

STORER (H. R.)

THE FREQUENTLY GYNÆCOLOGICAL ORIGIN
OF
INHERITED FORMS OF STRUMOUS DISEASE.

READ AT THE

TWENTY-NINTH ANNUAL MEETING OF THE AMERICAN
MEDICAL ASSOCIATION.

BY

HORATIO R. STORER, M.D., LL.B.,
OF NEWPORT, R. I.
President of the Gynæcological Society of Boston.

(Reprinted from the Transactions of the Association.)



PHILADELPHIA:
COLLINS, PRINTER, 705 JAYNE STREET.
1878.

THE FREQUENTLY GYNÆCOLOGICAL ORIGIN
OF
INHERITED FORMS OF STRUMOUS DISEASE.

READ AT THE

TWENTY-NINTH ANNUAL MEETING OF THE AMERICAN
MEDICAL ASSOCIATION.

BY

HORATIO R. STORER, M.D., LL.B.,

OF NEWPORT, R. I.

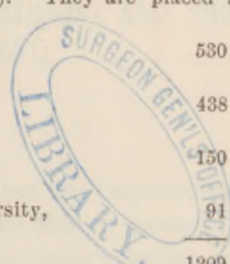
President of the Gynæcological Society of Boston.

(Reprinted from the Transactions of the Association.)

PHILADELPHIA:
COLLINS, PRINTER, 705 JAYNE STREET.
1878.

The Gynæcological Society of Boston, founded in 1869, is developing its large collection, already amounting to several hundreds and in many languages, of books and monographs upon the diseases of women, into a consultation library, which shall be accessible to all American gynæcologists. An invitation lately extended to the Society by the Boston Medical Library Association, to deposit its collection, for better access and the general benefit, with their own, has been accepted, and will facilitate an end for which the Society has labored since its inception,—the making of Boston, in this as in so many other departments, a centre for scientific work. So far as can as yet be ascertained, there are available here by those engaged in gynæcological research, over twelve hundred books and pamphlets upon the diseases of women, and the correlative department obstetrics properly so-called (midwifery). They are placed as follows:

Library of the Gynæcological Society of Boston, (Titles thus far catalogued.)	530
Boston Medical Library Association, (do. do. do.)	438
Library of the Massachusetts General Hospital, (The Treadwell Collection.)	150
Library of Medical Department of Harvard University,	91
Total,	1209



The gentlemen in charge of the Boston Public Library, the General Library of Harvard University (including the Boylston collection,) and that of the City Hospital of Boston, severally report that their gynæcological works have not yet been catalogued, but that it shall speedily be done. When completed, the above figures will probably be doubled.

The Society will be grateful for donations, home or foreign, even to the smallest pamphlet bearing upon gynæcology, and such will be duly acknowledged. It is particularly desired to obtain everything upon the subject that has been published in America. Almost every practitioner possesses books that he does not especially value, or duplicates, which would fill important gaps in a public collection, and many will doubtless be glad of the opportunity thus to turn them to practical use.

Library Committee of the Gynæcological Society of Boston.	}	WILLIAM G. WHEELER, M. D., Chelsea, Mass., (Chairman.) Consulting Physician to St. Elizabeth's Hospital for Women.
		L. F. WARNER, M. D., Boston. Formerly Physician to St. Elizabeth's Hospital.
		J. G. BLAKE, M. D., Boston, Physician to St. Elizabeth's, Senior do. to the Boston City Hospital, and Consulting Physician to the Carney Hospital.
		J. G. PINKHAM, M. D., Lynn, Mass., One of the State Medical Examiners of Massachusetts, and formerly Prof. in Berkshire Medical College.
		EPHRAIM CUTTER, M. D., Cambridge, Mass., and, ex officio.
		HORATIO R. STORER, M. D., Newport, R. I., <i>President of the Society</i> , Senior Consulting Surgeon to the Carney General Hospital, and formerly Surgeon to St. Elizabeth's Hospital and Prof. of Obstetrics and the Dis- eases of Women in Berkshire Medical College.
		HENRY M. FIELD, M. D., Newton, Mass., <i>Secretary of the Society</i> , and Prof. of Therapeutics in Dartmouth College.

