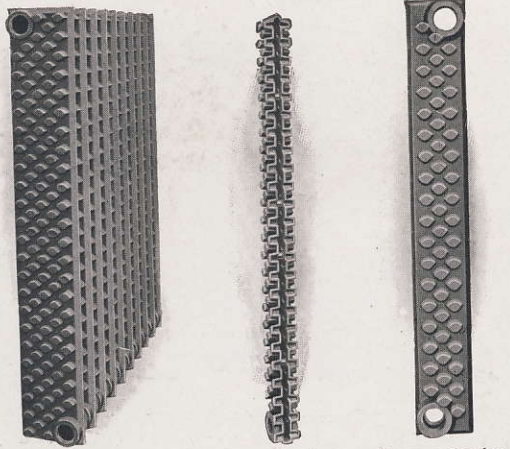
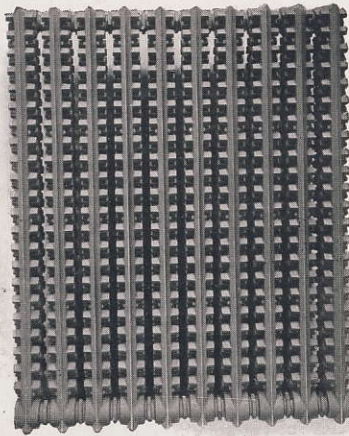


Vento Cast-Iron Heaters

For Fan or Blower Work



Regular Section Cross Section Narrow Section



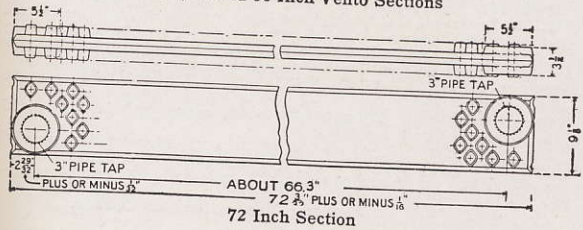
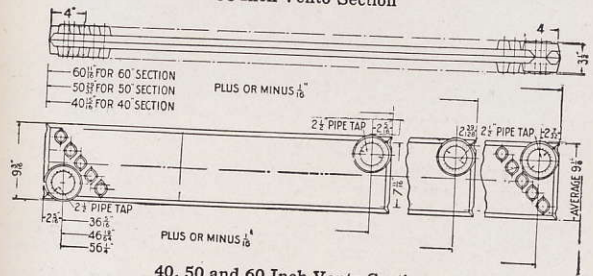
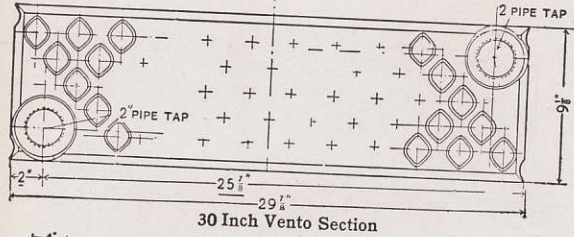
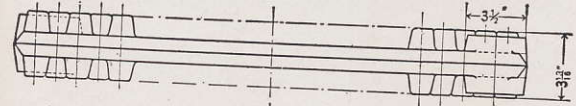
Front View of Ten-Section Stack

Sections are easily handled and transported and may be carried through doors or windows of any building, and can then be assembled in compact, complete heaters. The equivalent pipe coil stacks are cumbersome and difficult to handle and transport. All details given in special catalogs.

Vento Cast-Iron Heaters—Steam or Water

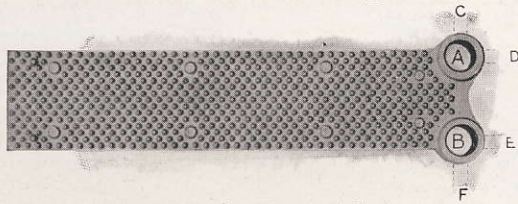
NARROW SECTIONS		Sq. Ft. per Section	Height	Width
40 inch		7.5	41 ⁵ / ₁₆	6 ³ / ₄
50 inch		9.5	50 ³ / ₁₆	6 ³ / ₄
60 inch		11.	60 ¹ / ₁₆	6 ³ / ₄
REGULAR SECTIONS		Sq. Ft. per Section	Height	Width
30 inch		8.0	30	9 ¹ / ₈
40 inch		10.75	41 ¹ / ₄	9 ¹ / ₈
50 inch		13.5	50 ³ / ₁₆	9 ¹ / ₈
60 inch		16.0	60 ¹ / ₁₆	9 ¹ / ₈
72 inch		19.0	72	9 ¹ / ₈

Please ask for special and complete catalog: "Engineers Data on Vento Heaters."



