

The John Call Company VENTILATING SPECIALISTS

128 North Franklin Street PHILADELPHIA, PA.

BRANCHES IN ALL PRINCIPAL CITIES

ROOF VENTILATORS AND WINDOW VENTILATORS

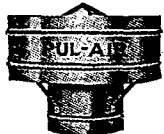


Products

The Liberty Ventilator. A roof ventilator for any type building or enclosure, such as Schools, Hospitals, Foundries, Barns, Churches, Armories, Residences and similar structures.

Also highly efficient for increasing draft in chimneys, flues, stacks, etc. Back drafts impossible, regardless of wind conditions. Rain or snow cannot penetrate. No moving parts to rattle or require attention. Substantially and staunchly built of any metal desired. Large stocks for prompt shipment.

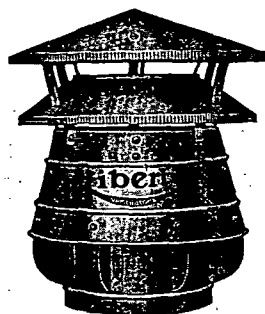
The Pul-Air Impingement Ventilator



The Pul-Air Ventilator

A good practical roof ventilator of the mushroom type, consisting of a double-cone top. Scientific storm band and impingement band. Made in every size and of any metal. Strongly built. Large stocks carried. Will not back draft; maximum of free areas.

THE LIBERTY VENTILATOR



LIBERTY VENTILATOR

Good architectural lines and symmetry



ANATOMY OF LIBERTY VENTILATOR—showing positive venturi action. White arrows indicate outside winds. Black arrows show air being pulled out

Embraces all four principles of scientific ventilation:—1st, Impingement; 2nd, Positive and Negative sides of Ventilators; 3rd, Siphonage; 4th, Stack Action. A positive and complete venturi action.

The Liberty Ventilator combines the principles of siphonage and air impingement. This in conjunction with the positive and negative sides of the ventilator creates a vacuum to which the air is naturally sucked regardless of the direction of the wind. Stack action, also, is so accommodated as to accelerate this movement. The free areas of the Liberty ventilator create no resistant constant. Send for copy of tests conducted by Carnegie Institute of Technology, and Massachusetts Institute of Technology.

Mechanical and Engineering Data, Service Talks, Catalogues and Prices gladly sent on request.

Royal Ventilator Company

415 Locust Street

PHILADELPHIA, PA.

Manufacturers of Ventilators and Exhaust Heads

PRODUCTS:

Royal Double Cone Ventilators of Galvanized Steel, Copper, Toncan Metal, Armco Iron, Etc., Glass Top Ventilators; Rectangular and Square Ventilators; Fire-retarding Ventilators; Smoke-jack and Combination Ventilators; Insect and Bird-proof Ventilators; Steam Exhaust Heads.

The Royal Double Cone Ventilator is designed to produce maximum ventilating efficiency. The Royal will give effective ventilation during adverse weather conditions; at all times an upward draft is maintained. Schools, hospitals, theatres, also factories, power-houses and foundries are among the types of buildings effectively ventilated with the Royal. The Royal is 100 per cent efficient.

The principles that have made

Royals superior:

- 1. Double Tapered Outer Frustums.**—The wind pressure deflected over and under the edges of the frustums constitutes a strong up draft.
- 2. The Inverted Cone.**—Placed directly in the center of ascending air, which on striking it is deflected directly upward and outward.
- 3. Radiating Ribs in the Cones.**—These prevent the air from swirling around, and also add to the firm construction.
- 4. Strength and Rigidity.**—Edgewise galvanized malleable iron braces, lapped seams, wired edges.
- 5. Graceful Design.**—Efficient, Faultless, Storm-proof.

Send for Catalogue.

Dimensions and Technical Information

Vent Size Inches	Cu. Ft. Exhaust per Minute. Wind, 5 Miles per Hour		Height Inches	Outside Diameter Inches	Area	Gauge Iron	Ounces of Copper
	Temperature Difference in Building and Outside						
	0°	20°					
10	141	186	12	16	78	24	16
12	159	417	13	19	113	24	16
14	306	426	15	22	164	24	16
16	388	512	17	26	201	24	16
18	490	832	18	29	255	24	16
20	606	911	21	31	314	24	16
24	874	1373	24	39	453	22	18
28	1186	2080	26	45	615	20	18
30	1364	2390	26	45	707	20	18
34	1765	2987	28	50	908	20	18
36	1961	3361	28	56	1017	20	18
40	2424	4124	34	61	1257	20	20
42	2673	4680	34	68	1386	18 and 20	20
48	3489	5987	39	75	1809	18 and 20	20
54	5414	8304	42	84	2390	18 and 20	20
60	6665	9721	47	94	2807	18	24
66	7851	13346	52	103	3504	18	24
72	10682	16910	54	108	4071	18	24