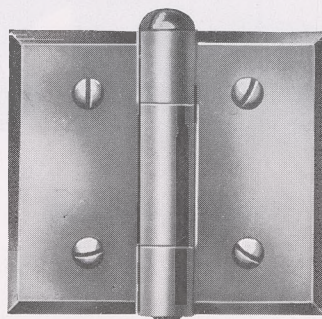


No. 457 Button Tip

Size Inches	Kind of Pin	Style	Number of Pairs in Box	Size of Screws	Weight per Dozen Pairs Pounds	Dozen Pairs in Case
1½	Oval-head	Flat	1 dozen	5/8 x 5	2	40
1¾	Oval-head	Flat	1 dozen	5/8 x 6	2¾	32
2	Ball-tip	Flat	1 dozen	¾ x 7	4	18
2½	Ball-tip	Flat	1 pair	¾ x 7	7½	12

Made of cold rolled steel.

Sizes 1½-inch, 1¾-inch and 2-inch are packed one pair in an envelope, with oval-head screws. (See page 10.)



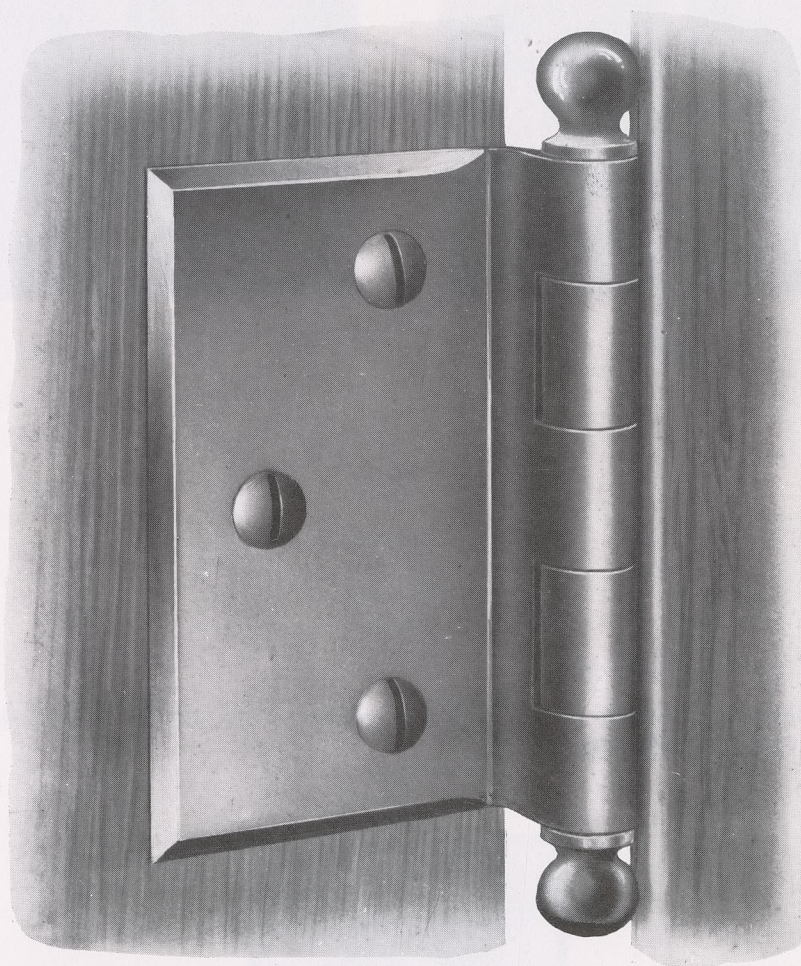
Cut full size of 1 ½-inch

National

MANUFACTURING COMPANY

Sterling, Illinois

No. 450 Half Surface Butt



Cut full size of 3 1/2-inch



No. 450 Half Surface Butt

Made of selected cold rolled steel, highly polished, with beveled edges.

This design matches very nicely the escutcheon plates with beveled edges, giving a very harmonious effect.

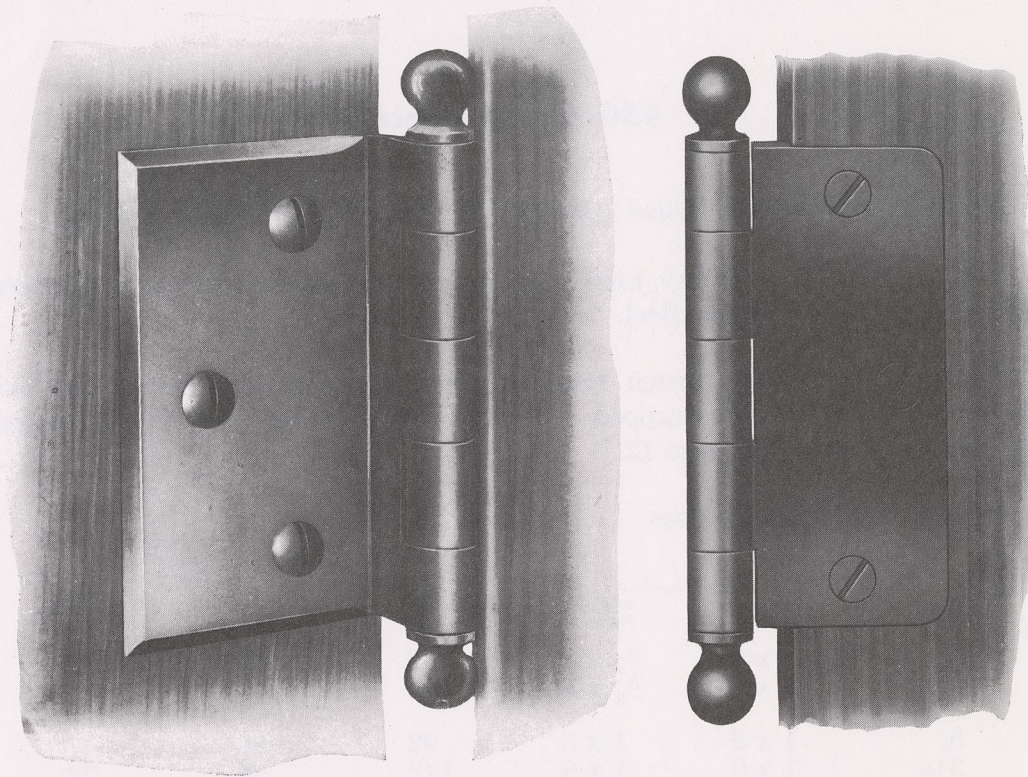
Two-inch, packed one dozen pairs in carton, all other sizes packed one pair in a carton, each Butt wrapped separately, with screws. Any finish desired. For list of finishes, see page 12.

Made in the following sizes:

Size Inches	Size of Screws		Average Net Weight per Hundred Pairs Pounds	Pairs in Case	Average Case Weight Pounds
	Door-leaf Oval-head	Jamb-leaf Flat-head			
2	$\frac{3}{4}$ x 7	$\frac{3}{4}$ x 7	32	100	33
2½	$\frac{3}{4}$ x 7	$\frac{3}{4}$ x 8	60	100	61
3	1 x 8	1 x 8	92	50	47
3½	1 x 9	1 x 9	142	50	73
4	1¼ x 10	1 x 10	182	25	47
4½	1¼ x 10	1¼ x 10	238	25	62

For smaller sizes, see page 171.

No. 450RC Half Surface Butt With Round Corners



Made of selected cold rolled steel, highly polished, with beveled edges.

This design matches very nicely the escutcheon plates with beveled edges, giving a very harmonious effect.

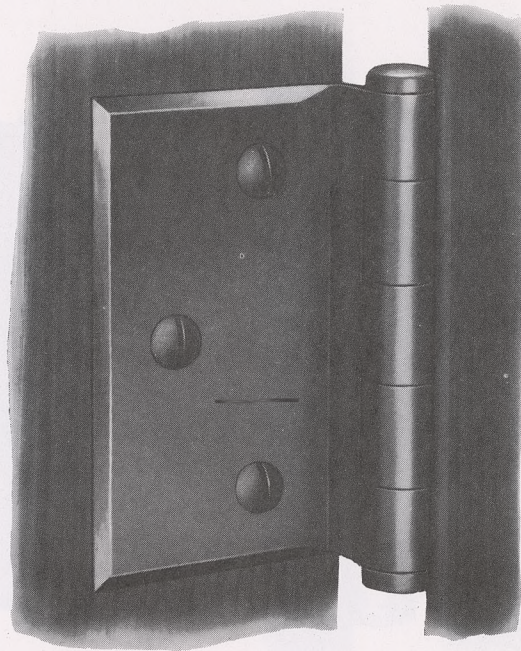
One pair in a carton, each Butt wrapped separately, with screws. Any finish desired. For list of finishes, see page 12.

Made in the following sizes:

Size Inches	Size of Screws		Average Net Weight per Hundred Pairs Pounds	Pairs in Case	Average Case Weight Pounds
	Door-leaf Oval-head	Jamb-leaf Flat-head			
2½	¾ x 7	¾ x 8	60	100	61
3	1 x 8	1 x 8	92	50	47
3½	1 x 9	1 x 9	142	50	73
4	1¼ x 10	1 x 10	182	25	47



No. 452 Half Surface Butt Button Tip



Made of selected cold rolled steel, highly polished, with beveled edges.

This design matches very nicely the escutcheon plates with beveled edges, giving a very harmonious effect.

Also, furnished in Prime Coat cut for painting.

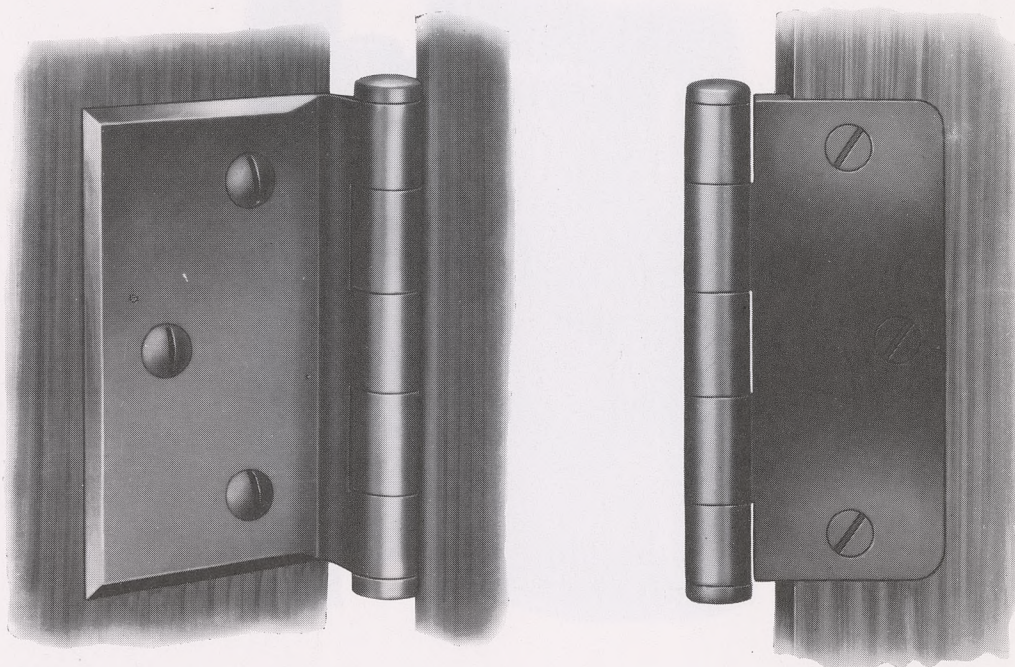
One pair in a carton, each Butt wrapped separately, with screws. Any finish desired. For list of finishes, see page 12.

Made in the following sizes:

Size Inches	Size of Screws		Average Net Weight per Hundred Pairs Pounds	Pairs in Case	Average Case Weight Pounds
	Door-leaf Oval-head	Jamb-leaf Flat-head			
2	$\frac{3}{4}$ x 7	$\frac{3}{4}$ x 7	30	100	31
2½	$\frac{3}{4}$ x 7	$\frac{3}{4}$ x 8	56	100	57
3	1 x 8	1 x 8	89	50	46
3½	1 x 9	1 x 9	137	50	69
4	1¼ x 10	1 x 10	172	25	44
4½	1¼ x 10	1¼ x 10	229	25	59

No. 452RC Half Surface Butt

With Round Corners
Button Tip



Made of selected cold rolled steel, highly polished, with beveled edges.

This design matches very nicely the escutcheon plates with beveled edges, giving a very harmonious effect.

Also, furnished in Prime Coat cut for painting.

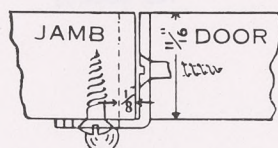
Packed one pair in a carton, each Butt wrapped separately, with screws. Any finish desired. For list of finishes, see page 12.

Made in the following sizes:

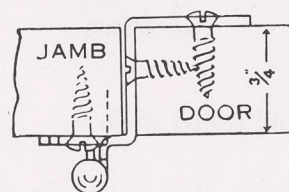
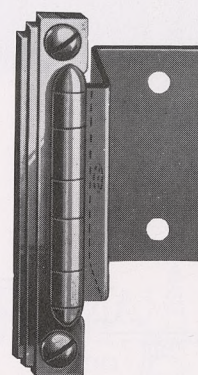
Size Inches	Size of Screws		Average Net Weight per Hundred Pairs Pounds	Pairs in Case	Average Case Weight Pounds
	Door-leaf Oval-head	Jamb-leaf Flat-head			
2½	¾ x 7	¾ x 8	55	100	57
3	1 x 8	1 x 8	89	50	46
3½	1 x 9	1 x 9	134	50	69
4	1¼ x 10	1 x 10	172	25	44



Semi-Concealed Hinges



No. 460



No. 460Z $\frac{3}{4}$

Made of cold rolled steel.