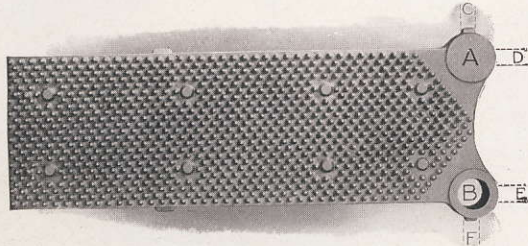
Perfection Pin Indirect Radiator

For Steam and Water—Threaded Nipple Connections



"Standard" Size, Water End Section

MEASUREMENTS: Heating surface, 10 square feet. Length, 36¼ inches. Height, 7½ inches—at connecting point 9¼ inches. Width in stack, 2¾ inches. On Special Order we furnish nipples to make distance center to center of sections in stack, 3, 3¼, 3½, or 3¾ inches.



"Extra Large" Size, Steam End Section

MEASUREMENTS: Heating surface, 15 square feet. Length, 36¼ inches. Height, 11½ inches—at connecting point 14 inches. Width in stack, 2¾ inches. On Special Order we furnish nipples to make distance center to center of sections in stack, 3¼, 3½, 3¾, or 3⅞ inches.

Both Sizes

CONSTRUCTION: Both "Standard" and "Extra-Large" sections are made in distinctive patterns for Steam and Water. The Steam patterns have one connection or passageway for Steam—the Water patterns have two connections or waterways.

TAPPINGS: 2 inches right-hand on one side, left-hand on other side. Unless otherwise ordered the inside tappings in bushings will be right-hand. Air Valve Tap—¾-inch.

SPECIAL TAPPINGS: If other than regular tappings ("A" and "B" for water and "B" only for steam) are desired, we can furnish on the Standard size section special tappings 1¼ inches or smaller, at "C," "F," "D," and "E," and for steam section 2 inches or smaller at "A." On the Extra Large section, can furnish special tappings 2 inches or smaller at "B," "C," "D," and "F," and at "A" on the steam section.

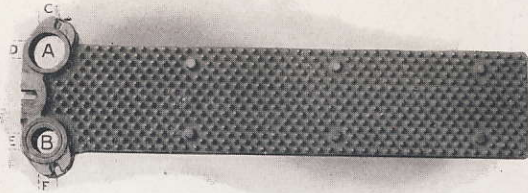
CONNECTIONS: Extra-heavy 2-inch right and left threaded nipples with hexagon nut in center.

SHIPMENTS: Water sections separate unless ordered assembled in stacks of 5 or 6 sections; steam sections cannot be safely shipped assembled and are therefore shipped knocked down. Sufficient nipples are shipped to assemble.

See page 309 for Free Areas and Distance between Centers.

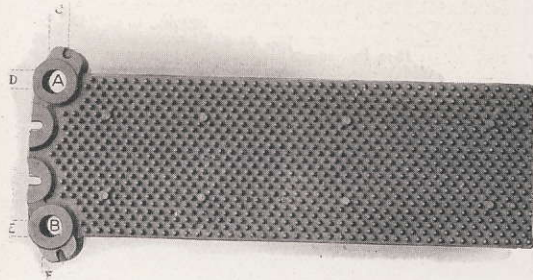
Perfection Pin Indirect Radiators

For Steam or Water—Flange and Bolt Connections



"Standard" Size Steam End Section

MEASUREMENTS: Standard Size—Heating surface, 10 square feet. Length, 36¼ inches. Height, 7½ inches—at connecting point 11½ inches. Width in stack, 2¾ inches.



"Extra Large" Size Steam End Section

MEASUREMENTS: Extra Large Size—Heating surface, 15 square feet. Length, 36¼ inches. Height, 11½ inches—at connecting point, 15½ inches. Width in stack, 2¾ inches.

