

## John J. Nesbitt, Inc.

Executive Offices and Factory  
State Road and Rhawn Street, Holmesburg, Philadelphia

Branch Office, 11 Park Place, New York

Sales and Service Through Offices of the American Blower Corp.  
In all the Principal Cities of the United States

### PRODUCTS

- 1: *Universal Heating and Ventilating Unit for SCHOOL ROOMS.*
- 2: *Universal Unit Heaters for LARGE ROOMS like Banking Rooms, Show Rooms, Stores, Sales Rooms, Offices, Assemblies, Churches, etc.*
- 3: *Universal Concealed and Cabinet Heaters for HOMES.*

#### . 1.

#### Universal Heating and Ventilating Unit for SCHOOL ROOMS

"Universal" has always been at the forefront in the use and development of the features that have made the Unit system universally accepted as ideal for school-room heating and ventilating. Among many other minor improvements, the Universal Unit introduced the light weight heater, the present-day form of unit with motor and fan assembly in base of cabinet, alternating current motors with rigid metal to metal mounting and the successful use of the blast system whereby direct radiation is eliminated from the class room.

#### "Universal" Multifin Copper Tube Radiator

Standard Universal Units are supplied with horizontal seamless copper tube radiators, the ends of the tubes of which are connected to cast iron headers by means of ground joints, thus being free of soldered, braised, welded or packed joints. Over these tubes are hydraulically pressed thin copper plates or fins, thus insuring real thermal contact between tubes and plates, making a highly efficient heating unit. Tested at 125 pound working pressure, and will stand freezing without breaking.

#### Motor

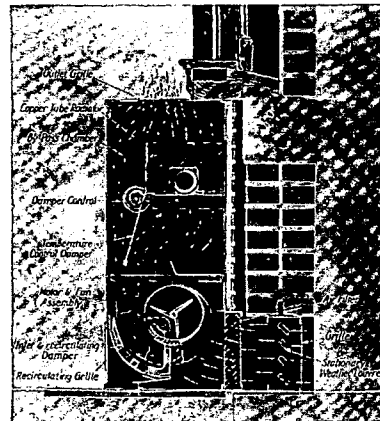
The motor of the "Universal" Unit is supplied for quiet operation on any character of current. The use of a motor generator set is no longer necessary with this system, but will be furnished upon request.

#### Three Point Lead Mounting

The Motor and Fan assembly of the Universal Unit is mounted in the cabinet on three steel ball points in contact with lead liners, making a very quiet operating unit, with no electrical noises. It has also made practical the use of alternating current motors with a permanent and rigid supporting device.

#### Fans

Universal fans are of the Sirocco type, aluminum, multiblade, low speed, double inlet, designed to operate at 800 r.p.m. plus or minus 5 per cent. No greater efficiency known. Volume regulators in discharge outlet permit precise control of air—another exclusive Universal feature. The by-pass chamber is parallel to heating



chamber and so located as to guide the column of cool air across the currents of warm air when mixing—thus creating an absolutely vertical discharge—and guide the cool air away from room occupants when completely by-passing. The large space between the fan and the radiator results in the uniform distribution and heating of entire air volume.

#### Thermostatic Control Optional

All Universal Units can be equipped with thermostatic and pneumatic attachments for pneumatic control of the inlet damper and thermostatic control of the by-pass damper. This equipment is optional.

#### . 2.

#### Universal Unit Heaters for LARGE ROOMS and beautiful interiors like Banking Rooms, Show Rooms, Stores, Offices, Assemblies, Churches, etc.

The Universal Unit Heater maintains a uniform temperature in the room—ceiling and floor alike—and it does this to the satisfaction of the heating engineer. It is also sufficiently attractive to meet the exacting requirements of the architect, and so quiet in operation as not to annoy those in the room.

Universal Unit Heaters are made on the same principles that have made the Universal Heating and Ventilating Unit for Schools so popular during the past 16 years. In them you will find the same high velocity vertical discharge, the same highly efficient Universal Multifin Copper Tube Radiator with its ground joint connections and its extra strength for more than working pressures and ability to stand up under freezing without breaking.

You will find the same low speed, long life, trouble free motor—either alternating or direct current—with the three point suspension of motor and fan on lead liners, making an assembly almost entirely free from operating noises.

You will find the same Sirocco type aluminum multiblade low speed double inlet fan. You will find the same volume regulators on the outlet of the fan housing so the air delivery of the Unit can be regulated to the requirements of the room.

#### ADVANTAGES

##### of Universal Unit Heaters

**Attractive in Appearance:** Encased in a beautiful Cabinet of heavy high grade furniture stock steel.

#### Sizes and Capacities

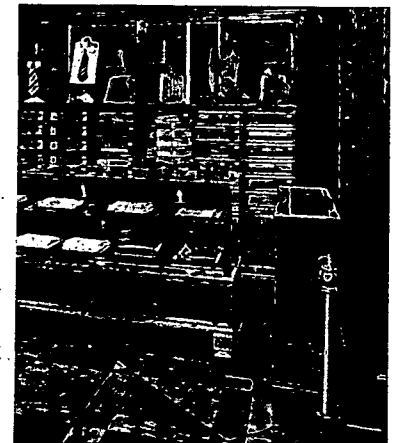
Universal Unit Heating and Ventilating Cabinets for schools are obtainable in six sizes of cabinets, with six different air deliveries. Two different radiator sizes are available for each cabinet size. Thru the operation of the volume regulators, it is possible to obtain any delivery between the minimum of 450 c.f.m. and the maximum of 1500 c.f.m.

Refer to table of Capacities and Dimensions on pages 22 and 23 of the "Universal Heating & Ventilating Unit," publication No. 210—(A. I. A. File No. 30-d-11) for complete information. Send for this publication—as well as our Catalogue and Engineers Data Book.

**Larger Heating Capacity in Smaller Space:** Universal Unit Heaters with five times the heating capacity require but one-fifth the space taken up by direct radiators and can often be entirely concealed. This is especially important in centers of high rent where the best use must be made of all space.

**Tremendous Saving in Fuel:** High velocity heat diffusion from the vertical discharge results in uniform temperature over entire area, with only slight difference between floor and ceiling, effecting a tremendous saving in fuel by eliminating overheating of upper areas.

**Quick Heating of Large Areas:** Rapid circulation of air by low speed motor driven fans over a high efficiency copper tube radiator results in quick heating of



Typical installation in a Sales Room, where every inch of space is valuable, the Universal Unit takes less space and is more efficient.