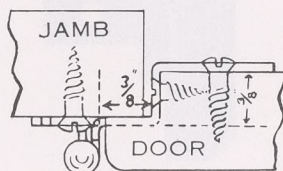
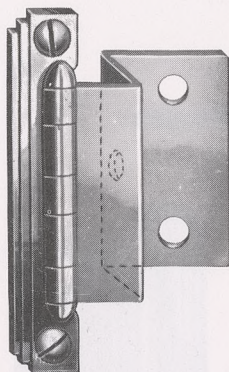
Packed one dozen pairs in a box, each pair in a separate envelope, with $\frac{5}{8}$ x 5 oval-head screws for jamb leaf and $\frac{5}{8}$ x 5 flat-head screws for door leaf. Forty dozen pairs in a case.

Any finish desired. For list of finishes, see page 12.

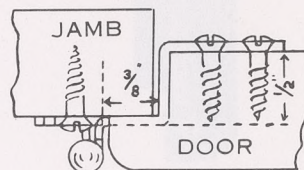
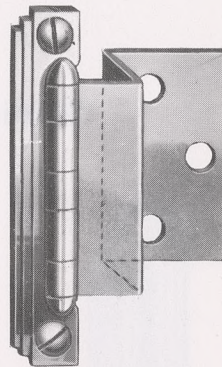
No. 460 —Weight, per dozen pairs, $1\frac{1}{2}$ pounds.

No. 460Z $\frac{3}{4}$ —Weight, per dozen pairs, $1\frac{3}{4}$ pounds.

Semi-Concealed Hinges



No. 460B $\frac{3}{8}$



No. 460D $\frac{1}{2}$

Made of cold rolled steel.

Packed one dozen pairs in a box, each pair in a separate envelope, with $\frac{5}{8}$ x 5 oval-head screws for jamb leaf and $\frac{5}{8}$ x 5 flat-head screws for door leaf. Forty dozen pairs in a case.

Any finish desired. For list of finishes, see page 12.

No. 460B $\frac{3}{8}$ – Weight, per dozen pairs, $1\frac{3}{4}$ pounds.

No. 460B $\frac{1}{2}$ – Weight, per dozen pairs, $1\frac{3}{4}$ pounds.

No. 460B $\frac{5}{8}$ – Weight, per dozen pairs, 2 pounds.

No. 460B $\frac{3}{4}$ – Weight, per dozen pairs, 2 pounds.

No. 460D $\frac{3}{8}$ – Weight, per dozen pairs, $1\frac{3}{4}$ pounds.

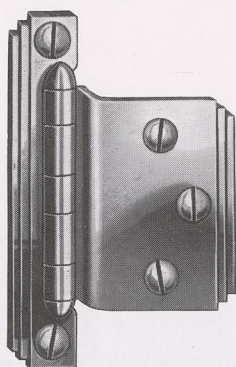
No. 460D $\frac{1}{2}$ – Weight, per dozen pairs, $1\frac{3}{4}$ pounds.

No. 460D $\frac{5}{8}$ – Weight, per dozen pairs, 2 pounds.

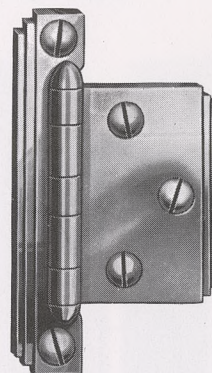
No. 460D $\frac{3}{4}$ – Weight, per dozen pairs, 2 pounds.



Ornamental Hinges



No. 460R



No. 460S

Made of cold rolled steel.

No. 460R Hinges are made for use with doors having $\frac{3}{8}$ -inch offset.

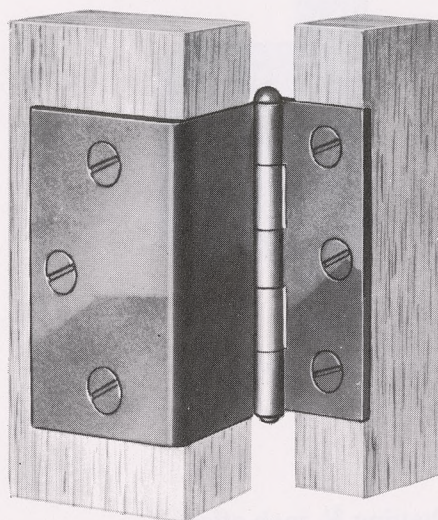
No. 460S Hinges are made for use with flush doors.

Packed one dozen pairs in a box, each pair in a separate envelope, with $\frac{5}{8}$ x 5 oval-head screws. Fifty dozen pairs in a case.

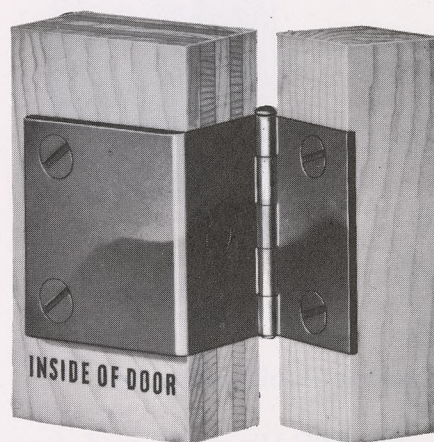
Any finish desired. For list of finishes, see page 12.

Weight, per dozen pairs, $1\frac{1}{2}$ pounds.

No. 471 Semi-Concealed Hinge



SIZE 2 1/2-inch



SIZE 1 1/2-inch

Size Inches	Number of Screw Holes	Size of Screws	Weight per Dozen Pairs Pounds	Dozen Pairs in Case
1 1/2 x 3/4*	5	5/8 x 6	2	50
1 1/2 x 1*	5	5/8 x 6	2	50
2 1/2 x 3/4*	6	5/8 x 8	4 3/4	20
2 1/2 x 1*	6	5/8 x 8	5 1/4	20
2 1/2 x 1 1/8*	6	5/8 x 8	5 1/4	20

* Denotes size of offset.

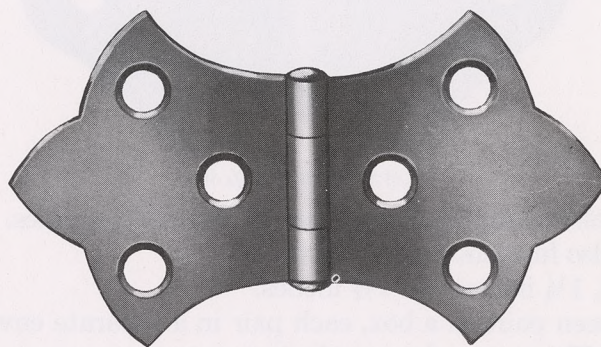
Made of cold rolled steel. Loose pin.

Packed one pair in an envelope, with flat-head screws. One dozen pairs in a box.

Any finish desired. For list of finishes, see page 12.



No. 475 Ornamental Hinge



Cut full size

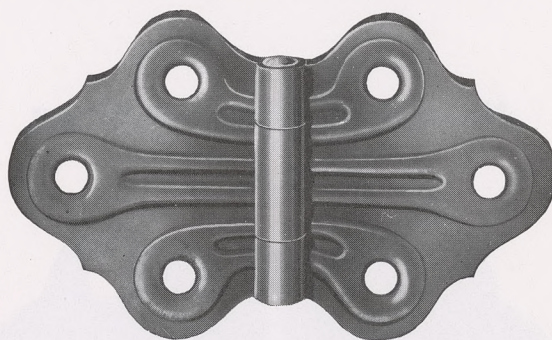
Made of cold rolled steel in 1-inch size only.

Packed one dozen pairs in a box, with $\frac{5}{8}$ x 5 oval-head screws. Fifty dozen pairs in a case.

Any finish desired. For list of finishes, see page 12.

Weight, per dozen pairs, $1\frac{1}{2}$ pounds.

No. 485 Ornamental Hinge



Cut full size of 1 1/4-inch

Made of cold rolled steel. Embossed leaves. Smooth knuckles.

Size 1 1/4-inch also furnished in solid brass.

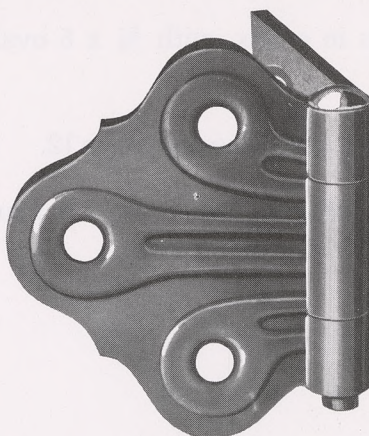
Length of joint, 1 1/4 inches and 1 1/2 inches.

Packed one dozen pairs in a box, each pair in a separate envelope, with 5/8 x 5 oval-head screws. Thirty-two dozen pairs in a case.

Any finish desired. For list of finishes, see page 12.

Weight, per dozen pairs, 1 1/4-inch, 2 pounds; 1 1/2-inch, 2 3/4 pounds.

No. 480 Ornamental Butt



Cut full size

This is the same design as the No. 485 Ornamental Hinge illustrated above. It is made in 1 1/2-inch size only. Made of cold rolled steel.

Packed one dozen pairs in a box, each pair in a separate envelope, with 5/8 x 5 oval-head screws for door leaf and 5/8 x 6 flat-head screws for jamb leaf. Thirty-two dozen pairs in a case.

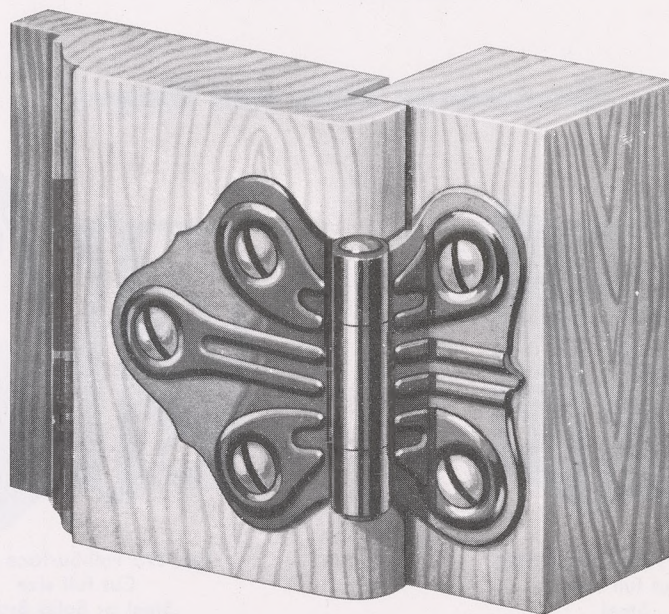
Any finish desired. For list of finishes, see page 12.

Weight, per dozen pairs, 2 pounds.



No. 486 Ornamental Hinge

Steel or Solid Brass



Furnished in steel or solid brass.

Made with $\frac{3}{8}$ -inch offset for use on rabbeted cupboard doors.

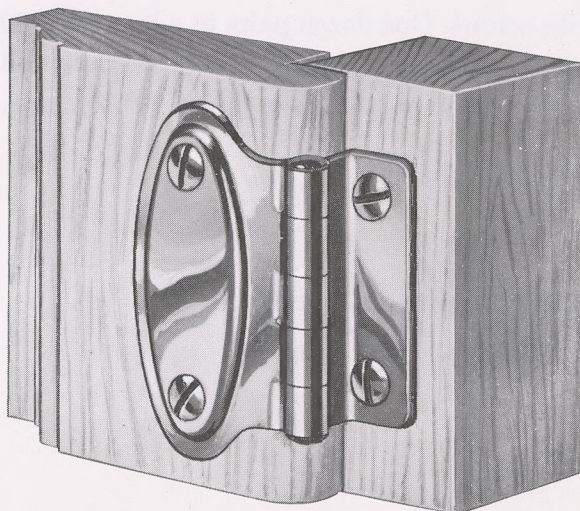
Packed with $\frac{5}{8}$ x 5 oval-head screws, one pair in an envelope, one dozen pairs in a carton. Any finish desired. For list of finishes, see page 12.

Size $1\frac{1}{4}$ -inch only.

Weight, per dozen pairs, $1\frac{1}{2}$ pounds.

No. 487 Ornamental Hinge

Steel or Solid Brass

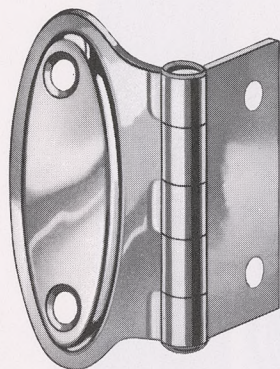


Made with $\frac{3}{8}$ -inch offset for use on rabbeted cupboard doors.

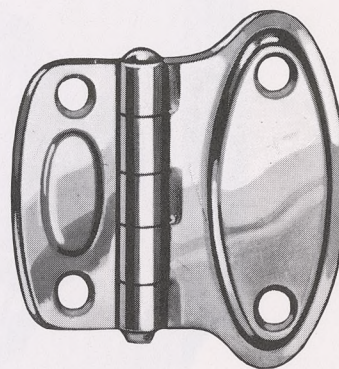
Packed with $\frac{5}{8}$ x 5 oval-head screws, one pair in an envelope, one dozen pairs in a carton. Any finish desired. For list of finishes, see page 12.

Size $1\frac{1}{2}$ -inch only.

Weight, per dozen pairs, $1\frac{3}{4}$ pounds.

Ornamental Butts and Hinges

No. 490 Half-Surface Butt
Cut full size
Steel



No. 495 Full-Surface Hinge
Cut full size
Steel or Solid Brass

No. 490 is a half-surface Butt and is made with one leaf to mortise.

No. 495 is a full-surface Hinge.

Deeply embossed. Five-knuckle.

Packed one pair in an envelope, with screws. One dozen pairs in a box. No. 490 Butts are supplied with $\frac{5}{8}$ x 5 oval-head screws for door leaf and $\frac{5}{8}$ x 5 flat-head screws for jamb leaf. No. 495 Hinges are supplied with $\frac{5}{8}$ x 5 oval-head screws.

Any finish desired. For list of finishes, see page 12.