Both Sizes

CONSTRUCTION: Made in one type for either steam or water—with openings at both top and bottom.

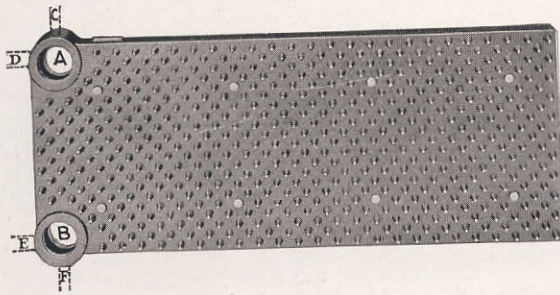
TAPPINGS: 2 inches, right-hand threads, unless otherwise ordered. Air Valve Tap—¾-inch.

SPECIAL TAPPINGS: If other than regular tappings ("A" and "B" on water, and "B" only on steam) are desired, we can furnish special tappings 1¼ inches or smaller at "C," or "F," "D," and "E," and for steam 2 inches or smaller at "A."

SHIPMENTS: Always separately; cannot be shipped assembled. Sufficient bolts are sent to assemble.

See page 309 for Free Areas and Distances between Centers.

Sanitary School Pin Indirect Radiators For Steam and Water



Section for Water

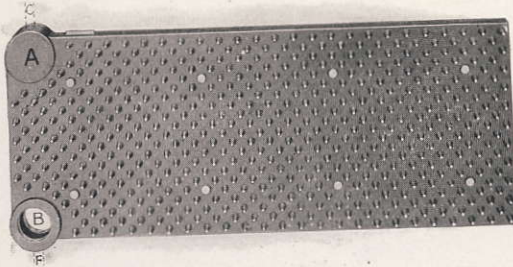
CONSTRUCTION: These sections are made in distinctive patterns for Steam and Water. The Steam patterns have one connection passageway for steam. The Water pattern has two connections or waterways.

MEASUREMENTS: Heating surface, 20 square feet. Length with regular tappings, $36\frac{3}{8}$ inches—when tapping is at "D" or "E," $36\frac{3}{4}$ inches. Height, $13\frac{3}{8}$ inches—with special tappings at "C" or "F," $15\frac{1}{2}$ inches. Width—each section in stack, 4 inches. On **Special Order**, we furnish nipples to make distances center to center in stack $3\frac{3}{4}$, $4\frac{1}{4}$, or $4\frac{1}{2}$ inches.

TAPPINGS: 2 inches, right-hand on supply end; left-hand on return end. Unless otherwise ordered the inside tappings of bushings will be right-hand. **Air Valve Tap**— $\frac{3}{8}$ -inch.

CONNECTIONS: Extra-heavy 2-inch right and left threaded nipples with hexagon nut at center.

SHIPMENTS: Steam sections always separate; Water sections separate, but when so specified Water sections can be shipped in five or six section stacks. Sufficient nipples are sent to assemble.

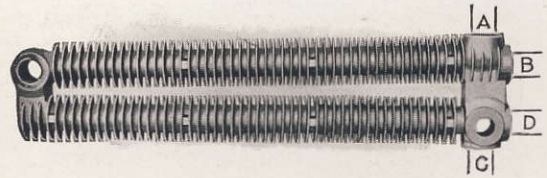


Section for Steam

NOTE, Special Tappings: If other than regular tappings ("A" and "B" on water section and "B" only on steam section) are desired, we can furnish special tappings 2 inches or smaller, at "C," "D," "E," and "F," and also at "A" on the steam section.

Excelsior Indirect Radiators

For Steam and Water



Water End Section

MEASUREMENTS: Heating surface, 12 square feet. Length, **Steam** section, 36 inches; **Water**, $36\frac{3}{4}$ inches. Height, 8 inches. Width in stack, $3\frac{5}{8}$ inches; on **Special Order** we can furnish nipples to make distances from center to center of sections in stack— $3\frac{7}{8}$, $4\frac{1}{8}$, or $4\frac{3}{8}$ inches.