Parcels, by post or otherwise, may be addressed to either of the above, or in care of Dr. Edwin H. Brigham, Librarian of the Boston Medical Library Association.

The Gynecological Society of Boston, founded in 1881, is developing its large collection, already amounting to several hundred and in many instances of books and monographs upon the diseases of women, into a consolidated library, which shall be accessible to all American gynecologists. An invitation has been extended to the Society by the Boston Medical Library Association, to deposit its collection, for better access and the general benefit, with their own, but being merged, and will facilitate an end for which the Society has labored since its inception—the making of Boston, in this as in so many other respects, a center for scientific work. So far as can be yet ascertained, there are available in Boston engaged in gynecological research, over twelve hundred books and pamphlets upon the diseases of women, and the corresponding department elsewhere, namely—

Library of the Gynecological Society of Boston	500
(This has its catalogue)	
Boston Medical Library Association	450
(See its list)	
Library of the Massachusetts General Hospital	150
(The Townsend Collection)	
Library of Medical Department of Harvard University	90
Total	1290

The Government in charge of the Boston Public Library, the General Library of Harvard University (including the Boston collection), and that of the City Hospital at Boston, naturally regard their gynecological works as not yet been catalogued, but that it will possibly be done. When completed, the above figures will probably be modified.

The Society will be grateful for donations, loans or transfers, even to the smallest pamphlet, bearing upon gynecology, and such will be duly acknowledged. It is particularly desired to secure everything upon the subject that has been published in America. Almost every gynecological pamphlet published does not especially refer to gynecology, which would still important give in a public collection, and every will doubtless be glad of the opportunity that this time to furnish one.

Western G. W. Warner, M. D., Professor, Mass. (Boston)	Library
Assistant Physician to St. Elizabeth's Hospital for Women	
J. C. Warner, M. D., Boston	Commissioner
Formerly Physician to St. Elizabeth's Hospital	
J. O. Drake, M. D., Boston	of the
Physician to St. Elizabeth's Hospital, No. 10, Boston City Hospital, and Consulting Physician to the County Hospital	
J. C. Gardner, M. D., New York	Gynecologist
Chief of the State Medical Examiners of Massachusetts, and formerly Prof. in Berkeley Medical College	
Samuel Loring, M. D., Cambridge, Mass.	Society
and ex-officio	
Harvard H. Warner, M. D., Newport, R. I., President of the Society, formerly Consulting Surgeon to the County General Hospital, and formerly Surgeon to St. Elizabeth's Hospital and formerly Surgeon to the City's Hospital and Prof. of Obstetrics and the Gynecology of Women in Berkeley Medical College	of
Harvard M. Warner, M. D., New York, Mass., Secretary of the Society, and Prof. of Therapeutics in Dartmouth College	Boston

Books, by post or otherwise, may be addressed to either of the above, or to care of Dr. Edwin H. Brigham, Treasurer of the Boston Medical Library Association.

THE FREQUENTLY GYNÆCOLOGICAL ORIGIN OF INHERITED FORMS OF STRUMOUS DISEASE (ESPECIALLY PHTHISIS), AND THE CONSEQUENT INDICATIONS FOR TREATMENT.

IN initiating the discussion of a subject as yet but imperfectly appreciated, the Section will permit me to state that in gynæcology, as in every other department of medicine, the prevention of disease is even more important than its cure, and to refer to the fact, that in pointing out the intimate relations that wide ranges of disease sometimes bear to questions of direct gynæcological interest, we enter into closer connection with the general practitioner, and do much toward securing his co-operation in the measures which, as a body of more separate workers, we may think it advisable to suggest.