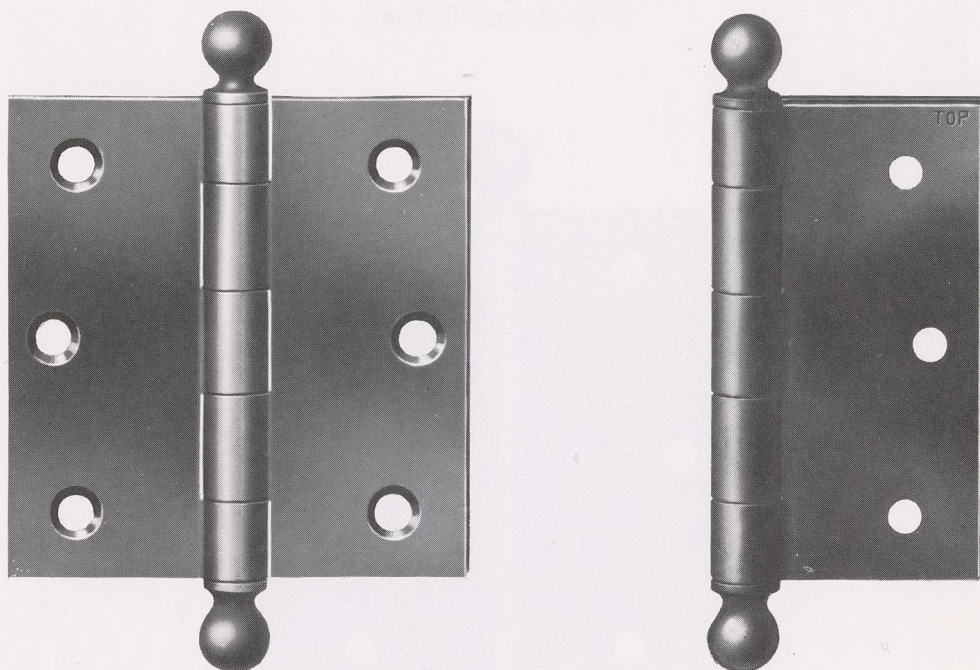
Size, 1½-inch only.

No. 490, weight, per dozen pairs, 1¾ pounds.

No. 495, weight, per dozen pairs, 1¾ pounds.



No. 500 Ball Tip Butt



Cut full size of 2 1/2 x 2 1/2 -inch

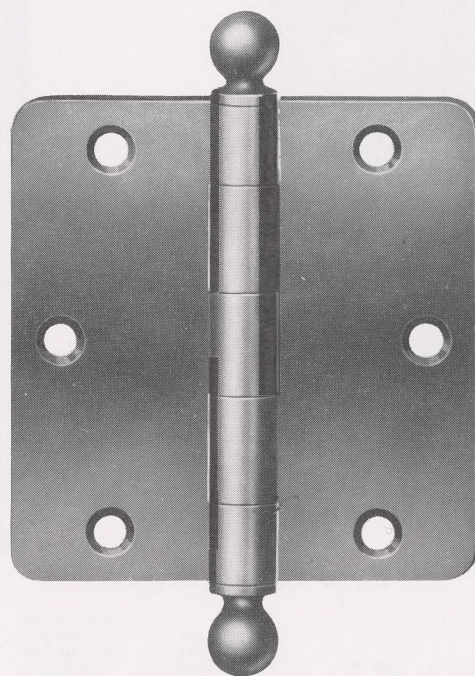
Size Inches	Number of Screw-holes	Size of Screws	Weight per Dozen Pairs Without Screws Pounds	Average Net Weight per Hundred Pairs With Screws Pounds	Pairs in Case With Screws	Average Case Weight Pounds
2 x 2	4	3/4 x 7	3 1/4	31	100	32
2 1/2 x 2 1/2	6	3/4 x 8	5 1/2	52	100	54
3 x 3	6	1 x 8	8 1/2	79	50	41
3 1/2 x 3 1/2	6	1 x 9	14 1/2	130	50	66
3 1/2 x 5	6	1 1/4 x 10		164	50	84
4 x 4	8	1 x 10	19 1/4	175	25	45
4 x 5	8	1 1/4 x 10		197		
4 x 6	8	1 1/4 x 10		232		
4 1/2 x 4 1/2	8	1 1/4 x 10	26	213	25	55
5 x 5*	10	1 1/4 x 11	32	302	20	62

Made of cold rolled steel.

The 2x2-inch bright steel, Japanned and plated Butts are packed one dozen pairs in carton, each pair in a separate envelope, with flat-head screws. (See page 10.) All other sizes are packed one pair in a box, each plated Butt wrapped separately, with flat-head screws. The word "Top" is stamped on upper end of leaf. Made to conform to specifications of U.S. Bureau of Standards. For list of finishes, see page 12.

**Button-tip.*

No. 500RC Ball Tip Butt With Round Corners



Cut full size of 2 1/2 x 2 1/2-inch

Size Inches	Number of Screw-holes	Size of Screws	Average Net Weight per Hundred Pairs Pounds	Pairs in Case	Average Case Weight Pounds
2 1/2 x 2 1/2	6	3/4 x 8	52	100	54
3 x 3	6	1 x 8	78	50	40
3 1/2 x 3 1/2	6	1 x 9	129	50	66
4 x 4	8	1 x 10	171	25	44
4 1/2 x 4 1/2	8	1 1/4 x 10	208	25	54
5 x 5*	10	1 1/4 x 11	296	20	61

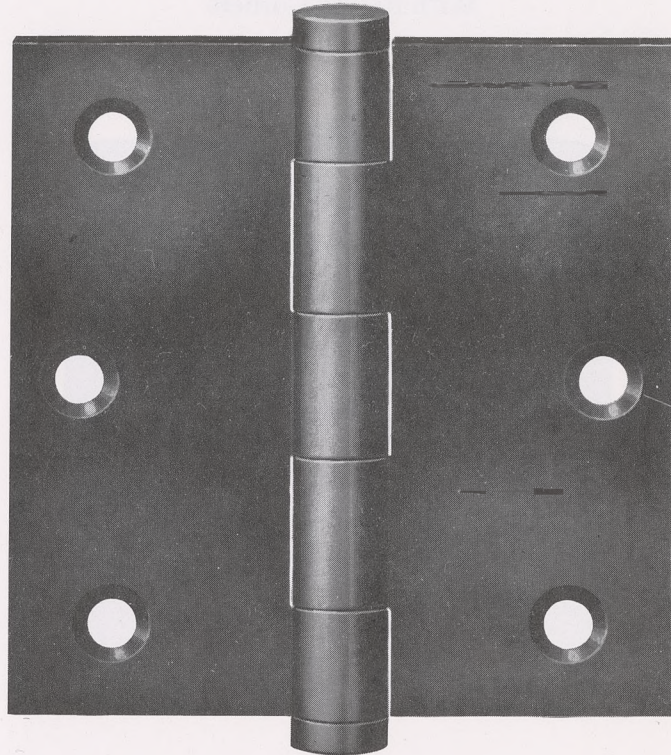
Made of cold rolled steel.

All sizes are packed one pair in a box, each plated Butt wrapped separately, with flat-head screws. The word "Top" is stamped on upper end of leaf. Also furnished in Prime Coat cut for painting. Made to conform to specifications of U.S. Bureau of Standards. Any finish desired. For list of finishes, see page 12.

*Button tip only.



No. 502 Button Tip Butt



Cut full size of $3\frac{1}{2} \times 3\frac{1}{2}$ -inch

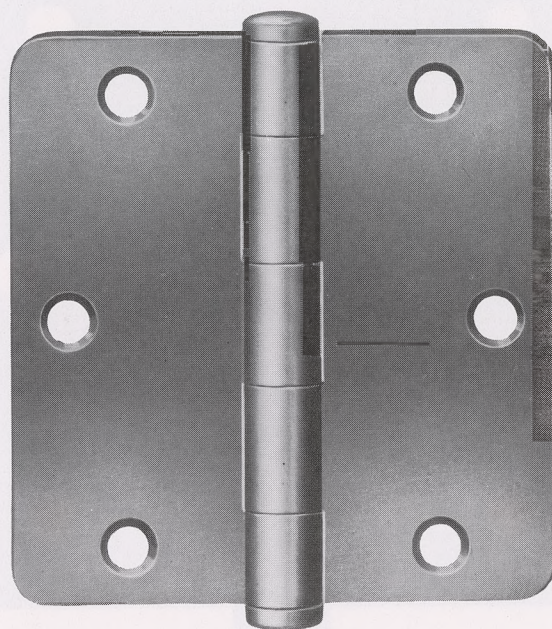
Size Inches	Number of Screw-holes	Size of Screws	Average Net Weight per Hundred Pairs Pounds	Pairs in Case	Average Case Weight Pounds
2 x 2	4	$\frac{3}{4}$ x 7	31	100	32
$2\frac{1}{2} \times 2\frac{1}{2}$	6	$\frac{3}{4}$ x 8	49	100	51
3 x 3	6	1 x 8	73	50	38
$3\frac{1}{2} \times 3\frac{1}{2}$	6	1 x 9	123	50	64
$3\frac{1}{2} \times 5$	6	$1\frac{1}{4}$ x 10	157	50	80
4 x 4	8	1 x 10	165	25	43
4 x 5	8	1 x 10	197		
4 x 6	8	$1\frac{1}{4}$ x 10	222		
$4\frac{1}{2} \times 4\frac{1}{2}$	8	$1\frac{1}{4}$ x 10	204	25	53
5 x 5	10	$1\frac{1}{2}$ x 11	287	20	60

Made of cold rolled steel.

The 2 x 2-inch bright steel, Japanned and plated Butts are packed one dozen pairs in a carton, each pair in a separate envelope, with flat-head screws. (See page 10.) All other sizes are packed one pair in a box, each plated Butt wrapped separately, with flat-head screws. The word "Top" is stamped on upper end of leaf. Made to conform to specifications of U.S. Bureau of Standards. For list of finishes, see page 12.

No. 502RC Button Tip Butt

With Round Corners



Cut full size of 3x3-inch

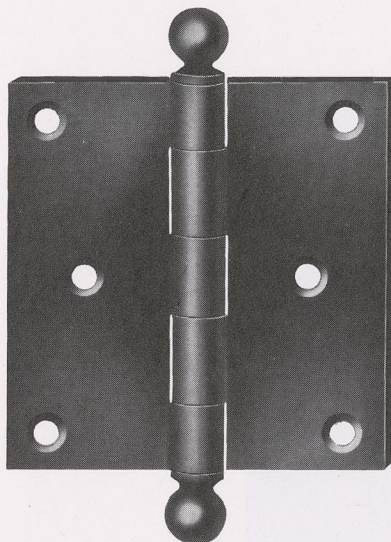
Size Inches	Number of Screw-holes	Size of Screws	Average Net Weight per Hundred Pairs Pounds	Pairs in Case	Average Case Weight Pounds
2½ x 2½	6	¾ x 8	48	100	50
3 x 3	6	1 x 8	73	50	38
3½ x 3½	6	1 x 9	123	50	64
4 x 4	8	1 x 10	164	25	43
4½ x 4½	8	1¼ x 10	201	25	52
5 x 5	10	1¼ x 11	283	20	59

Made of cold rolled steel.

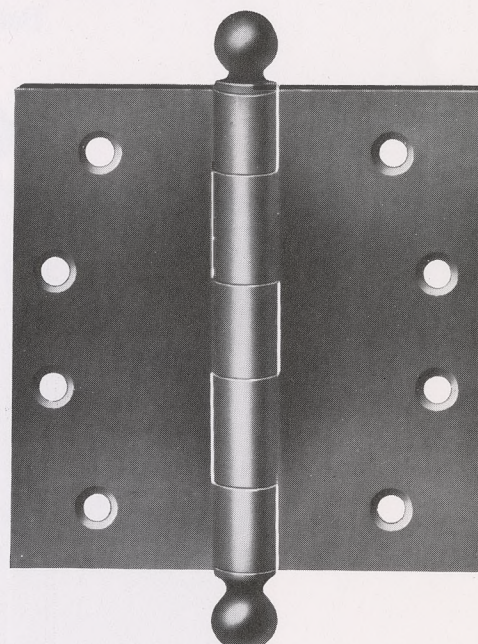
All sizes are packed one pair in a box, each plated Butt wrapped separately, with flat-head screws. The word "Top" is stamped on upper end of leaf. Also furnished in Prime Coat cut for painting. Made to conform to specifications of U.S. Bureau of Standards. Any finish desired. For list of finishes, see page 12.



Wrought-Steel Template Butts



3 1/2 x 3 1/2-inch



4x4-inch

Made of cold rolled steel.

For use on interior hollow metal doors or wood doors with pressed-steel jambs.

Screw-holes placed accurately so they will match perfectly screw-holes drilled to similar template in metal doors and jambs.

Packed one pair in a box. Any finish desired. For list of finishes, see page 12.

Also finished in Prime Coat for painting.

Made in the following sizes:

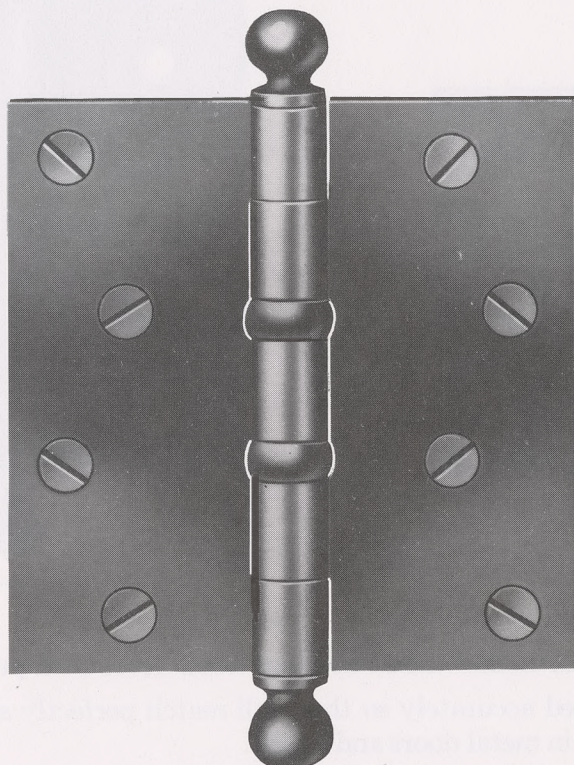
Size Inches	Number of Screw-holes	Size of Screws		Weight per Pair Pounds	Pairs in Case	Average Case Weight Pounds
		Machine	Flat-head Wood			
2 1/2 x 2 1/2	6	1/2 x 8-32	3/4 x 8	1/2	100	52
3 x 3	6	1/2 x 10-24	1 x 10	3/4	50	41
3 1/2 x 3 1/2	6	1/2 x 10-24	1 x 10	1 1/4	50	66
4 x 4	8	1/2 x 12-24	1 1/4 x 12	1 3/4	25	45
4 1/2 x 4 1/2	8	1/2 x 12-24	1 1/4 x 12	2 1/8	25	55

No. 500T Ball Tip and **No. 502T Button Tip Butts** packed with machine screws.

