## The History Corner: "The Benefits and Advantages of Flannel"

In 1839, New Hampton resident John Langdon Sanborn sent an essay to his older brother, Thomas Jefferson Sanborn, the new postmaster in a town he named "Sanbornton" in Clinton County, Territory of Iowa. While Sanbornton, Iowa no longer exists, John's exposition of "the benefits and advantages of flannel" does! In the essay, written in August of 1838, John laid out how flannel was the perfect fabric for warm, damp climates – not just winter! As you read through John's technical description of how the body functions (no doubt freshly learned in his science class at New Hampton School) keep in mind this was composed 184 years ago. John graduated from the New Hampton Theological Seminary and went on to serve as a Baptist minister for congregations in Virginia, Maine and then Stratford, NH. Thomas and John's family was prominent in the early history of both Sanbornton and New Hampton, and a letter from their older brother, Caleb, written home from Ohio in 1813, featured in an earlier History Corner.

New Harapton tug 18, 1838 Dear Brother herspira When The write w an hour shall. I chall divide ther glisorders The benefit and advantages of flannel in warm damp climates lier nel sheaking of under the necessity the angle To the Structure and office of the An is composed thin which, Their hencher al 11.

New Hampton Aug 18, 1838

Dear Brother

As it is now vacation I have concluded to write you a good long letter, one that will take you an hour to read at least, as I shall write on various subjects. I shall divide it off into sections.

## The benefit and advantages of flannel in warm damp climates

In speaking of the benefits of flannel I shall be under the necessity of averting to the structure and office of the skin.

The skin is composed of three layers of membrane, Viz. the epidermis or cuticle, the mucous coat, & the dermis or true skin. This constitutes the chief thickness of the skin and is the seat of many important functions. The most important of these functions are perspiration/absorption, a regulator of animal heat and the seat of sensation and touch.

In order to give you as definite an idea as possible of these I shall dwell on these functions. 1<sup>st</sup> of Perspiration. You are already aware that the body is in a state of constant decay and renovation, and while the stomach takes in new materials, the skin is one of the principal organs by which the old and useless particles are thrown off in the form of vapor and carried off by the atmosphere invisible to the naked eye. The skin then is constantly throwing out a large amount of useless matter, and when by any cause this perspiration is checked or stopped, this must either remain in the system or be carried off by other organs. When it remains it becomes an active poison and is a powerful cause of disease, and when thrown upon the other excreting organs they have more than their appropriate labor to perform: and are consequently enflamed. And if it is thrown upon the bowels, relaxation is the result; if upon the lungs, a cold is the consequence.

I have said that the particles thrown off by the skin are carried off in the form of vapor by the atmosphere. Then when the air is damp you see at once that these particles would not be so readily taken up by it and in that case would remain on the surface, and form a white scurf which you have undoubtedly noticed. This stops the pores, and prevents the skin from perspiring, and consequently produces disease, and this is the reason why damp climates are more unhealthy than other climates.

## 2. Of absorption

This is the opposite of the function just treated of. By its operation, substances coming in contact with the skin are taken up and carried into the system. Vaccination is a familiar example of absorption.

When the perspiration is brought to the surface of the skin and confined there by injudicious clothing or any other cause, it is again taken up by the absorbent vessels and acts on the system as a poison, of greater or less power, according to its quantity and degree of concentration, thereby producing fever and other disorders, for it has been proved by observation that concentrated animal effluvia form a very active poison. Marsh miasmata<sup>1</sup> is also taken into the system by the absorbents and produce disease. Many of the contagious diseases are supposed to be taken [in] by absorption.

It is a general law that every organ acts with increased energy when excited by its own stimulus, and the application of this law to the functions of the skin we have already noticed & may help to establish the principle which I wish to establish (viz. the benefit of flannel). The skin exhales most in a warm climate because the atmosphere dissolves and carries off the secretion as fast as it is produced – and the same condition is unfavorable to absorption because there is nothing in which they can act.

In a moist atmosphere on the other hand the absorbents meet with their appropriate stimulus and act powerfully, while exhalation is greatly retarded because the atmosphere can no longer carry off the perspiration so freely; then we again see why <u>damp</u> climates are more unhealthy than dry ones...

<sup>&</sup>lt;sup>1</sup> "Miasma from marshes or boggy spots; the infectious vapors which arise from certain marshes and marshy soils, and produce intermittent and remittent fevers." <u>https://www.wordnik.com/words/marsh-miasma</u>

The advantages of flannel may now be stated. From its presenting a rough and uneven, though soft surface to the skin, every movement of the body gives consequent friction a gentle stimulus to the intravenous vessels and nerves which assists their actions and maintains there functions in health. And being at the same time of a loose and porous [?] texture it is capable of absorbing the cutaneous exhalations to much larger extent than any other material now in use. Thus it keeps the pores open and allows the perspiration to escape and at the same time takes up what is not carried by the atmosphere. Et al ------

## Jan. 6th 1839

Believing as I [do] that I never have time to finish this, I shall send you what I have written and you may have it for what it is worth.

Yours truly -

J. Langdon Sanborn

For more information on the history of the town, please visit the newly updated New Hampton Historical Society website at <a href="https://www.newhamptonhistory.org/">https://www.newhamptonhistory.org/</a> If you would like a complete image of the essay, contact me at <a href="https://www.newhampton.org">kbicknell@newhamptonhistory.org/</a> If you would like a complete image of the essay,

Kent Bicknell Historian, NHHS Curator of Special Collections The Gordon-Nash Library at New Hampton School July 5<sup>th</sup>, 2022