Upon lately returning from a long residence abroad, I took occasion to bring before my associates of the Gynæcological Society of Boston,¹ the new and promising treatment of strumous disease practised in southern Italy, by what may be called the Solfatara Method. To this method, which is now of several years' standing, and has attracted much notice upon the continent of Europe, attention was apparently first called in the English language by myself, in the report which, as chairman of a special committee appointed by the American Medical Association, at St. Louis, in 1873, to investigate European health stations in their relation to American invalids, I had the honor to send to this body two years later, at the annual meeting at Louisville, in 1875. Subsequently, in a series of letters published at Paris, and still later in a collective form at Naples, I reaffirmed my conviction² that the matter was worthy of investigation; and in

¹ At the 88th regular meeting of the Society, 7 Feb. 1878.

² Southern Italy as a Health Station for Invalids. Naples, R. Marghieri, p. 70.

1877, being then in London and requested to give the result of my observations to the British profession, I did so through an article in the *London Lancet*.¹

In thus presenting what might seem a question of mainly general interest to my colleagues of the Gynæcological Society, I was in reality conforming to a main feature of its original plan. Not merely has it been aimed at by this Society to consider purely local disease, confined in its seat and in its chief effects to the pelvic viscera, but to throw light if possible upon the great groups of general disease, so often studied ineffectually from a general standpoint, whenever these initiate, or in their course take influence, from pelvic organs or their lesions, disordered parturition, or any other genital cause. To make this fact more evident, I may mention that in the very first number of the *Journal of the Gynæcological Society* (July, 1869), there was published a paper by the present Secretary of the Society, Prof. Field, of Dartmouth College, upon the necessity of constitutional treatment for even local disease.² From that day there has hardly been a single one of its fourscore and more regular meetings, at which, by some one of its members, similar expressions of opinion have not directly or indirectly been made. At the present session of this Section, an important paper of the character alluded to will probably be presented by a late vice-president of the Association, and one of the founders of the Boston Society, my friend, and former associate in practice, Dr. L. F. Warner, whose views, based upon long experience and extremely accurate observation, I believe to be correct. The conservatism of Charles West, of London, has been accepted by the Society as safer doctrine than the idea, at present far too prevalent, that local exhibitions of disease are to be studied, considered, and treated as necessarily only of local origin.³ In resuming my work in its service, after five years of involuntary absence, I felt that I could not do better than again to turn attention to questions of constitutional treat-

¹ Upon the Arsenical Atmosphere and Arsenical Hot Spring of the Solfatara, at Pozzuoli (near Naples), in the Treatment of Consumptives. *Loc. cit.*, Sept. 1877.

² The Necessity of Associating Constitutional Medication with Topical Applications in the Treatment of Uterine Disease. *Journal of the Gynæcological Society of Boston*, July, 1869, p. 30.

³ "All the evils inseparable from the practice of a specialty are thus aggravated, and the natural tendency of such practice to subside into routine or to degenerate into empiricism, becomes almost unavoidable." West. *An Inquiry into the Pathological Importance of Ulceration of the Os Uteri*. 1854, p. 84.

ment and of chronic disease, since of necessity a large proportion of the cases consulting the specialist, just as the general practitioner, are in one way or another, either primarily or secondarily, of constitutional character. Incidentally I mentioned that there were points involved in the history of struma that as yet had been but imperfectly studied, but were in my opinion of great interest and importance. To the development of these, with your permission, I will now proceed.

To the American profession, and especially to physicians in New England, struma under its myriad of disguises affords a very large proportion of their patients. A single one of its forms, pulmonary consumption, kills a fearful percentage of us all.¹ Perhaps the general prevalence of phthisis has by no one been more plainly or truthfully stated than by Dr. Cotting of Roxbury, whose personal observations have extended to South America, as well as to the usual courses of foreign travel. Dr. Cotting, as

¹ We are all of us accustomed to acknowledge the above in general terms. The following figures, however, will make the fact more manifest. I take merely the States of Massachusetts and Rhode Island—for while the statistics of both, for the past twenty years, bear out what has been stated, they testify to the truth of another important proposition, to which I may more distinctly refer upon a future occasion.