No. 500T 1/2 Ball Tip and **No. 502T 1/2 Button Tip Butts** packed with half machine screws and half wood screws. Made to conform to specifications of U.S. Bureau of Standards.

No. BB500 Ball-Tip Butt

Ball Bearing



Cut three-fourths size of 4x4-inch

Made of cold rolled steel.

Packed one pair in a box, each plated Butt wrapped separately, with flat-head screws. The word "Top" is stamped on upper end of leaf. Made to conform to specifications of U.S. Bureau of Standards. For list of finishes see page 12.

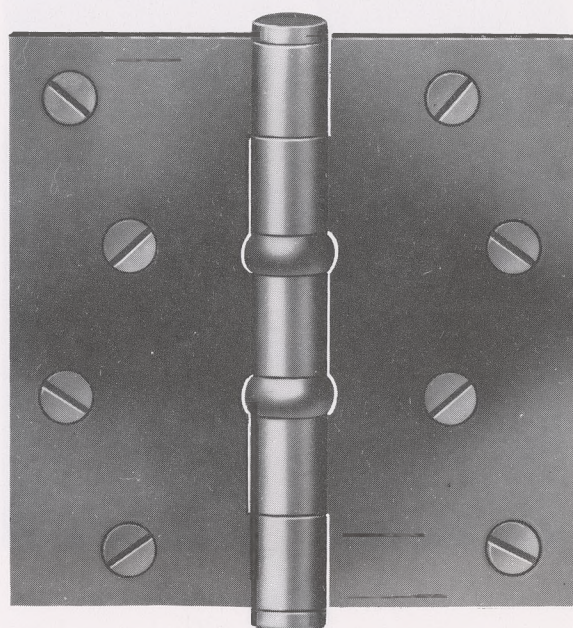
Size Inches	Number of Screw-holes	Size of Screws	Weight per Pair, Pounds	Pairs in Case	Average Case Weight Pounds
3½ x 3½	6	1 x 9	1¼	50	67
4 x 4	8	1 x 10	1¾	25	47
4½ x 4½	8	1¼ x 10	2¼	20	46
5 x 5	10	1¼ x 10	3	20	63

Also available with round corners.



No. BB502 Button Tip Butt

Ball Bearing



Cut three-fourths size of 4x4-inch

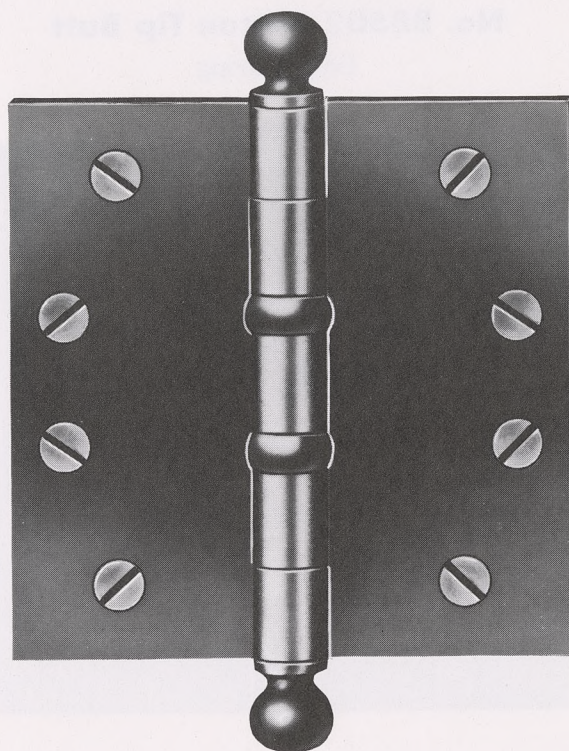
Made of cold rolled steel.

All sizes are packed one pair in a box, each plated Butt wrapped separately, with flat-head screws. The word "Top" is stamped on upper end of leaf. Made to conform to specifications of U.S. Bureau of Standards. Any finish desired. For list of finishes see page 12.

Size Inches	Number of Screw-holes	Size of Screws	Weight per Pair, Pounds	Pairs in Case	Average Case Weight Pounds
3½ x 3½	6	1 x 9	1¼	50	64
4 x 4	8	1 x 10	1¾	25	44
4½ x 4½	8	1¼ x 10	2	20	42
5 x 5	10	1¼ x 10	3	20	63

Also available with round corners.

Wrought-Steel Template Butt Ball Bearing



Cut three-fourths size of 4x4-inch

Made of cold rolled steel.

For use on interior hollow metal doors or wood doors with pressed-steel jambs.

Screw-holes placed accurately so they will match perfectly screw-holes drilled to similar template in metal doors and jambs.

Packed one pair in a box. Any finish desired. For list of finishes see page 12.

Size Inches	Number of Screw-holes	Size of Screws		Weight per Pair Pounds	Pairs in Case	Average Case Weight Pounds
		Machine	Flat-head Wood			
3½ x 3½	6	½ x 10-24	1 x 10	1¼	50	67
4 x 4	8	½ x 12-24	1¼ x 12	1¾	25	47
4½ x 4½	8	½ x 12-24	1¼ x 12	2¼	20	46

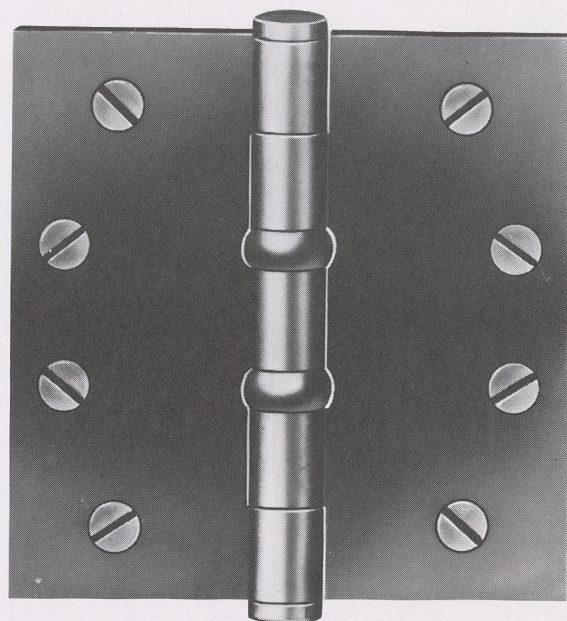
No. BB500T packed with machine screws.

No. BB500T½ packed with half machine screws and half wood screws. Made to conform to specifications of U.S. Bureau of Standards.

Also available with round corners.



Wrought-Steel Template Butt Ball-Bearing



Cut three-fourths size of 4 x 4-inch

Made of cold rolled steel.

For use on interior hollow metal doors or wood doors with pressed-steel jambs.

Screw-holes placed accurately so they will match perfectly screw-holes drilled to similar template in metal doors and jambs.

Packed one pair in a box. Any finish desired.

Size Inches	Number of Screw-holes	Size of Screws		Weight per Pair Pounds	Pairs in Case	Average Case Weight Pounds
		Machine	Flat-head Wood			
3½ x 3½	6	½ x 10-24	1 x 10	1¼	50	64
4 x 4	8	½ x 12-24	1¼ x 12	1¾	25	44
4½ x 4½	8	½ x 12-24	1¼ x 12	2	20	42
5 x 5	10	½ x 12-24	1¼ x 12	3	20	63

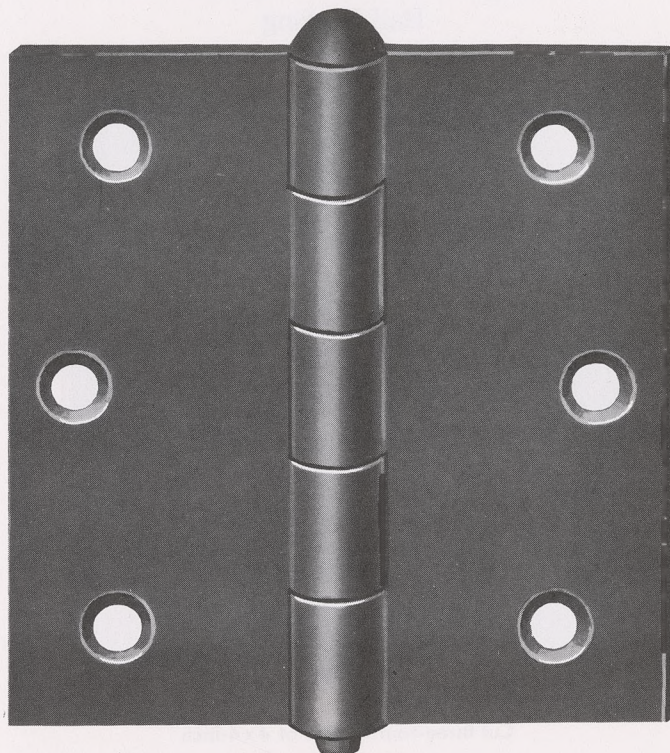
No. BB502T packed with machine screws.

No. BB502T½ packed with half machine screws and half wood screws. Made to conform to specifications of U.S. Bureau of Standards.

Also available with round corners.

For list of finishes see page 12.

No. 504 Reversible Butt



Cut full size of $3\frac{1}{2} \times 3\frac{1}{2}$ -inch

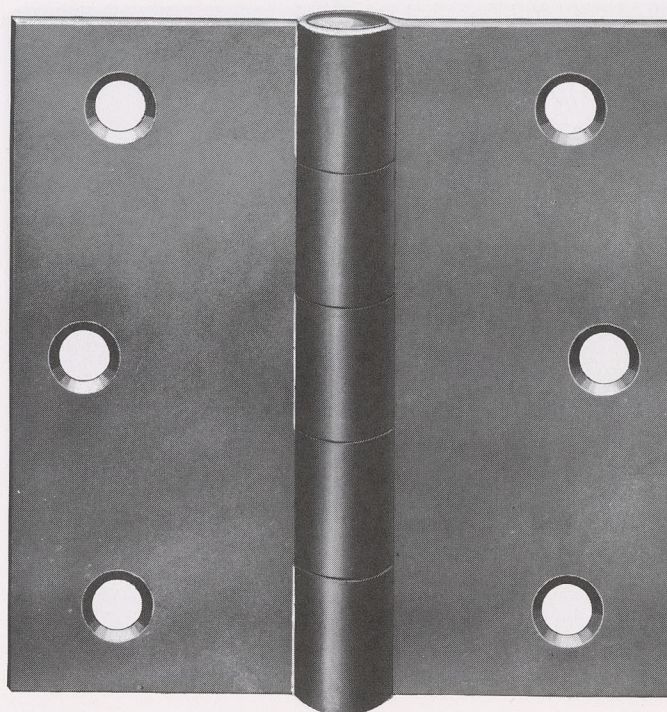
Size Inches	Number of Screw-holes	Size of Screws	Weight per Dozen Pairs Without Screws Pounds	Weight per Dozen Pairs With Screws Pounds	Dozen Pairs in Case	Average Case Weight Pounds
2 x 2	4	$\frac{3}{4} \times 7$	3	$3\frac{1}{2}$	8	28
$2\frac{1}{2} \times 2\frac{1}{2}$	6	$\frac{3}{4} \times 8$	5	$5\frac{1}{2}$	8	47
3 x $2\frac{1}{2}$	6	1 x 8	7	8	4	32
3 x 3	6	1 x 8	$7\frac{3}{4}$	$8\frac{3}{4}$	4	36
$3\frac{1}{2} \times 3$	6	1 x 9	11	$12\frac{1}{2}$	4	50
$3\frac{1}{2} \times 3\frac{1}{2}$	6	1 x 9	$12\frac{1}{4}$	14	4	55
4 x 4	8	1 x 10	$15\frac{1}{2}$	$16\frac{3}{4}$	2	35
$4\frac{1}{2} \times 4\frac{1}{2}$	8	$1\frac{1}{4} \times 10$	$22\frac{1}{2}$	$23\frac{1}{4}$	2	50

These Butts are bright steel. Also furnished Zinc with steel pin and Galvanized with brass pin. The 2 x 2-inch Butts are packed one dozen pairs in a box, each pair in a separate envelope, with flat-head screws. (See page 10.) All other sizes are packed one pair in a box, with flat-head screws. Also available packed as above, without screws, when so specified.



