Bellefonte Farm near Mt. Holly 9/1/69

Prof. Marsh
Yale College

Dear Sir,

Learning that you intend making another geological visit to this county, I would be pleased to see you here, having many objects of palaeontological interest to show you.

Respectfully,

W. H. B. [Signature]
A BRIEF ESSAY

ON THE

Mineral Water of Bellefonte Farm,

BY

WILLIAM H. STERLING, M.D.,

OF BURLINGTON, N. J.

Prof. W. H. B. THOMAS,

Bellefonte Farm, near Mount Holly, N. J.

Dear Sir:

The admirable analysis, by Professor Gentz, of the Bellefonte Farm Mineral Water, prove it a most valuable medicinal combination of remedial agents in daily use.

In the course of my medical reading, I am familiar with the analysis of the most noted Mineral Springs of this country and Europe; and there is not probably a single one which contains as many of the Therapeutic agents daily prescribed by the physician for diseases of both acute and chronic character, as the Bellefonte Farm Mineral Water.

You have, in this truly valuable Water, the medicinal combination so eagerly sought for by the physician, and which he so often vainly strives to imitate in his prescriptions—that of a Tonic and Stimulant combined with an Alleviative and Depurative—or Blood Purifier.

In giving a medical opinion of the virtues of this Water, I cannot, from want of time at present, give anything more than a general statement of the remedial action of the principal constituents. A very remarkable circumstance, however, of this Water is, that it seems to combine, in an unusual degree, the virtues of the Waters of several different noted Mineral Springs.

It is evident, even to the non-professional observer, that the great majority of diseases arise from the want of proper functional activity of either the Stomach, Liver or Kidneys.

In this Water it really seems as though Nature had kindly, amid the multitude of other blessings which she daily bestows upon the human family, endeavored to combine those agents which should act remedially upon all these organs, thus rendering its use beneficial in a degree, in almost every case of disease, that is susceptible of cure through the use of remedies.

The Stomach being, as it were, the great Chemical Laboratory in which, by means of the Gastric Juices, the food is properly prepared for absorption by the circulation and assimilation by the various tissues; it is of paramount importance that it be preserved always in that state of healthy activity, by which the proper amount and quality of Gastric Juices necessary for digestion may be secreted.

In this Water, we find in large proportions, the very elements most essential for this purpose, that of Chloride of Sodium in its natural combination in water most fitted for immediate absorption by the blood vessels of the Stomach.
The most important constituent of Gastric Juice is Hydrochloric or Muriaetic Acid. Here, therefore, we find one of the very elements of the digestive juices, and that, too, in combination with the base or alkali Soda, of all others the most valuable in diseases of the Stomach, known under the name Dyspepsia; for it is now ascertained beyond a doubt, that the presence of a well combined alkali in the Stomach at the time of taking food, increases that peculiar process of the secretion of the Gastric Juice, called by Physiologists *Economosis*; or the "passing out" of one liquid through the intestinal membrane to mingle with another of different density and character. Thus the presence of the proper alkali in the Stomach will promote the secretion of or "passing-out;" in other words, the *Economosis* of the acid constituent of Gastric Juice, which is the solvent necessary to prepare the food for the use of the body generally.

In this Water, therefore, I again remark, you have the admirable combination of the acid of the Gastric Juice with the valuable alkali Soda, in the form of Chloride of Sodium. The conclusion is evident, that in those forms of Dyspepsia caused by a deficiency, either of quantity or quality of Gastric Juice, this Water must be valuable.

In diseases of the Liver, acute or chronic, the use of *Bellevoite Farm Water* will undoubtedly be of great service, as it is a received opinion among the most prominent physicians, that the "Soda Salts" act especially upon the Liver, increasing its functional activity, and thereby removing from the system the various effete or worn out materials; which, having served their purpose in the economy of the body, must now be removed by the agency of the different secreting glands; the Liver, being the largest, of course has the most important part to perform, and therefore it is absolutely necessary that it be in a healthy functional condition, otherwise those effete materials, still continuing in the circulation, produce diseases, not only by clogging the capillary vessels, causing boils, carbuncles, eruptions, and skin diseases of various kinds, but from the foundation of the numerous ailments which, under the general name "Torpidity of Liver," comprise more various diseases than are produced by any other one cause. The failure of the Liver to perform its allotted task interferes with the proper functions of the other glandular organs; for in addition to their own work, they must help the Liver. Thus we see skin yellow from Bile which it is trying to get rid off through its Perspiratory Glands; the urine also becomes highly colored from the same cause, each trying to assist the Liver when it fails to do its work; therefore, in the Soda Salts, contained in the *Bellevoite Farm Water*, you have a valuable remedial agent in the diseases of the Liver.

The Kidneys are of the highest importance in the depurative or cleansing office of the system; for it is through them that Uric and Lactic Acids are removed from the blood; and which, if allowed to remain, through want of functional activity of the Urinary organs, Gout, Rheumatism and blood poisoning, in various forms, are certain to follow. It is, perhaps, in these diseases, that your *Bellevoite Farm Water* will prove of the highest value, from the fact that it contains the Potash Salts in a remarkably large proportion. As in the case of the action of the Soda Salts upon the Liver, so are the Potash Salts known by the medical profession to act particularly upon the Kidneys. Hence the standard remedy for Gout, Rheumatism, and Drop-