In Massachusetts the proportions are as follows: (*State Registration Report for 1875.*)

Year of census.	Population.	Deaths from consumption.	Of the living population.	
			One in every	In each one thousand.
1860,	1,231,066	4,557	270.1	3.70
1865,	1,267,031	4,661	271.8	3.68
1870,	1,457,351	5,003	291.3	3.43
1875,	1,651,912	5,738	287.9	3.47

In Rhode Island: (Dr. Snow of Providence, *Twenty-fourth State Registration Report, 1876.*)

Year of census.	Population.	Deaths from consumption.	Of the living population.	
			One in every	In each one thousand.
1860,	174,620	503	347	2.88
1865,	184,965	547	331	2.96
1870,	217,353	575	378	2.64
1875,	258,239	650	397	2.52

“It will be noticed that the proportion of mortality from consumption, to the living population in Massachusetts, is constantly considerably greater than in Rhode Island” (*Ibid.* p. 301), in which State, however, “as always in every year, consumption leads the list in the number of its victims; and in the whole period (21 years, from 1852 to 1873), its number of victims is more than three times as great as from any other cause.” (*Ibid.* p. 89.)

quoted by Dr. Bowditch,¹ thus defines the limits of the disease: "From the East Indies and the West, from the Isles of the Ocean and those in the Mediterranean, from the Western prairies and from Italian skies, we hear the same story of the universal existence, prevalence, and inexorable progress of pulmonary consumption." I am well aware of the distinction that is attempted to be drawn by recent writers between pulmonary tuberculosis and all other forms of scrofulous degeneration. Were this, however, fully allowed, the practical conclusions that I shall present would not be invalidated.

To several points of moment connected with the causation, progress, and rational treatment of phthisis in the female, I have in former years, upon more than one occasion, directed the attention of the profession. I will now indicate the unsuspected part, of intense interest to us as gynæcologists, that she plays in its transmission—not merely as the mother of the human race, for she herself may be without taint of struma—but as communicating to it in a twofold way, and often without consciousness that there exists such a danger, what Sir Wm. Jenner so fitly called "death,"—death to her associate, death to their children. In pursuing the matter to its legitimate conclusions, the bearing of which upon questions of the first value in public sanitation will be evident, I frankly acknowledge that I am but continuing the work begun from a different direction by other observers, pre-eminently by members of our national body, whose views, as coinciding with my own, I would press most earnestly upon the attention of this, the most influential Section of the American Medical Association. The investigation will be found to cover the causation (direct and by heredity), and most reasonable treatment of a large proportion of the cases of strumous disease that occur—not in the female sex alone, though it is to ground upon which gynæcology overlaps, and therefore properly coming within the province of this Section, that we must attribute their ultimate origin. Truthfully was it said to the Association very recently, by one of its Presidents, that "gynæcology in its broadest sense includes not only uterine, but much of general human pathology."²

In a late address before the Surgical Section of this Association,

¹ Public Hygiene in America: being the Centennial Discourse delivered before the International Medical Congress, Philadelphia, 1876.

² Bowditch. Presidential Address at the Chicago Meeting of the American Medical Association, 1877.

Prof. Gross, of Philadelphia, unhesitatingly asserted his belief that nearly *all* forms of strumous disease ("in the great majority of cases, if not invariably, of what is called scrofula, struma, or tuberculosis") are primarily, and by near or distant inheritance, of *syphilitic* origin.¹ This statement, at first sight so startling and so repulsive, was prefaced by the following apt quotation from Quarles. "I here present thee with a hive of bees, laden some with wax and some with honey. Fear not to approach. There are no wasps, no hornets here. If some wanton bee should chance to buzz about thine ear, stand thy ground and hold thy hands; there's none will sting if thou strike not first. If any do, she has honey in her bag will cure thee too." Dr. Gross alludes to the corroborative opinion of Mr. Jordan, of Birmingham, and quotes from Sir Wm. Jenner. The passage given from the latter I shall reproduce, with the addition of a sentence that adjoins it in the original text, and is extremely pertinent to the present discussion, though omitted by Prof. Gross.