No. 505 Broad Butt

Tight Pin



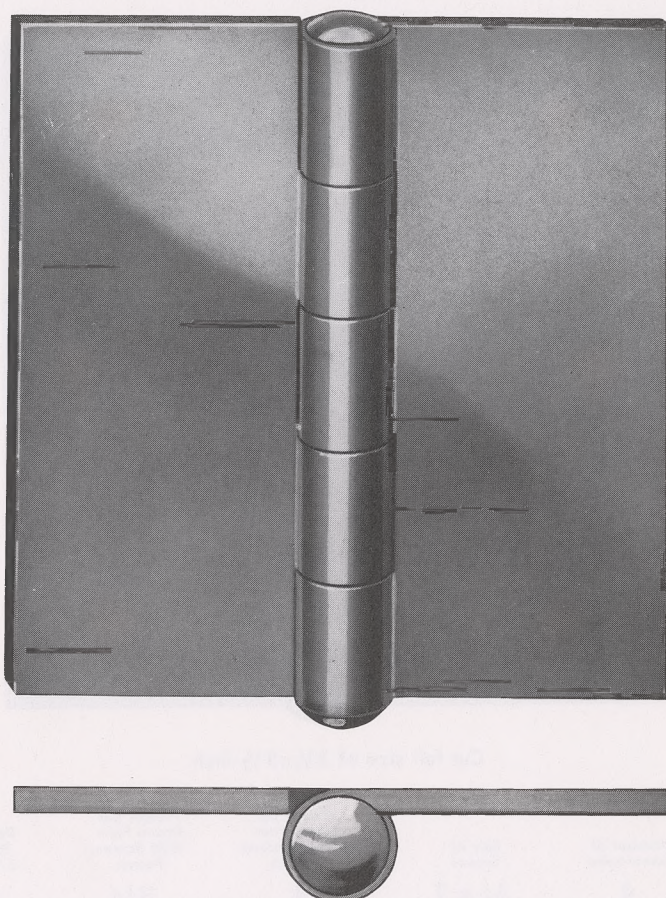
Cut full size of $3\frac{1}{2} \times 3\frac{1}{2}$ -inch

Size Inches	Number of Screw-holes	Size of Screws	Weight per Dozen Pairs Without Screws Pounds	Weight per Dozen Pairs With Screws Pounds	Dozen Pairs in Case	Average Case Weight Pounds
2 x 2	4	$\frac{3}{4}$ x 7	3	$3\frac{1}{4}$	8	28
$2\frac{1}{2} \times 2\frac{1}{2}$	6	$\frac{3}{4}$ x 8	5	$5\frac{3}{4}$	8	47
$3 \times 2\frac{1}{2}$	6	1 x 8	7	8	4	32
3 x 3	6	1 x 8	$7\frac{3}{4}$	9	4	36
$3\frac{1}{2} \times 3$	6	1 x 9	11	$12\frac{1}{2}$	4	50
$3\frac{1}{2} \times 3\frac{1}{2}$	6	1 x 9	12	13	4	55
4 x 4	8	1 x 10	$15\frac{1}{4}$	17	2	35
$4\frac{1}{2} \times 4\frac{1}{2}$	8	$1\frac{1}{4}$ x 10	$22\frac{1}{2}$	$24\frac{3}{4}$	2	50

Made of steel.

These Butts can be furnished Zinc with steel pin, Galvanized with brass pin or any finish desired. (See page 12.) The $3 \times 2\frac{1}{2}$ -inch and $3\frac{1}{2} \times 3$ -inch Butts cannot be furnished in plated finishes. The 2 x 2-inch Butts are packed one dozen pairs in a box, each pair in a separate envelope, with flat-head screws. (See page 10.) All other sizes are packed one pair in a box, with flat-head screws.

No. 560 Wrought-Steel Surface Butt
Not Swaged



Actual size of 3 1/2 x 3 1/2-inch

Size Inches	Weight per Dozen Pairs Pounds	Dozen Pairs in Case	Average Case Weight Pounds
2 x 2	3	8	25
2 1/2 x 2 1/2	5 1/4	8	44
3 x 3	8	4	33
3 1/2 x 3 1/2	13 1/2	4	56
4 x 4	18 1/4	2	38
4 1/2 x 4 1/2	22 1/2	2	47

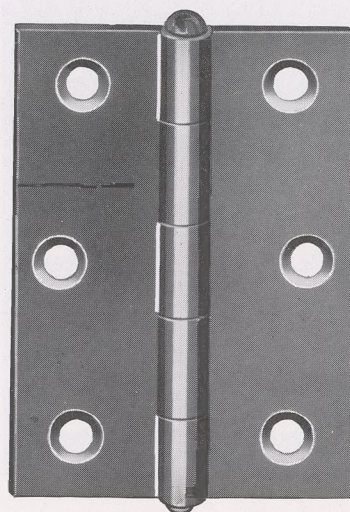
Made of cold rolled steel. For use on iron gates, shutters and cell doors. Made with fast pin and without screw-holes.

The 2 x 2-inch butts are packed one dozen pairs in a box; all other sizes are packed one-half dozen pairs in a box.

Can be furnished swaged when so ordered. Bright steel finish.



No. 508 Light Narrow Butt Loose Pin



Cut full size of 2 1/2-inch

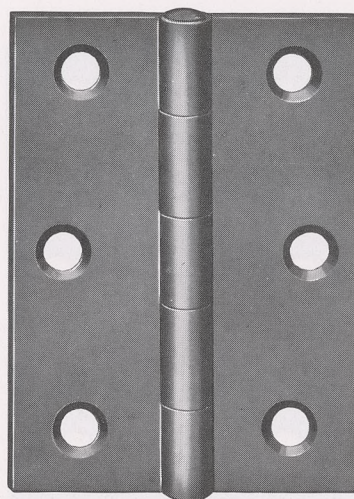
Length Inches	Width Open Inches	Number of Screw-holes	Size of Screws	Weight per Dozen Pairs with Screws Pounds	Weight per Dozen Pairs without Screws Pounds	Dozen Pairs in Case
1	1	4	1/2 x 3	3/4	1/2	50
1 1/4	1 1/16	4	5/8 x 4	1	3/4	50
1 1/2	1 7/16	4	5/8 x 5	1 3/4	1	50
1 3/4	1 7/16	4	5/8 x 5	2 1/4	1 1/4	50
2	1 9/16	4	3/4 x 6	2 1/2	2	25
2 1/2	1 11/16	6	3/4 x 6	3	2 1/2	25
3	2	6	3/4 x 7	4 1/2	4	25

Made of cold rolled steel.

These Butts are packed one dozen pairs in a box, each pair in a separate envelope, with flat-head screws. (See page 10.) Any finish desired. For list of finishes, see page 12.

Also furnished packed without screws or in bulk without screws.

No. 518 Light Narrow Butt Tight Pin



Cut full size of 2 1/2-inch

Length Inches	Width Open Inches	Number of Screw-holes	Size of Screws	Weight per Dozen Pairs with Screws Pounds	Weight per Dozen Pairs without Screws Pounds	Dozen Pairs in Case
1	1	4	1/2 x 3	3/4	1/2	50
1 1/4	1 1/16	4	5/8 x 4	1	3/4	50
1 1/2	1 7/16	4	5/8 x 5	1 3/4	1	50
1 3/4	1 7/16	4	5/8 x 5	2 1/4	1 1/4	50
2	1 9/16	4	3/4 x 6	2 1/2	2	25
2 1/2	1 11/16	6	3/4 x 6	3	2 1/2	25
3	2	6	3/4 x 7	4 1/2	4	25

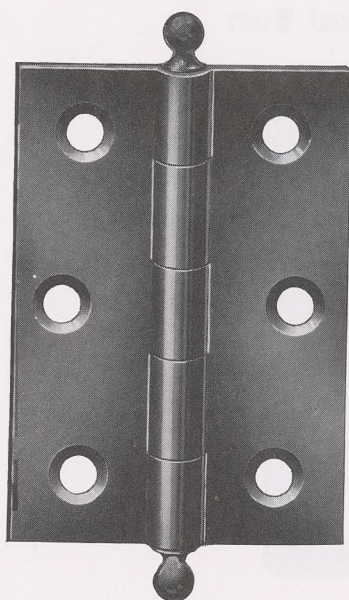
Made of cold rolled steel.

These Butts are packed one dozen pairs in a box, each pair in a separate envelope, with flat-head screws. (See page 10.) Any finish desired. Size 2-inch and larger can be furnished Sherardized with brass pin. For list of finishes, see page 12.

Also furnished packed without screws or in bulk without screws.



No. 528 Light Narrow Butt Ball Tip



Cut full size of 2 1/2-inch

Length Inches	Number of Screw-holes	Size of Screws	Width Open Inches	Weight per Dozen Pairs Pounds	Dozen Pairs in Case
1 1/2	4	5/8 x 5	1 7/16	1 1/2	25
2	4	3/4 x 6	1 9/16	2 1/2	25
2 1/2	6	3/4 x 6	1 11/16	3	25
3	6	3/4 x 7	2	4 3/4	25

Made of cold rolled steel.

All sizes of these Butts are packed one dozen pairs in a box, each pair in separate envelope, with flat-head screws. (See page 10.)

Any finish desired. For list of finishes, see page 12.

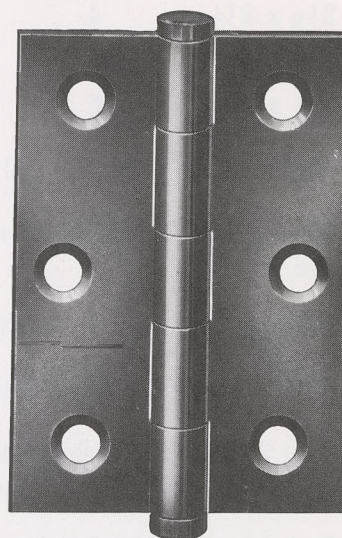
No. 529 Light Narrow Butt Button Tip

Length Inches	Number of Screw-holes	Size of Screws	Width Open Inches	Weight per Dozen Pairs Pounds	Dozen Pairs in Case
2	4	3/4 x 6	1 9/16	2 1/2	25
2 1/2	6	3/4 x 6	1 11/16	3	25
3	6	3/4 x 7	2	4 3/4	25

Made of cold rolled steel.

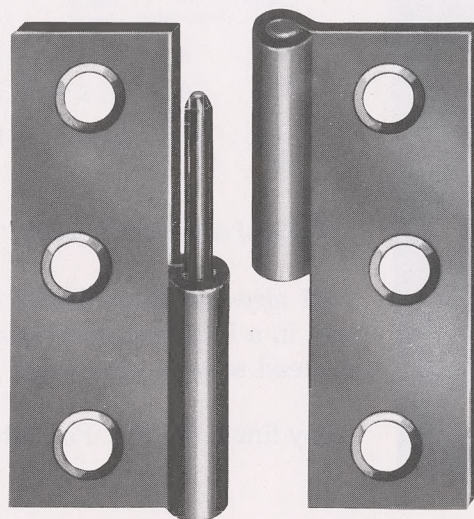
All sizes of these Butts are packed one dozen pairs in a box, each pair in a separate envelope, with flat-head screws. (See page 10.)

Any finish desired. Also furnished in Prime Coat cut for painting. For list of finishes, see page 12.



Cut full size of 2 1/2-inch

No. 506 Loose-Joint Broad Butt



Left-hand

Size Inches	Number of Screw-holes	Size of Screws	Number of Pairs in Box	Weight per Dozen Pairs with Screws Pounds	Weight per Dozen Pairs without Screws Pounds
2 x 2	4	$\frac{3}{4}$ x 7	12	$3\frac{1}{4}$	$2\frac{3}{4}$
$2\frac{1}{2}$ x $2\frac{1}{2}$	4	$\frac{3}{4}$ x 8	1	$5\frac{1}{2}$	5
3 x 3	6	1 x 8	1	$8\frac{3}{4}$	$7\frac{3}{4}$
$3\frac{1}{2}$ x $3\frac{1}{2}$	6	1 x 9	1	13	12

Made of cold rolled steel.

The pin in one Butt of each pair is longer than in the other one, making it easier to hang.

Made in both right- and left-hand.

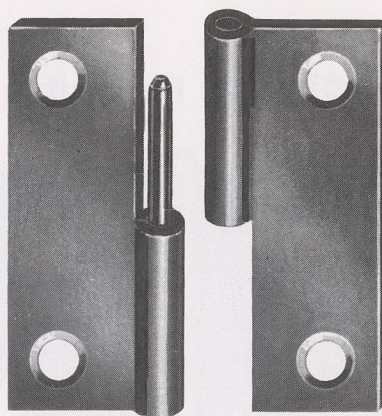
Right- and left-hand packed separately.

The 2 x 2 inch, packed one dozen pairs in a carton, all other sizes packed one pair in a box, with flat-head screws.

Furnished in Bright Steel, Japan, Zinc Steel Pin and Galvanized Brass Pin.



No. 538 Narrow Loose-Joint Butt



Left-hand

Cut full size of 2-inch

Made of cold rolled steel.

This Butt is used quite extensively for hanging full-length screens.

Made in both right- and left-hand in 2-inch and 2½-inch sizes only. Right- and left-hand packed separately.

The pin in one Butt of each pair is longer than in the other one, making it easier to hang screen.

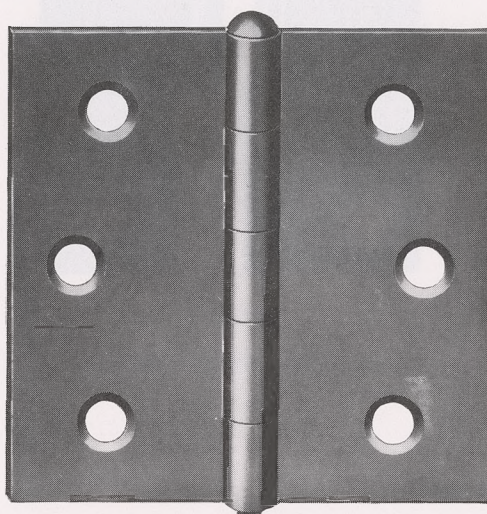
Furnished in Bright Steel, Japan and Zinc.

Bright Steel are packed one dozen pairs in a box, each pair in an envelope with screws, or in bulk without screws if desired.

Japan and Zinc are packed one dozen pairs in a box, with flat-head screws only.

Size Inches	Number of Screw-holes	Size of Screws	Weight per Dozen Pairs with Screws Pounds	Weight per Dozen Pairs without Screws Pounds
2	4	$\frac{3}{4}$ x 6	2½	2
2½	6	$\frac{3}{4}$ x 6	3	2¾

No. 608 Light Reversible Butt



Cut full size of $2\frac{1}{2} \times 2\frac{1}{2}$ -inch

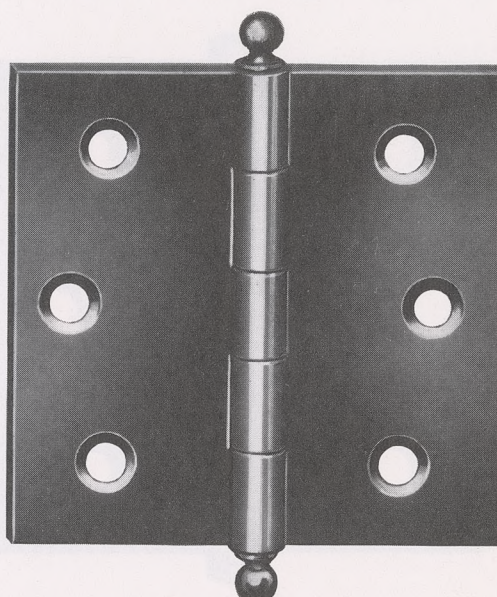
Size Open Inches	Number of Screw-holes	Size of Screws	Weight per Dozen Pairs Pounds	Dozen Pairs in Case
2 x 2	4	$\frac{3}{4}$ x 7	$2\frac{3}{4}$	25
$2\frac{1}{2}$ x 2	6	$\frac{3}{4}$ x 7	$3\frac{1}{4}$	25
$2\frac{1}{2}$ x $2\frac{1}{2}$	6	$\frac{3}{4}$ x 7	$3\frac{3}{4}$	25
3 x $2\frac{1}{2}$	6	$\frac{3}{4}$ x 8	$5\frac{1}{4}$	25
3 x 3	6	$\frac{3}{4}$ x 8	6	25

Made of cold rolled steel.

