

is another common practice. In eight of these twelve barns the manure is kept in this way. At the farm referred to as No. 8, there are twelve cows, each cow with 487 cubic feet of space. This barn is well lighted; the windows facing the south; but there is no ventilation whatever, except when the door is open. This farmer makes a special boast that his cattle are not out of the barn from fall till spring. They are watered in the barn, and the manure is dropped into the cellar below, where it is allowed to remain till removed in the spring. In making a visit to this barn during the winter, a man who was with me had to leave the barn because of the foulness of the air.

At another farm, Nos. 2 and 4, there are two barns. In one containing ten cattle, each animal has 286 cubic feet with no ventilation and only one small window for light. The other barn has six cattle, each animal having 224 cubic feet. This one also is without ventilation or sufficient light. In these barns the air was very bad.

At No. 5 there is no ventilation and only one small window for light. In this barn each animal had only  $143\frac{1}{4}$  cubic feet. Two out of four animals were evidently tuberculous.

At No. 10 three cows are kept in a tightly boarded pen, 10 x 10 x 8, giving about 266 cubic feet to each animal. At this barn there is a small ventilator and one small window, but in winter when everything is tightly closed, the atmosphere is fearful.

The other day I visited a barn No. 11, and in conversation with the owner, I asked him where he watered his stock. "In the puddle outside,"

he answered. The puddle was a marshy place where the water lodged in wet weather. It was situated about twenty yards from the barn and formed part of the yard. The manure pile was on sloping ground at the side and drained into the puddle.

At No. 12 there are twelve cows, each having 233 cubic feet, with no ventilation whatever, the farmer taking special pains to have a heavy canvas curtain in front of the cows. This is a fearful hole in winter time, and it has the reputation of being the hottest barn in the district. This farmer is said to lose three or four cows every year.

No. 3 is a small shanty in the city with neither window nor ventilation. The water is carried to the cow, and she is in the barn winter and summer. Inside the barn is terribly filthy.

At another farm (the State Experimental Station of a neighboring State), the barn is so hot and close in winter that a friend of mine who was visiting there, had to leave and go into the open air because the hot, foul air in the barn made him sick and inclined to vomit.

These, gentlemen, are common examples of the average New England farm. Farmers have been taught to do the very things that are injurious to their stock. They have been taught to keep the manure in the cellar. What is the result? You have a damp, chilly atmosphere full of foul odours and organic impurities. They have been taught to keep the barn close and warm, and the only heat it gets is from the animal body. The hotter, they think, the better it is.

In the great majority of dairy farms.