"The frequency of cases of liver disease," says Jenner, "of so-called consumption, of kidney disease, and of brain disease, which are directly referable to syphilis, and of cases of so-called scrofulous diseases in the child, that are also due to inherited syphilis, becomes daily more apparent. Syphilis, more often than has commonly been believed, means death; death to the contractor of the disease, death to his offspring."²

I shall now proceed to cite other authorities of similar weight, not mentioned in the address to our Surgical Section, to which reference has been made. I do not allude to the writers of thirty or forty years ago, still less to those preceding them, who were not accustomed to the modes of modern research, but to men of the present day, confessedly competent to observe correctly, and to form their own conclusions. Sir James Paget, whose great influence has been thrown with Mr. Lane, Dr. Drysdale, and other sanitarians who have been battling in England with this greatest of social evils, thus expresses himself: "It is very highly probable that much of what is set down as scrofula is due to syphilis, modified in its transmission from parents to children."³

¹ Syphilis in its Relation to the National Health. Transactions of the American Medical Association, 1874.

² Opening Address to the Epidemiological Society, Nov. 1876.

³ Letter to Association for Promoting the Extension of the Contagious Disease Act. (Report on the Extent of Venereal Diseases.) London, 1868, p. 25.

M. Fournier asserts that "syphilis may, through the medium of the nutritive disturbance which it causes, act indirectly by producing common lesions, *i. e.*, tubercle; in other words, syphilis may sometimes give rise to common phthisis. If it were not overlooked, as it most often is, pulmonary syphilis would not be found to be so rare an affection as it seems to be. It is a tertiary complication of the specific diathesis, and it may appear five, ten, or fifteen years, or even much later, from the beginning of the disease. The pulmonary lesions, which are so common in fetuses and infants, demonstrate that the affection may unquestionably be hereditary. The pulmonary symptoms from congenital syphilis may only develop in more or less advancing life."¹

M. Rollet affirms that, "It is certain that during the course of constitutional syphilis, different forms of disease of the parenchyma of the lung and bronchi appear, which are syphilitic in their origin. But these are little studied in their pathological and anatomical, and still less in their clinical relations. In any case pulmonary syphilis must occur far oftener than has been anatomically proved and recorded. It should receive more attention in order, if possible, to throw some light on the important relations existing between syphilis and pulmonary phthisis, tuberculosis and scrofula."²

Other evidence of similarly conclusive character might be adduced; as in this country, and within the past year, the series of cases reported by Dr. McLane Tiffany.³ Enough, however, has been afforded to prove that leaders in our profession like Després⁴ and others abroad, and at home the two late presidents of this association,⁵ have been alarmists in no sense but a legitimate one, and that their warning and advice should be promptly followed.

Much may be done towards a "stamping out" of venereal disease from our midst, so far at least as its direct communication is concerned, by the firm tread of the Law. To further this is rather the work of our Section on State Medicine and Public Hygiene, than of our own, but we can do much even in the same direction through the influence of our individual members. There

¹ Gazette Hebdomadaire, 1875.

² Wiener Med. Presse, Nov. 21, 1875; Dobell's Annual Reports on Diseases of the Chest, vol. ii. 1876, p. 95.

³ American Journal of the Medical Sciences, July, 1877.

⁴ Est-il Moyen d'arrêter la Propagation des Maladies Vénéériennes? Paris, 1870.