All sizes of these Butts are packed one dozen pairs in a box, each pair in a separate envelope, with flat-head screws. (See page 10.) Any finish desired. For list of finishes, see page 12.



No. 628 Light Ball Tip Butt



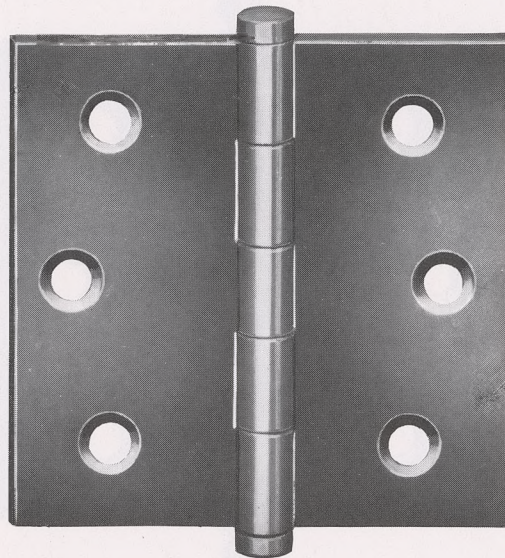
Cut full size of $2\frac{1}{2} \times 2\frac{1}{2}$ -inch

Size Open Inches	Number of Screw-holes	Size of Screws	Weight per Dozen Pairs Pounds	Dozen Pairs in Case
2 x 2	4	$\frac{3}{4} \times 7$	$2\frac{3}{4}$	25
$2\frac{1}{2} \times 2$	6	$\frac{3}{4} \times 7$	$3\frac{1}{4}$	25
$2\frac{1}{2} \times 2\frac{1}{2}$	6	$\frac{3}{4} \times 7$	4	25
3 x $2\frac{1}{2}$	6	$\frac{3}{4} \times 8$	$5\frac{1}{2}$	25
3 x 3	6	$\frac{3}{4} \times 8$	$6\frac{1}{4}$	25

Made of cold rolled steel.

All sizes of these Butts are packed one dozen pairs in a box, each pair in a separate envelope, with flat-head screws. (See page 10.) Any finish desired. For list of finishes, see page 12.

No. 629 Light Button Tip Butt



Cut full size of $2\frac{1}{2} \times 2\frac{1}{2}$ -inch

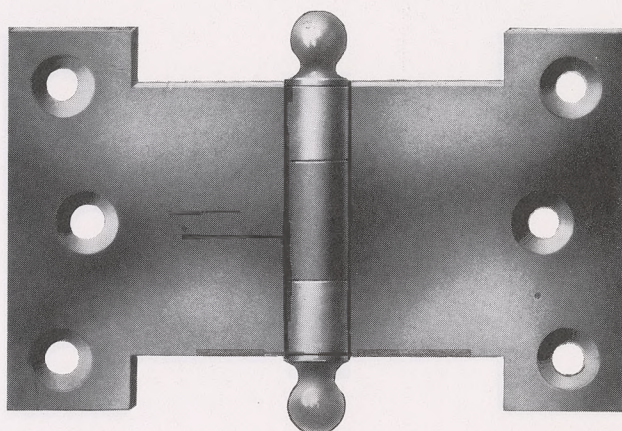
Size Open Inches	Number of Screw-holes	Size of Screws	Weight per Dozen Pairs Pounds	Dozen Pairs in Case
2 x 2	4	$\frac{3}{4} \times 7$	$2\frac{3}{4}$	25
$2\frac{1}{2} \times 2$	6	$\frac{3}{4} \times 7$	$3\frac{1}{4}$	25
$2\frac{1}{2} \times 2\frac{1}{2}$	6	$\frac{3}{4} \times 7$	4	25
3 x $2\frac{1}{2}$	6	$\frac{3}{4} \times 8$	$5\frac{1}{2}$	25
3 x 3	6	$\frac{3}{4} \times 8$	$6\frac{1}{4}$	25

Made of cold rolled steel.

All sizes of these Butts are packed one dozen pairs in a box, each pair in a separate envelope, with flat-head screws. (See page 10.) Any finish desired. Also furnished in Prime Coat cut for painting. For list of finishes, see page 12.



No. 650 Parliament Ball Tip Butt



Size Open Inches	Number of Screw-holes	Size of Screws	Weight per Dozen Pairs Pounds	Dozen Pairs in Case
3	6	1 x 8	5 $\frac{1}{4}$	24
3 $\frac{1}{2}$	6	1 x 9	7 $\frac{3}{4}$	24
4	6	1 x 9	8 $\frac{1}{4}$	24
4 $\frac{1}{2}$	6	1 x 9	8 $\frac{3}{4}$	24
5	6	1 x 9	10 $\frac{1}{2}$	24

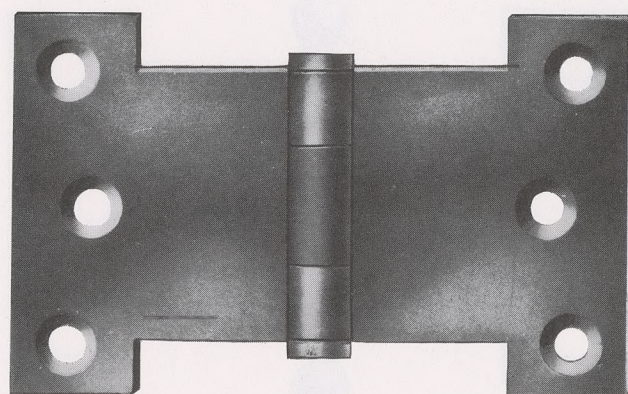
Made of cold rolled steel.

Especially adapted for hanging French windows and doors.

Packed one pair in a box, with flat-head screws.

Any finish desired. For list of finishes, see page 12.

No. 652 Parliament Button Tip Butt



Size Open Inches	Number of Screw-holes	Size of Screws	Weight per Dozen Pairs Pounds	Dozen Pairs in Case
3½	6	1 x 9	7¾	24
4	6	1x 9	8¼	24
4½	6	1 x 9	8¾	24
5	6	1 x 9	10½	24

Made of cold rolled steel.

Especially adapted for hanging French windows and doors.

Packed one pair in a box, with flat-head screws.

Any finish desired. Also furnished in Prime Coat cut for painting. For list of finishes, see page 12.

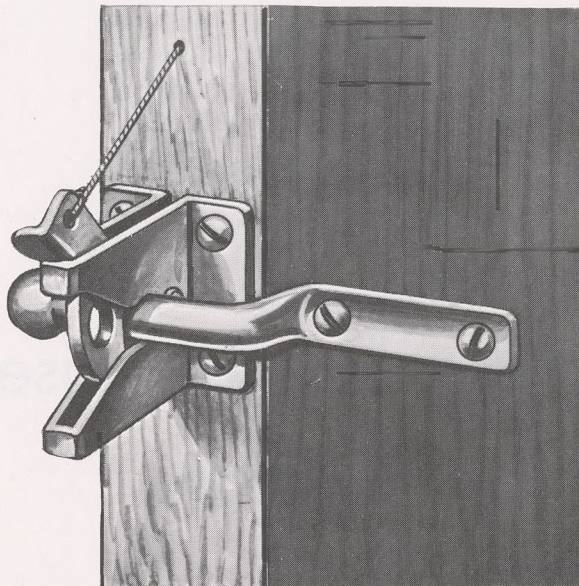


New Merchandise Section

On the following illustrated pages you will find all of the new hardware that has been added to the National line during the past year.

There is also a four page section devoted to our Visual Pac line, which includes the new merchandise as well as many of the items we have been manufacturing over the years.

No. 21 Automatic Gate Latch



Made entirely of steel.

Latches automatically. Released by raising latch lever.

Thumb piece on latch lever is an exclusive feature.

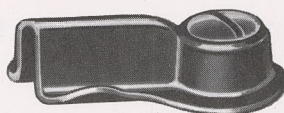
Can be used on gates, swinging barn doors, cellar doors, Dutch doors, and animal coops.

Finishes: Zinc or Bonderized Dead Black.

Packed one in a box with 1 x 9 round-head screws for case and 1¼ x 10 round-head screws for bar.

Weight per dozen, 7½ pounds.

No. 83½ Turn Button



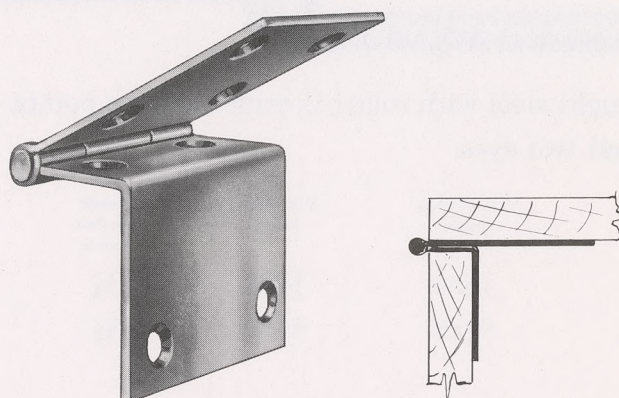
Made of cold rolled steel. So formed that the only point of contact on the window frame is at the circular base around the screw hole. The wings are raised slightly above the base and edges are curved so that in turning it will not gouge into the wood.

Finish: Zinc plated over sherardized base.

Units in Box	Weight per 100 No Screws	Weight per 100 With Screws	Number in Case	Weight per Case With Screws Pounds	Weight per Case Without Screws Pounds
100	1¼ lbs.	1¾ lbs.	2000	36	27



NO. 550 CHEST HINGE

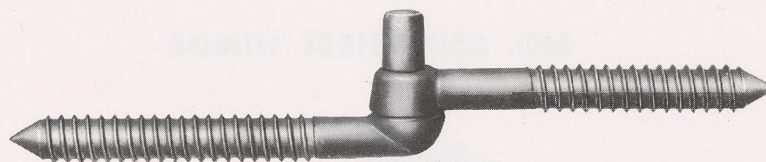


Made of cold rolled steel. Size $1\frac{1}{2}$ inch tight pin only. Size 2 inch, fast or loose pin. Countersunk holes. Be sure to specify size and offset when ordering.

Finish: Bright steel in bulk without screws. Any plated finish with screws.
For list of finishes see page 12.

Size Inches	Offset	Countersunk for screws size	Pairs in box Plated with screws	Weight per box with screws pounds	Weight 100 pair no screws pounds
$1\frac{1}{2}$	$\frac{1}{2}$ "	#7	10	$3\frac{3}{4}$	$32\frac{1}{2}$
$1\frac{1}{2}$	$\frac{5}{8}$ "	#7	10	$3\frac{3}{4}$	$32\frac{1}{2}$
$1\frac{1}{2}$	$\frac{3}{4}$ "	#7	10	$3\frac{3}{4}$	$32\frac{1}{2}$
$1\frac{1}{2}$	$\frac{7}{8}$ "	#7	10	$3\frac{3}{4}$	$32\frac{1}{2}$
2	$\frac{5}{8}$ "	#8	10	$5\frac{3}{4}$	$52\frac{1}{2}$
2	$\frac{7}{8}$ "	#8	10	$5\frac{3}{4}$	$52\frac{1}{2}$
2	$\frac{3}{4}$ "	#8	10	$5\frac{3}{4}$	$52\frac{1}{2}$

NO. 295 SCREW HOOK AND EYE HINGES



Made of wrought steel with rolled threads and fine points. One pair consists of two hooks and two eyes.

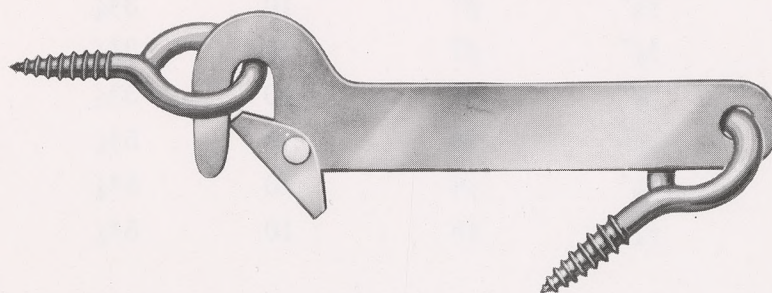
Size of Hook Inches	Size of Eye Inches	Weight Per Pair Pounds
$\frac{1}{2} \times 4$	$\frac{1}{2} \times 4$	$\frac{1}{4}$
$\frac{3}{4} \times 6$	$\frac{3}{4} \times 6$	$\frac{3}{4}$

NO. 296 SCREW EYES

Rolled threads, extra good points.

Diameter Inches	Length Inches	Weight Each Pounds
$\frac{1}{2}$	4	$\frac{3}{4}$
$\frac{3}{4}$	6	$1\frac{3}{4}$

NO. 960 SAFETY GATE HOOK & EYES



Made from .125 gauge steel. Positive action safety catch that livestock cannot open. Over-all length of hook, 6". Furnished with No. 6 screw eyes.

Zinc finish.

Packed one dozen in a box. Weight, per dozen— $3\frac{1}{4}$ lbs.