TAPPINGS: $1\frac{1}{2}$ inches right threaded on supply; left threaded on return. If smaller opening is required for **Steam** use a $1\frac{1}{2}$ -inch nipple and reducing ell, instead of bushing—to avoid interfering with diaphragm opening. We do not furnish any bushings. **Air Valve Tap**— $\frac{3}{8}$ -inch. The supply pipe should be attached to the **right-hand side** of stack, and return pipe to the **left-hand side**.

SPECIAL TAPPINGS: If other tappings than regular are required we can furnish at "A," "B," "C," or "D,"— $1\frac{1}{2}$ inches or smaller.

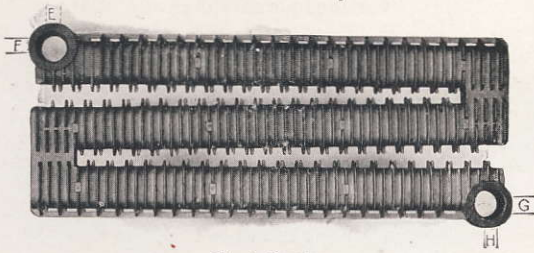
CONNECTIONS: Extra-heavy $1\frac{1}{2}$ -inch right and left threaded nipples, with hexagon nut in center.

SHIPMENTS: Separate sections, unless ordered in stacks of five or six sections. Sufficient nipples are sent to assemble.

See page 309 for Free Areas and Distances between Centers.

See page 310 for Directions for Setting, and other Data.

Sterling Indirect Radiators For Water Only



Single Section

MEASUREMENTS: Heating surface, 20 square feet. Length 36 $\frac{3}{4}$ inches. Height, 15 $\frac{3}{4}$ inches. Width—each section in stack, 3 $\frac{1}{2}$ inches. On **Special Order** we furnish extra long nipples to make center to center of sections in stack, 3 $\frac{3}{4}$, 4, 4 $\frac{1}{4}$, or 4 $\frac{1}{2}$ inches.

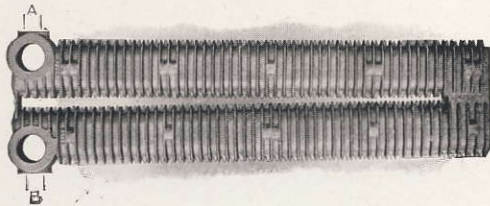
TAPPINGS: 2 inches, right threaded on supply; left threaded on return—unless otherwise ordered. When bushed down, the tapping inside the bushing is right-hand, unless otherwise ordered. **Air Valve Tap**— $\frac{3}{8}$ -inch.

SPECIAL TAPPINGS: If desired we can furnish special tappings at "E", "F", "G", or "H"—2 inches or smaller.

CONNECTIONS: Extra-heavy 2-inch right and left threaded nipples, with hexagon nuts in center.

SHIPMENTS: Separate sections—unless specially ordered in stacks of five or six sections. Sufficient nipples are sent to assemble.

Cardinal Indirect Radiators For Steam or Water



Single Section—Steam or Water

MEASUREMENTS: Heating surface, 15 square feet. Length, 37 $\frac{1}{4}$ inches. Height, at connecting end, 11 $\frac{1}{4}$ inches; at opposite end, 9 $\frac{1}{4}$ inches. Width—in stack, 3 $\frac{1}{2}$ inches. On **Special Order** we furnish extra long nipples to make distance center to center of sections in stack, 3 $\frac{1}{4}$, 3 $\frac{3}{4}$, 4, 4 $\frac{1}{4}$ inches.

TAPPINGS: 2 inches, right threaded on supply; left threaded on return—unless otherwise ordered. When bushed down, the thread inside the bushing is right-hand, unless otherwise ordered. **Air Valve Tap**— $\frac{3}{8}$ -inch.

SPECIAL TAPPINGS: If tapping other than regular is desired, we can furnish special tappings at "A," or "B," 1 $\frac{1}{2}$ -inch or smaller.

CONNECTIONS: Extra-heavy 2-inch right and left threaded nipples, with hexagon nut in center.

SHIPMENTS: Separate sections, unless ordered assembled in stacks of five or six sections. Sufficient nipples are sent to assemble.

See page 309 for Free Areas and Distances between Centers.

Data on Indirect Radiators

All AMERICAN Indirect Radiators are shipped with sufficient nipples to put the stack together on the job.