⁵ Gross, *loc. citat.*; Sims, Inaugural Address before American Medical Association, 1876.

are, however, five points relative to the main question, four of them of a general bearing, but the fifth strictly gynæcological, which do come within our province. If the Section will but give to them in its discussion at the present session the attention that they deserve, a great step will be taken towards the end advocated by both Presidents Gross and Marion Sims. Neither of the points to which I shall now call attention has been alluded to by these gentlemen, or indeed appreciated by others who have written upon the subject.

The points to which I refer are the following. I would bespeak for them the earnest consideration of every member of the Section.

1. Syphilis, like other toxæmiæ, is more prone to become constitutional in a strumous than in a perfectly healthy subject.

2. Struma, the result of syphilis, especially if from inheritance, though confessedly not uncommon, is comparatively seldom recognized as such during life, and still more infrequently does it receive appropriate treatment.

3. Syphilitic struma, personal or by heredity, is in no sense self-limited.

4. The predisposition to syphilis by heredity (a very different thing from its inheritance), is both of itself and as affected by strumous and other antecedent dyscrasiæ, much more frequent and intense than is generally supposed.

5. The transference of primary syphilis being sometimes made by perfectly healthy women who are themselves entirely free from specific disease, this is an element not to be overlooked in the discussion of syphilitic struma, as it bears vitally upon the questions, who are most prone to receive infection, how the virus is propagated, and in what way to attempt to restrain the spread of venereal disease.

These propositions I shall now but very briefly consider, my object being attained by simply presenting them to the Section. They can hardly fail of convincing it of the necessity of bearing them in mind in daily practice. I will first speak of the fifth proposition, as of most immediate interest to gynæcologists.

The transference of primary syphilis may be made by a perfectly healthy woman, herself undiseased.

Every physician of experience has had cases, few no doubt, but sufficient to attract his attention, where, in endeavoring to trace the parentage of a chancre, the party presenting it being appa-

rently truthful in his statement, the corresponding lesion has failed to be detected, and this although all possible sites, however unusual, have been searched. Of course no such examination of a woman can be called complete until the urethra, the interior of the cervix, the anus and rectum, the breasts and other parts of the surface of the body, and even the mouth, fauces, nares and eyelids have been inspected. Though this has been done, there still remain occasional cases that are inexplicable, assuming that the male in question has not lied, save upon the supposition that the woman has received the syphilitic virus from a third party, and has retained a portion of it in her genital canal, effective and virulent, but without absorption by herself, long enough to infect the party upon whom the lesion is subsequently discovered. That this must at times happen is admitted by Bumstead. We have reliable evidence, cited by him, that it has been proved of the chancroid by direct experiments, and there is no reason for believing that it is not just as true of the chancre itself, which could not justifiably be put to the same test, and he draws the following deduction: "It would thus appear that in rare instances the sound vagina may play the part of a mere medium of contagion."¹ I here purposely refrain from referring to the entirely distinct class of cases, indicated by Hammond and others, where, in the failure to detect a primary lesion, it is supposed that syphilis is communicated by leucorrhœal, metrorrhagic, or menstrual discharges, that have been tainted, constitutionally, by the disease. I am now speaking of *perfectly* healthy women. In spite of every precaution as yet known, enough of them would transfer the contagion to keep up indefinitely the existence of the disease.

From the above it is seen that:—

a. The examination of women, whether prostitutes or not, and to however great extent it may be carried, can afford but insufficient check to syphilis.

b. The examination of men—on the large scale, as of armies and navies, the inmates of prisons, almshouses, and hospitals, and of ordinary seamen at ports of entry, indicated to meet the requirements of State Medicine and perfectly practicable—will not entirely supplement that of the other sex, which, as has been shown, must be necessarily imperfect in result. Its neglect, however, evident enough as the primary lesion generally is when

¹ The Pathology and Treatment of Venereal Diseases, p. 324.

occurring in the male, has been a glaring defect of the English Contagious Diseases Act, as ordinarily applied, and similar statutes elsewhere. It is, moreover, "possible," as Bumstead again admits,¹ that the genital organ of the male may also occasionally play the part, though more rarely than that of the female, of "a medium of contagion." Like the pollen- or pus-bearing insect, though unaffected by it himself, he may carry about with him from place to place, from mere lack of cleanliness, the determination of disease.