No. 127 Double Acting Adjustable Spring Hinge

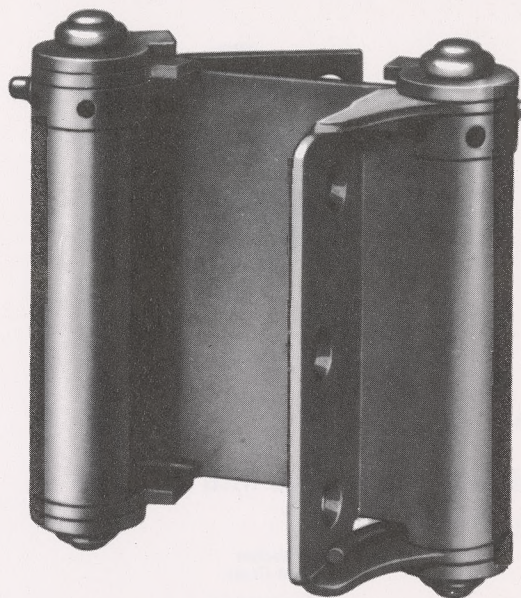


Illustration full size

Made of cold rolled steel.

One size only, 3-inch. For light doors $\frac{3}{4}$ -inch to $1\frac{1}{4}$ -inch. For $1\frac{3}{8}$ thickness, notch door.

Springs are solid coiled. Made of best oil-tempered spring wire. Tension of springs can be adjusted.

For doors 6-feet 6-inches and over, use three hinges.

No hanging strip necessary.

Easy to apply. No mortising. One leaf attached to surface of door or gate.

To install on door or gate:

1. Release tension on both barrels.
2. Attach jamb plate.
3. Wedge back edge of door against hinge.
4. Insert screws in surface plate.
5. Adjust tension.
6. No mortising.

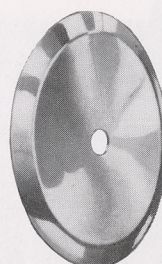
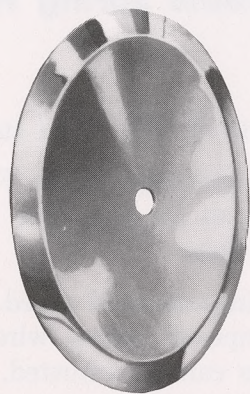
For use on doors in recreation rooms, office partitions, gates in self-service stores, louvre doors between kitchen and dining rooms, louvre doors in utility rooms, storage-room doors in stores and homes, milk-house doors on dairy farms.

Available in the following finishes only: Zinc, Bonderized Dead Black, Bonderized Aluminized, Dull Brass, Prime Coat, and Dull Bronze.

Packed one pair in a box with 1 x 9 oval-head screws for door leaf and 1 x 9 flat-head screws for jamb leaf.

Weight per pair, 2 pounds.

No. 213 Back Plates



For use with No. 214 or No. 216 Pulls.
Made of solid brass.
Packed one dozen in a carton, each plate in an envelope with screws.
Any finish desired. For list of finishes, see page 12.

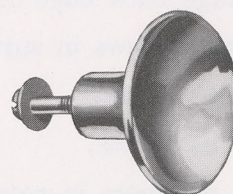
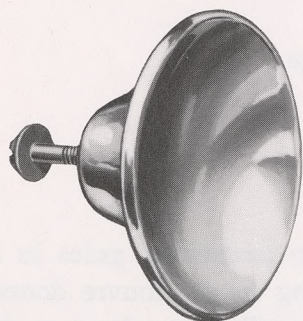
Diameter
Inches

$1\frac{5}{8}$
 $2\frac{1}{2}$

Weight
per Dozen

4 ounces
8 ounces

No. 214 Concave Pulls



For material $\frac{5}{8}$ inch or $\frac{3}{4}$ inch thick.
Made of solid brass.
Packed one dozen in a carton, each pull in an envelope with machine screws.
Any finish desired. For list of finishes see page 12.

Diameter
Inches

$1\frac{1}{8}$
2

Size
Screws

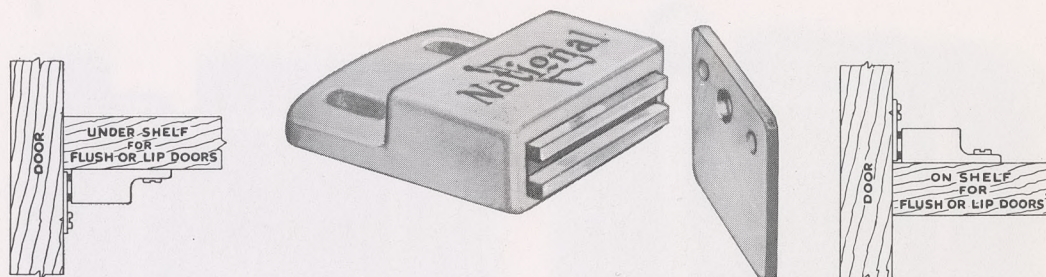
1 x 8-32
1 x 8-32

Weight
per Dozen

4 ounces
1 pound 4 ounces



No. V712 Magnetic Catch



Has Flush Strike mounted on door eliminating unsightly projections.

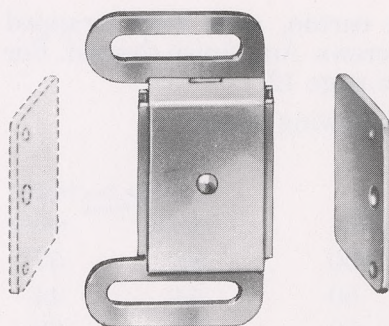
The catch can be mounted under shelf or on frame or on floor of bottom shelf accommodating lip or flush doors.

Sturdy, permanent magnet mounted in adjustable modern streamlined nylon case with approximately 13 pounds holding power.

Construction permits magnets to adjust for misaligned or warped doors and pole plates will always center squarely on strike plate for maximum pull.

Packed 10 in a carton. Weight per carton, one pound.

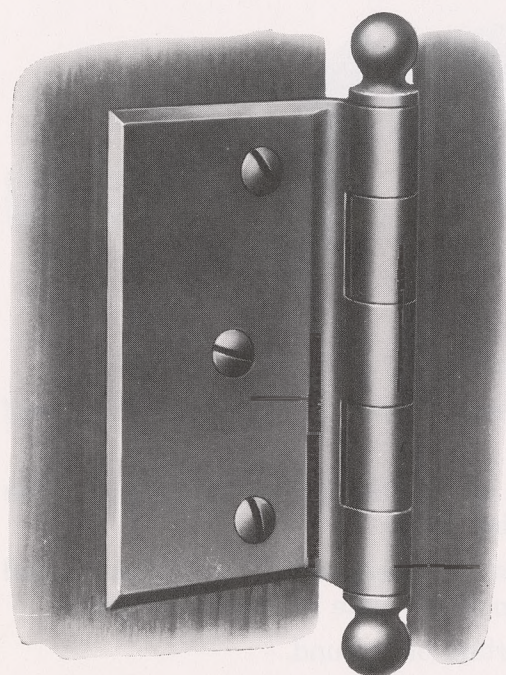
No. V713 Magnetic Catch



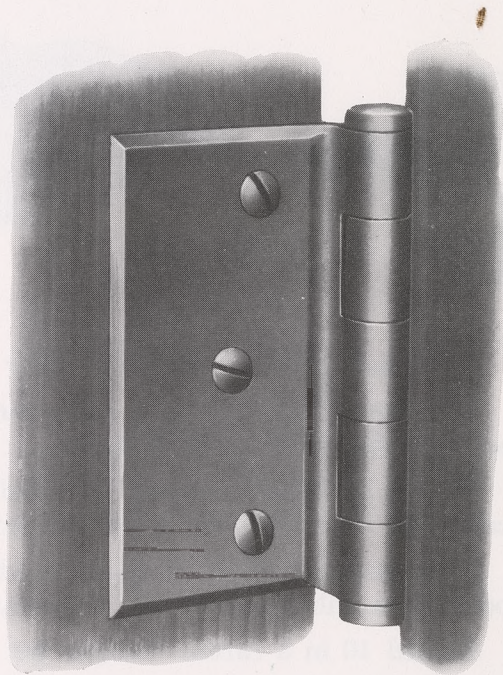
Dual action. Reversible. Aluminum case. Magnet has approximately 13 pounds holding power. Packed 10 in a carton. Weight, per carton, one pound.

Half Surface Butts

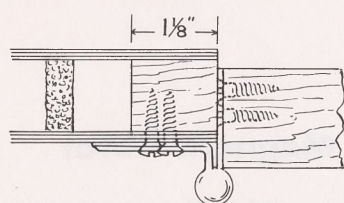
Narrow Leaf



No. 451 Ball Tip



No. 453 Button Tip



Sectional View

These butts are made specially for use on all hollow core doors with stiles down to 1 1/8" in thickness. Made of cold rolled steel, with beveled edges.

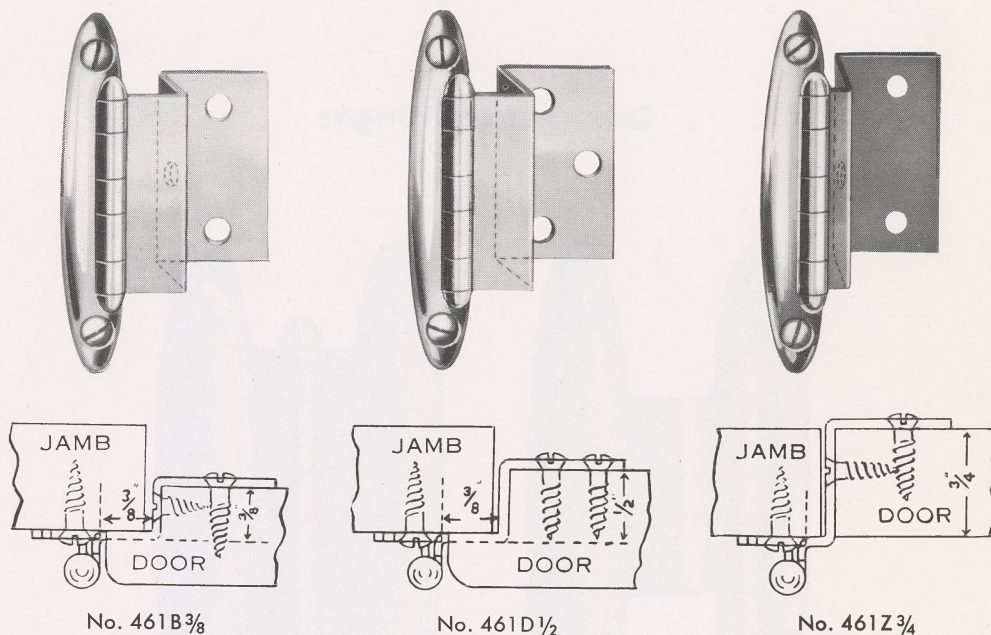
One pair in a carton, each butt wrapped separately with screws. Any finish desired. For list of finishes see page 12.

Made in the following sizes:

Size Inches	Size of Screws		Average Net Weight per Hundred Pairs	Pairs in Case	Average Case Weight Pounds	
	Door-leaf Oval-head	Jamb-leaf Flat-head			No. 451	No. 453
2 1/2	3/4 x 7	3/4 x 8	60	100	61	57
3	1 x 8	1 x 8	92	50	44	44
3 1/2	1 x 9	1 x 9	142	50	70	66



Semi-Concealed Hinges



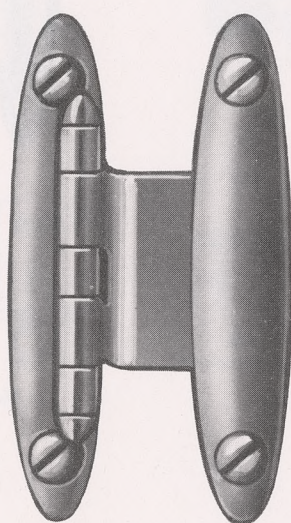
Made of cold rolled steel.

Packed one dozen pairs in a box, each pair in a separate envelope, with $\frac{5}{8}$ x 5 oval-head screws for jamb leaf and $\frac{5}{8}$ x 5 flat-head screws for door leaf. Forty dozen pairs in a case.

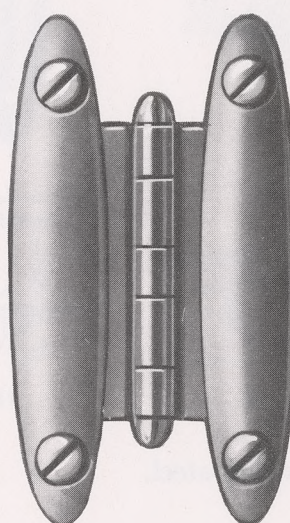
Any finish desired. For list of finishes, see page 12.

- No. 461B $\frac{3}{8}$ – Weight, per dozen pairs, $1\frac{3}{4}$ pounds.
- No. 461B $\frac{1}{2}$ – Weight, per dozen pairs, $1\frac{3}{4}$ pounds.
- No. 461B $\frac{5}{8}$ – Weight, per dozen pairs, 2 pounds.
- No. 461B $\frac{3}{4}$ – Weight, per dozen pairs, 2 pounds.
- No. 461D $\frac{3}{8}$ – Weight, per dozen pairs, $1\frac{3}{4}$ pounds.
- No. 461D $\frac{1}{2}$ – Weight, per dozen pairs, $1\frac{3}{4}$ pounds.
- No. 461D $\frac{5}{8}$ – Weight, per dozen pairs, 2 pounds.
- No. 461D $\frac{3}{4}$ – Weight, per dozen pairs, 2 pounds.
- No. 461Z $\frac{3}{4}$ – Weight per dozen pairs, $1\frac{3}{4}$ pounds.

Ornamental Hinges



No. 461R



No. 461S

Made of cold rolled steel.

No. 461R Hinges are made for use with doors having $\frac{3}{8}$ -inch offset.

No. 461S Hinges are made for use with flush doors.

Packed one dozen pairs in a box, each pair in a separate envelope, with $\frac{5}{8}$ x 5 oval-head screws. Fifty dozen pairs in a case.

Any finish desired. For list of finishes, see page 12.

Weight, per dozen pairs, $1\frac{1}{2}$ pounds.

