

live and breathe from four to six hours per day, that it becomes a real blessing. In our First Ward building the air is completely renewed and absolutely changed every twenty minutes. The rooms are literally flooded with warm, fresh air through the furnaces—or registers leading therefrom—and the air in the room pressed out through the open base into the foul air duct, thence to the base of the foul air shaft, and from thence upward 70 feet into mid-air, where it can become pure again by association. Our new house will accommodate 600 pupils. We use four furnaces, and have run them since September until now. The cost of heating is no greater than, if as great as, by the common stove. One janitor attends the four furnaces, and takes care of the whole building, with the assistance of a small boy (his son) out of school hours.

With the facts above set forth, I must close this hastily written letter. Wishing you great success in the introduction of this great blessing to the public, I am,

Your obedient servant,

W. M. PACKARD,

*President Board of Education, City of Bloomington.*

MOLINE, ILL., October 19th, 1868.

W. A. PENNELL & Co.:—The Ventilation and Air-Warmer put into my house by you works first-rate, and I am satisfied it is the most complete arrangement for heating houses I have ever seen.

JOHN DEERE.

We also refer to the following parties, who are now using Ruttan's apparatus and Ventilation:—

PRIVATE RESIDENCES.—H. G. Harrison, Minneapolis, Minn.; Wm. M. Harrison, Minneapolis, Minn.; M. Heath, (Heath & Milligan) Chicago, Ill.; Dr. J. L. R. Wadsworth, Collinsville, Ill.; N. Sherwood, Aurora, Ill.; E. Y. Griggs, Ottawa, Ill.; W. Bushnell, Ottawa, Ill.; A. T. Purviance, Hennepin, Ill.; W. H. H. Holdridge, Tonica, Ill.; John Deere, Moline, Ill.; W. R. Baldwin, Delavan, Ill.; E. H. Goulding, Alton, Ill.; R. C. Smith, Omaha, Neb.

PUBLIC BUILDINGS. — Three School Houses, Decatur, Ill.; One School House, Bloomington, Ill.; One School House, Collinsville, Ill.; One School House, Moline, Ill.; State Agricultural College, Ames, Iowa.; Several churches in Bloomington, Muscatine, and other towns in Iowa and Illinois.

Don't forget that by keeping all *outside* doors and windows closed, the ventilation of your house will be *more perfect*. In winter, *more even heat* and *better air*. In summer, *pure air*, and *no flies* or *insects*; and a room may be lighted up as brilliantly on a July evening as in January, and no bugs or millers about your lights.