To obtain the control of syphilis, it is therefore more necessary than has hitherto been supposed, to attack its predisposing causes; to which my first four propositions will now be found to pertain.

1. *Syphilis is more prone to become constitutional in a strumous than a perfectly healthy subject.* I here but state in distinct terms what in the case of septicæmia and the other toxæmiæ has been accepted as a general formula by the profession.

2. *Struma, the result of syphilis, especially if from inheritance, is but seldom recognized as such during life, and still more unfrequently does it receive appropriate treatment.*

This also requires no further statement, in view of the evidence already given. Syphilis very constantly runs into phthisis, as in diseased prostitutes, even where the ordinary influences of dissipation, exposure to chill at ball-rooms, and from cold vaginal injections to prevent conception, nervous exhaustion from sexual excess, etc. etc., are all guarded against. I use the general term consumption since the distinction that has been attempted between tubercle and syphiloma of the lung has by no means been established. Were it so, however, the general conclusions that are forced upon us would remain the same. The most sceptical must admit that in the absence of soil moisture, that so valuable suggestion that we owe to Dr. Bowditch, insufficient or improper food, extreme atmospheric changes, depressing emotions, an unhealthy occupation, the intermarriage of phthisical subjects, and all other immediate and exciting causes of such disease, the existence of an hereditary syphilitic taint, however slight, not merely may, but is quite sure to, act as a powerful predisposing cause; over and beyond the great number of additional cases of consumption and other forms of struma, in which unmistakable evidences of inherited though unsuspected specific disease are revealed at the autopsy.

¹ Loc citat., p. 324.

3. *Syphilitic struma, personal or by heredity, is in no sense self-limited.*

As to the first of these distinctions, and its bearing upon questions of marriage and the like, no one doubts. As to the second of them, there is a growing suspicion in the profession whether, after all, there may not be some truth in the popular prejudice concerning the contagion of struma, through the respiration for instance, as in the case of husband and wife, and other long-continued direct exposures, in phthisis and similar disease. My own feeling was strongly against such possibility. A later residence, however, of several years in Italy, where the profession, highly educated, critically observant, and of good judgment, almost universally accept the belief, has gone far to make me reconsider the question. As I write these lines, there are published the conclusive experiments of Buhl and Tappenheimer, by which the contagiousness of phthisis is alleged to be "proved." We cannot now avoid the conviction that "the air of apartments occupied by phthisical persons, and not well ventilated, may become dangerous for healthy persons occupying the same quarters."¹

4. *The predisposition to syphilis by heredity is, both of itself, and as affected by strumous and other antecedent dyscrasie, much more frequent and intense than is generally supposed.*

This predisposition, as I have intimated, must not be confounded with the syphilitic inheritance itself, of which it is but the precursor. Atavism here, as elsewhere, plays its part, and the misfortunes, not only of parents, but of still more distant ancestors, affect their descendants. The reasonableness, within quite extended limits, of the above proposition is readily shown.

Syphilis, once become constitutional, is now considered to be never entirely eradicated from the individual, certainly not spontaneously. There is ground for believing, despite all hope to the contrary, that the disease existed in remotest antiquity, and that there have been times when its ravages were almost universal. Plutarch, Josephus, Aristotle, Galen, Aretius, and many other old writers, seem to have described its primary, secondary, and tertiary stages, and Prof. Gross does not doubt that even Job and David were among its victims. A glance at the following figures will give a fair idea of the chance possessed by single individuals of the present day of having entirely es-

¹ Boston Med. and Surg. Journal, May 23, 1878; Canada Lancet, May 1, 1878.