If the sections are assembled at our Plants an extra charge is made for the work.

All indirect air-valve tappings are regularly made $\frac{3}{8}$ inch.

Measurements

Length of Section	Ex-treme Height	Pattern Name	Heat-ing Surface	Width Each Section Occu-pies in Stack †Inches	Regu-lar Tap-ping
36 $\frac{3}{4}$	11 $\frac{1}{2}$	Perfection Flange and Bolt, Standard size, Steam or Water	10	2 $\frac{3}{4}$	*2
36 $\frac{3}{4}$	15 $\frac{1}{2}$	Perfection Flange and Bolt, extra-large size, Steam or Water	15	2 $\frac{7}{8}$	*2
36 $\frac{3}{4}$	9 $\frac{1}{8}$	Perfection Right & Left Threaded, standard size, Steam or Water	10	2 $\frac{3}{4}$	*2
36 $\frac{3}{4}$	14	Perfection Right & Left Threaded, extra-large size, Steam or Water	15	2 $\frac{7}{8}$	*2
37 $\frac{1}{4}$	11 $\frac{1}{4}$	Cardinal, Steam or Water	15	3 $\frac{1}{2}$	*2
36 $\frac{3}{4}$	15 $\frac{3}{4}$	Sterling, Steam or Water	20	3 $\frac{1}{2}$	*2
36 $\frac{1}{8}$	15 $\frac{1}{4}$	Sanitary School Pin, Steam or Water	20	4	*2

*These Radiators are all regularly tapped 2 inches and bushed according to the size specified in order.

†When greater air space is desired between the sections we can so furnish on special order.

‡Bushing reduction cannot be made.

Radiator Wrenches



Direct Radiator Wrench

These steel wrenches are made especially for assembling or disassembling direct Radiators connected with right- and left-hand threaded nipples. They are made in two sizes—for 1½-inch and 2-inch nipples and in three lengths—1-foot, 2-foot, and 4-foot (carried in stock at all Plants and Warehouses).



Indirect Radiator Wrench

These drop-forged steel wrenches are made especially for assembling Indirect Radiators connected with right- and left-hand threaded nipples having hexagon nut at center. Made in two sizes for 1½- and 2-inch nipple openings. Carried in stock at Springfield and Standard Plants.

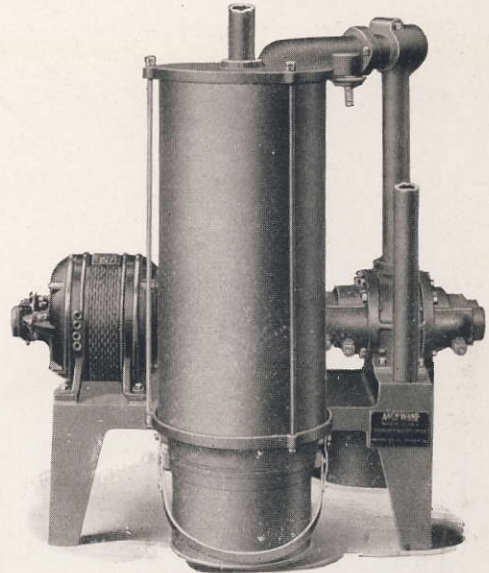


Vento Nipple Wrench

For **Vento** Sections this wrench will be found most practical. Made of drop-forged steel, for right- and left-hand threaded nipples having a hexagon nut at center. In ordering state whether for 2½ or 3 inch nipple. Carried in stock at Springfield Plant.

Arco Wand Vacuum Cleaners

(Pat'd Mar. 9, 1907—Feb. 18, 1913—Mar. 17, 1914—Sept. 1, 1914)



This cut illustrates type Nos. 341 and 361 Arco Wand with electric motor direct drive

Number	Capacity	Motor† H. P.	Equipment* Included	List Price
341	1 sweeper	½	No. 3	\$240.00
361	1 "	1	No. 4	350.00

†Includes direct current, 110 or 220 volts or alternating current, single phase, 60 cycles, 110 or 220 volts.

Added net charge for motors of other specifications upon application.

*Illustrated and listed on page 141.

Number	Dimensions			Shipping Weight, Lbs.
	Length Inches	Width Inches	Height Inches	
341	36	21	41	430
361	43	23	50	600