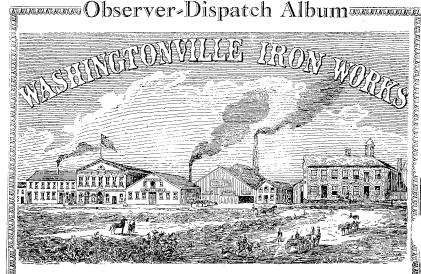
## H.V.A.C. Prior to 1894

- 1500 (circa) Leonardo de Vinci devised instrument for measuring changes in moisture in air, instrument for measuring wind velocity, also built water driven ventilating fan.
- 1607- Galileo invented a thermometer.
- 1643- Torricelli invented a barometer.
- 1659- Boyle discovered relationship between density of air and its temperarure.
- 1730- Henri Y. Pitot invented the Pitot Tube.
- 1736- Desagulier designed centrifugal blowing wheel.
- 1800- Dalton formulated laws of pressure of water vapor in air.
- 1821- Utica Steam Engine & Boiler Works, Inc., Utica, NY did boiler repair work.
- 1824- Carnot proposed theory of Heat Pump.
- 1834- Jacob Perkins first in America to patent a refrigeration machine.
- 1864- (circa) Ames Iron Works of Oswego manufactured boilers.
- 1872- Vulcan Iron Works manufactured boilers in Oswego, NY
- 1874- Hessler Co. started in Syracuse making sheet metal items. Today is House Sheet Metal Works, Inc. fabricating ductwork for the HVAC industry.

- 1874- York Corp. was founded. Manufactured refrigeration machines.
- 1875- Edward Joy Co., Syracuse, NY. Heating Contractor. Did Carrier Dome installation.
- 1883- Mack Brothers located in Syracuse manufacturing and installing boilers. Still operating on Marcellus St.
- 1886- Ftizgibbons Boilers were manufactured in Oswego, NY.
- 1886- The Trane Co. was founded. Manufactures HVAC equipment.
- 1892- D.J. Heaphy started sheet metal business which is still operated by his Grandson.



The Utica Steam Engine & Boiler Works, 800 Whitesboro St.,

The scene, reproduced from an old lithograph owned by the proprietors of the Works, depicts a section of the city once known as Washingtonville.

Right to left, following the stone building, are a boiler shop, a cabinet works, of which William Weiser was proprietor; Union Hall, conducted by Henry Lux, and an oil refinery, of which T. K. Butler was proprietor. The present-day Steam Engine & Boiler Works, in its 80,000 square feet of manufacturing space, has aborbed all of these structures.

The office of the plant occupies the original stone building which appears, except for a facade of brick veneer added in 1917, as it did 30 years before the Civil War.

Universa! Engineering, consulting and chief engineers' magazine recently ran a history of the Utica Steam Engine & Boiler Works, taken from an account written by the late Lucy Clark for the Utics Centennial Souvenir Book in 1932. It was submitted to the magazine by Morgan T. Fisher, one of the officers of the

"On a Spring morning in 1932," says the article, "Philo C. Curtis, a recognized designer of machines as well as a manufacturer, launched an industry of importance to the little community of 9,000 persons. Leaving the manufacturing center then at the foot of Charlotte St., he erected a stone building, 193 feet long, at the edge of the newly-incorporated city where Nail Creek meandered along the highway to meet the Eric Canal.

"A rolling mill and foundry on the site were soon included in the plant which Curtis established as the Vulcan Iron Works.

There he manufactured steam engines and machinery in general. "About 1835 the business passed from the ownership of Philo Curtis. Almost a quarter of a century later it came back to the intrepid founder, but the following year was taken over by his son, Philo S. Curtis, who renamed the Vulcan Iron Works calling it the Washingtonville Iron Works.

"The present name, Utica Steam Engine & Boiler Works, adopted when an incorporated company was formed in 1896

"Philo S. Curtis conducted the Works during its long heydey in the manufacture of stationary and portable steam engines and steam boilers. Steam engines are no longer an output of the plant. The manufacture of boilers was discontinued during World War 1.

"But boiler work (such as smoke stacks, pressure other tanks) is only one item among many diversities of modern industrial service performed today in a shop that has met to changing demand of industry for well over 100 years. In 19 the abandoned canal at the rear and adjoining parcels of were purchased to accommodate the growing shop output.

During World War 2 the business worked on contracts for the During worid war z the business worked on contracts for the national ship-building program, as well as parts going into hombs. With the wide range of all type of machines, the company furnishes engineering as well as manufacturing and sphericality country. fabricating service.

Fisher and Benjamin J. Fisher. They are sons of the late Benja min J. Fisher Sr. who for years, with William F. McCann, the operating director of the plant.

Fisher Sr., after being connected with the Works for several years, left to manage a cotton mill in Alabama, then returned in 1919 to continue in charge of the local plant until his in 1946. McCann's death occurred in 1941.

James S. Marsden, superintendent of the boiler shop, is the senior employe, in years of service, having been with the Works for more than 40 years. He succeeded his father, the late James S. Marden Sr., as foreman 20 years ago. The latter with George Dehm, who died in January, this year, after 58 years in the employ of the Works, worked for Philo S. Curtis, son of the founder