caped all hereditary taint of this kind from the past. From that past we take only the last thousand years, or but thirty generations. As each of us has had two parents, four grandparents, eight great-grandparents, and so on, there inevitably flows in every individual of us all, at only the thirtieth descent, the blood not of merely one thousand and seventy-three millions of persons, as has been erroneously stated (the addition together, after their multiplication, of the several generations having been forgotten in the estimate, and one large factor altogether omitted), but of no less than four thousand millions! If we go still further back, even but to the commencement of the Christian era, the mind becomes bewildered by the immensity of the computation. It would be well if we could believe that the syphilitic poison, predisposing to struma, as well as to its own reproduction, were wholly effaced instead of merely rendered latent and attenuated in the lapse of time.

The distinction that I have drawn in these propositions between syphilis as determined in its invasion by the existence of the strumous dyscrasia, and the strumous diathesis as caused by syphilis, personal or by inheritance, or, in other words, syphilis resulting (however indirectly) from struma, and struma resulting from syphilis, will not be lost sight of. In the treatment of special forms of struma, phthisis, for example, it will be found of practical use. It will probably prove our duty, much more frequently than has yet been done, and in cases without suspicion of direct taint, to employ what are ordinarily called specific remedies.

Many questions of infinite moment here arise. Is it possible, for instance, to discover, by any reliable tests, such constant, unmistakable, and conclusive changes in the blood, where tainted by syphilis, as may afford us unerring means of diagnosis, even where the patient does not suspect, or knowing it denies, the existence of the disease? Such, in the case of the microscope, has indeed been claimed by Prof. Salisbury,¹ whose slides from the blood were shown to me by that gentleman, at his office in Cleveland, shortly after his publication in 1868, as doubtless since then to many of the profession. The subject is still being investigated by independent observers, among others, with great zeal and persistence for many years, but now with microscopic powers hitherto unattained, aided by the most careful microphotography,

¹ American Journal of the Medical Sciences, January, 1868.

by Drs. Cutter, of Cambridge, and Harriman, of Boston, who modestly claim to be merely witnesses to the validity of Salisbury's discoveries. The former of these gentlemen has communicated the results of their work up to the present time at two late meetings of the Gynæcological Society of Boston,¹ and these demonstrations, thrown from nature upon an illuminated screen of many feet in diameter, as I have reason to hope may also be done at the present meeting, cannot, it would seem, be otherwise interpreted, save upon evidence as yet unafforded. As to this, however, I am myself, from want of recent practice with the microscope, but incompetent authority. It belongs rather to the domain of Prof. Richardson, of Philadelphia, Woodward, of Washington, and other members of our Association, by whose decisions in such questions we are accustomed to be governed. Unless disproved, these investigations bid fair not merely to afford a test by which to decide upon the presence of syphilis, however attenuated the taint, but to corroborate, from this side of the problem, the connection, perhaps relationship even, already established by clinical evidence, between specific and strumous disease.

Our five propositions being granted, it must follow

I. That the more completely we prevent (by wise sanitation), control (by intelligent supervision), and perhaps cure (in certain cases by specific treatment), phthisis and other forms of strumous disease, to such an extent do we limit the probable infection, propagation, and intensity of syphilis.

II. Similarly, that the more actively we endeavor, by public and private measures other than those now indicated, to absolutely eradicate syphilis from any community, to such an extent do we limit the occurrence, personal and by inheritance, of the various forms of strumous disease. And

III. *A fortiori*, and even to a greater extent than has as yet been or can be effected by governmental or private attempts to control venereal by examining for or by treating its primary lesions, by thus removing from our midst a large moiety of the material upon which the disease has thus far subsisted, we may hope eventually to get it under control. It will be an added triumph for gynæcology if the most really practical steps towards this great end shall prove, upon the large and effectual scale, to have initiated from ourselves.

¹ The 89th and 90th regular meetings, March 7, and April 4, 1878.