BUILDERS' HARDWARE of quality for over 50 years



No. V80 Screen Hanger



No. V834 Barrel Bolt

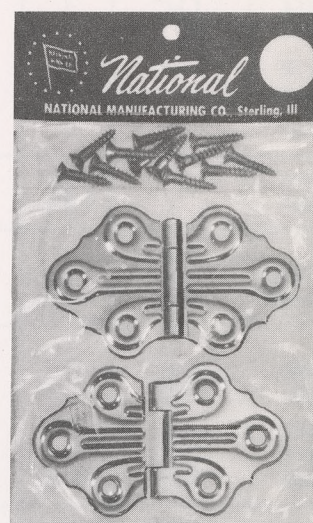
The NEW Visual Pac Line

The following pages list the hardware products which are now available in this new package form. The bags holding the merchandise are made of strong, transparent polyethylene with separate compartments for screws.

The paper tops stitched to the bags have circular spot for marking prices, and punch at top serves for hanging on pegs or in display racks.



No. V460 D Cabinet Hinge



No. V485 Ornamental Hinge

Cat. No.		No. in Pac	Pacs to a Box	Weight Per Box Pounds									
	Size												
V30	2 1/2"	1	12	1 1/2									
V30	3 1/4"	1	12	3									
V32	3 1/4"	1	12	3 3/4									
V80		1 Set	12	2									
V83	1 3/4"	4	36	3 1/4									
V83	2"	4	36	4 1/4									
V83 1/2		10	10	1 3/4									
V106		1	12	1									
V107		1	12	1									
V108		1	12	1									
V115	Finish Zinc	4	9	1"	1 1/2"	2 x 5/8"	2 1/2"	3"	3 1/2"	4"			
V116	Zinc	2	18	3 x 3"	4 x 4"								
V117	Zinc	4	9	1 1/2"	2"	2 1/2 x 3/8"	2 1/2 x 1/2"	3 x 1/2"	3 x 5/8"	3 1/2 x 5/8"	4"		
V118	Zinc	4	9	1"	1 1/4"	1 3/4"	2 1/4"	2 1/2"	3	3 1/2"	5 1/4"		
V141		1	12	1									
V142		6	24	1									
V144		1	12	1/2									
V213	Size 1 5/8" & 2 1/2"	1	12	1 5/8"	2 1/2"								
V214	1 1/8"	1	12	1 1/2									
V214	2"	1	12	1 1/4									
V216		1	12	1 1/2									
V217		1	12	1 1/4									
V218		1	12	1									
V270		1 Pr.	12	1 3/4									
V274		1 Pr.	12	1 3/4									
SCV280	Finish Zinc	1 Pr.	12	2"	3"	4"							
SCV284	Zinc	1 Pr.	12	1 2/3	3 1/4	4							
V405	D.B.	1 Pr.	12	1 1/2"	1 3/4"	2"							
V420	D.B.	1 Pr.	12	2	2 3/4	4 1/4							
V425	D.B.	1 Pr.	12	1 3/4	2 1/2	4 1/4							
V450	D.B.	1 Pr.	12	1 3/4	2 1/2	4 1/4							
V455	D.B.	1 Pr.	12	1 3/4	2 1/2	4 1/4							
V460B	Size 3/8"	1 Pr.	12	2									
V460B	5/8"	1 Pr.	12	2									

No. V508 Light Narrow Butts



No. SV284 Light "T" Hinges

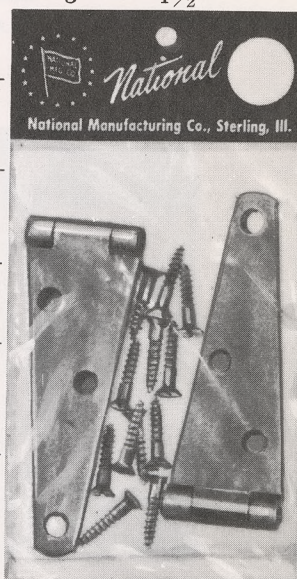
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No. V833 Barrel Bolt



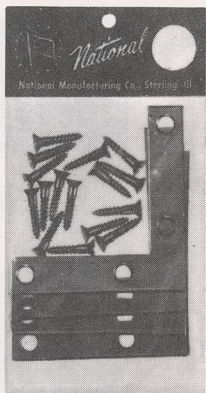
Cat. No.		No. in Pac	Pacs to a Box	Weight Per Box Pounds					
	Size								
V460B	$\frac{3}{4}$	1 Pr.	12	$2\frac{1}{4}$					
V460D	$\frac{3}{8}$	1 Pr.	12	2					
V460D	$\frac{1}{2}$	1 Pr.	12	$2\frac{1}{4}$					
V460D	$\frac{3}{4}$	1 Pr.	12	$2\frac{1}{4}$					
V460R		1 Pr.	12	$1\frac{3}{4}$					
V460S		1 Pr.	12	$1\frac{1}{2}$					
V460Z	$\frac{3}{4}$	1 Pr.	12	2					
V461B	$\frac{5}{8}$	1 Pr.	12	$2\frac{1}{4}$					
V461B	$\frac{3}{4}$	1 Pr.	12	$2\frac{1}{4}$					
V461D	$\frac{3}{8}$	1 Pr.	12	$2\frac{1}{4}$					
V461D	$\frac{1}{2}$	1 Pr.	12	$2\frac{1}{4}$					
V461D	$\frac{5}{8}$	1 Pr.	12	$2\frac{1}{4}$					
V461D	$\frac{3}{4}$	1 Pr.	12	$2\frac{1}{4}$					
V461R		1 Pr.	12	$1\frac{3}{4}$					
V461S		1 Pr.	12	$1\frac{3}{4}$					
V461Z	$\frac{3}{4}$	1 Pr.	12	2					
V471	$1\frac{1}{2} \times \frac{1}{2}$	1 Pr.	12	$1\frac{3}{4}$					
V471	$1\frac{1}{2} \times \frac{3}{4}$	1 Pr.	12	2					
V475		1 Pr.	12	$1\frac{3}{4}$					
V485	$1\frac{1}{4}$	1 Pr.	12	$1\frac{3}{4}$					
V485	$1\frac{1}{2}$	1 Pr.	12	$2\frac{1}{2}$					
V486		1 Pr.	12	$1\frac{1}{2}$					
V508	Finish			$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{2}$	2"	$2\frac{1}{2}$ "	3"
V508	Brt. S.	1 Pr.	12	$\frac{3}{4}$	1	$1\frac{1}{4}$	$2\frac{1}{4}$	3	$4\frac{1}{2}$
V508	Zinc	1 Pr.	12			$1\frac{1}{4}$			
V508	D.B.	1 Pr.	12			$1\frac{1}{4}$			
V518	Brt. S.	1 Pr.	12	$\frac{3}{4}$	1	$1\frac{1}{4}$	$2\frac{1}{4}$	3	$4\frac{1}{2}$
V518	Zinc	1 Pr.	12			$1\frac{1}{4}$			
V518	D.B.	1 Pr.	12			$1\frac{1}{4}$			
V528	D.B.	1 Pr.	12	$\frac{1}{2}$ "	2"	$2\frac{1}{2}$ "	3"		
V528	Nick.	1 Pr.	12	$1\frac{1}{2}$	$2\frac{1}{2}$	$3\frac{1}{4}$	$4\frac{3}{4}$		
V528				$1\frac{1}{2}$	$2\frac{1}{2}$	$3\frac{1}{4}$	$4\frac{3}{4}$		
V529	D.B.	1 Pr.	12	$\frac{1}{2}$ "	2"	$2\frac{1}{2}$ "	3"		
V529	Nick.	1 Pr.	12	$1\frac{1}{4}$	$2\frac{1}{4}$	3	$4\frac{3}{4}$		
V529				$1\frac{1}{4}$	$2\frac{1}{4}$	3	$4\frac{3}{4}$		
V629	D.B.	1 Pr.	12	$\frac{2 \times 2"}{2\frac{3}{4}}$	$\frac{2\frac{1}{2} \times 2"}{3\frac{1}{4}}$	$\frac{2\frac{1}{2} \times 2\frac{1}{2}"}{4}$			
V600		1	12	$1\frac{3}{4}$					
V699		1	12	$1\frac{1}{4}$					
V712		1	12	$1\frac{1}{2}$					
V833	Size								
V833	2"	1	12	$1\frac{1}{2}$					
V833	$2\frac{1}{2}$ "	1	12	$1\frac{3}{4}$					
V834	$2\frac{1}{2}$ "	1	12	$1\frac{1}{4}$					
V834	3"	1	12	$2\frac{1}{4}$					



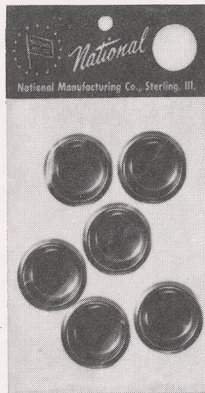
No. SV280 Light Strap Hinges

National

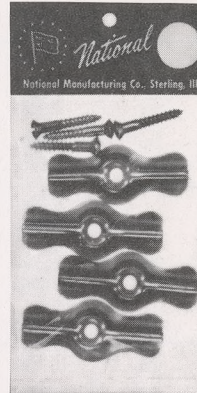
MANUFACTURING COMPANY Sterling, Illinois



No. V117 Corner Iron



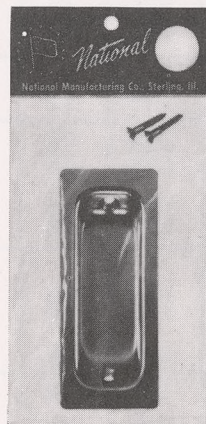
No. V142 Flush Pulls



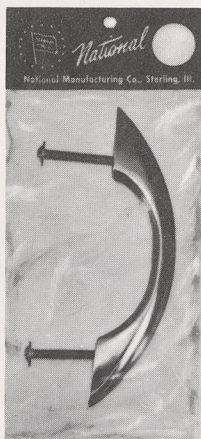
No. V83 Turn Buttons



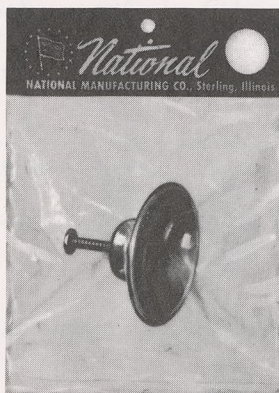
No. V600 Sash Lock



No. V141 Edge Pull



No. V218 Drawer Pull



No. V214 Concave Pull



No. V32 Safety Hasp

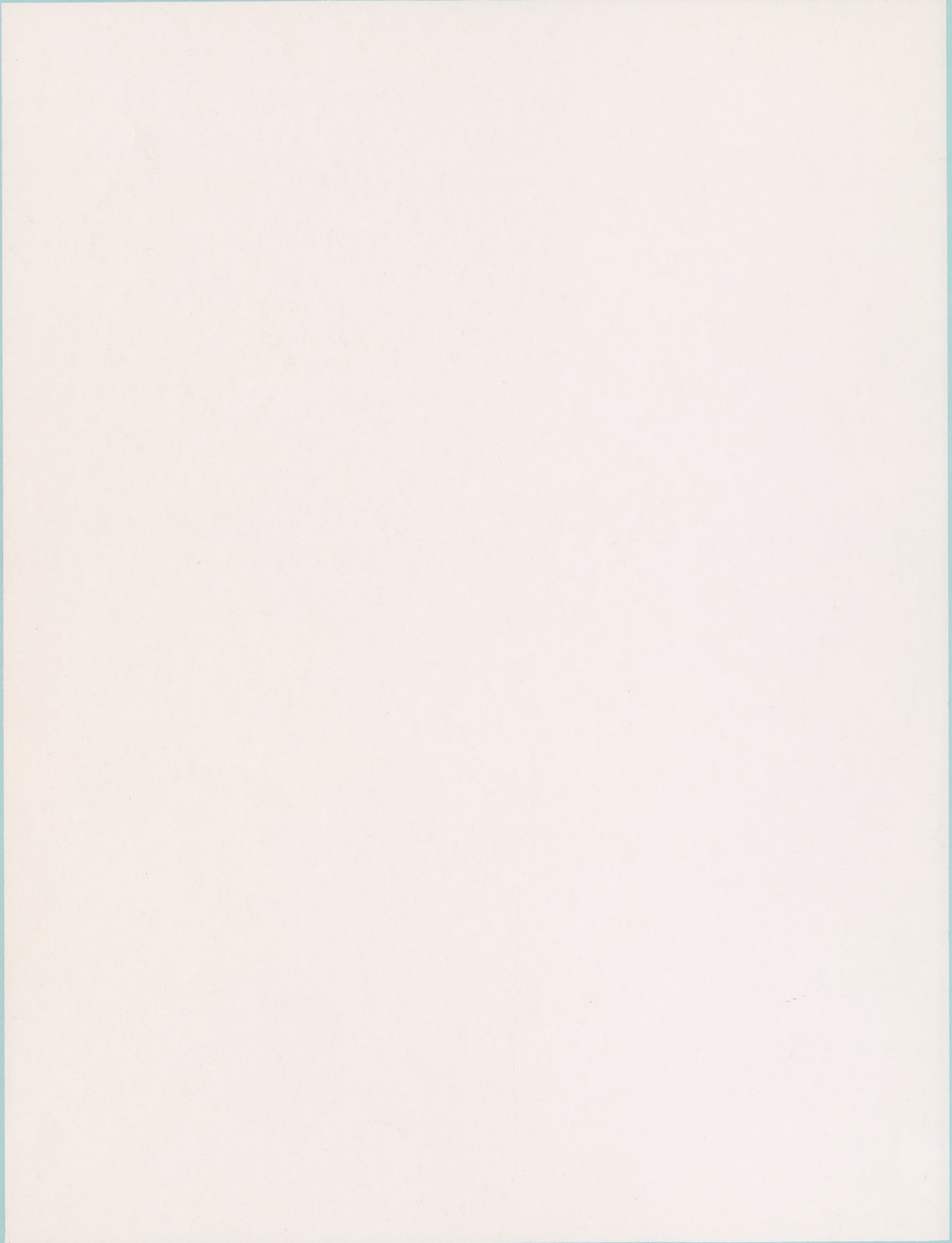
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