17175 Hellefonte Farm near mrtbolly x.f. men 5/69 Vool marthe Yale College. Dearing another that you when making another Geological Visit to this Country, I would be pleased to see you here, having many objects of Rafacoutological interest to Show you Bille B. J.

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 Genth, 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 *Alterative* 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.

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The most important constituent of Gastric Juice is Hydrochloric or Muriatic 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 Exosmosis, or the "passing out" of one liquid through animal membrane to mingle with another of different density and character. Thus the presence of the proper alkali in the Stomach will promote the secretion or "passing-out;" in other words, the Exosmosis 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 Bellefonte 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 effect 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 bealthy functional condition, otherwise these 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 form the foundation of the numerous ailments which, under the general name "Torpidity of Liver," comprise more various diseases than are produced by any otler one cause. The failure of the Liver to perform its alloted task interfere 5 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 Bellefonte Farm Water, you have a valuable remedial agent in the diseases of the Liver.

The Kidneys are of the highest importance in the deparative 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 Bellefonts 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-

sical Affections has been for some time past the Potassa Salts, in some of their varied forms, for it is through the activity of the functions of the Kidneys, together with the important aid of the Skin Glands, that physicians hope to relieve and cure these distressing complaints. The most valuable of the Potassa Salts is probably the Chlorate, or (Chloride.) This important and most valuable Salt you have in this Water in large proportions. In reading the analysis of the various noted Mineral Springs of Europe and this country that I have been able to procure, I was surprised to find that this most valuable remedial agent is found in only one Spring, and in that one in very small quantities, while in this Water the proportion is large.

As an evidence of the value of this agent, I would state that in Mercurial Salivation, from too long continued use of Mercury, Chlorate of Potassa is considered by physicians to be almost specific; the Fetor of Breath, Soreness of Gums and Swollen Tongue disappearing under its use with magical rapidity. I should infer that all forms of Urinary diseases, including diseases arising from effete materials remaining in the circulation from want of secreting power of the Kidneys, such as Gout and Rheumatism, would be greatly benefited by the use of the Bellefonte Farm Water; from the fact, that to relieve and cure these diseases a joint action of the functions of the Kidneys, Skin and Bowels are necessary. In the Chloride of Potassium, you have the agent to act upon the Kidneys; in the combination with the proper dilution of Water you have the element to promote free action of the Skin. In Magnesia Salts, and Salts of Alumina, there is found the most essential Therapeutic agents to give a bealthy tonic action to the peristaltic movements of the bowels, thereby removing and preventing constipation, and ensuring a daily evacuation of the intestines without the aid of drastic and weakening purgatives.

Yours Respectfully,

[Signed.]

W. H. STERLING, M. D.

Burlington, N. J., January, 1869.

All orders for the Bellefonte Farm Mineral Water, and all communications must be addressed, thus:

Prof. W. H. B. THOMAS,

Bellefonte Farm, near Mount Holly,

New Jersey.