A letter to Daniel Drake, M.D., on the cause of premature decay in the deciduous teeth : in which is embodied a review of the discussion of the Miss. Valley Association of Dental Surgeons, upon the same subject / by Scrutator.

Contributors

Drake, Daniel, 1785-1852.
Mississippi Valley Association of Dental Surgeons.
National Library of Medicine (U.S.)

Publication/Creation

Philadelphia : [publisher not identified], 1852.

Persistent URL

https://wellcomecollection.org/works/c5dhzavs

License and attribution

This material has been provided by This material has been provided by the National Library of Medicine (U.S.), through the Medical Heritage Library. The original may be consulted at the National Library of Medicine (U.S.) where the originals may be consulted.
This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.

Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
https://wellcomecollection.org

WU
S434L
1852

A LETTER

TO

DANIEL DRAKE, M. D.,

ON THE CAUSE OF

PREMATURE DECAY IN THE DECIDUOUS TEETH;

IN WHICH IS EMBODIED

A REVIEW OF THE DISCUSSION

OF THE

MISS. VALLEY ASSOCIATION OF DENTAL SURGEONS,

UPON THE SAME SUBJECT.

BY SCRUTATOR.

PHILADELPHIA:

1852.

WU
S434L
1852

Film 7675, Item 5

A LETTER

TO

DANIEL DRAKE, M. D.,

ON THE CAUSE OF

PREMATURE DECAY IN THE DECIDUOUS TEETH;

IN WHICH IS EMBODIED

A REVIEW OF THE DISCUSSION

OF THE

MISS. VALLEY ASSOCIATION OF DENTAL SURGEONS,

UPON THE SAME SUBJECT.

26985

BY SCRUTATOR.

PHILADELPHIA:

1852.

WU
S435L
1852

TO THE READER.

The following letter was written about nine months since, for the "American Journal of Dental Soience," with the intention of following it up with other letters of the same character, upon the subject matter of Dr. Drake's interrogations to the "Mississippi Valley Association of Dental Surgeons." The letter was, however, very unexpectedly denied a place in that Journal, and the original idea of publishing the series of letters abandoned. A late writer in the Medical Examiner in referring to this subject, says the reason that the letter was not published, was because it contained doctrines adverse to those promulgated by the Baltimore Editor. The Editor denies this charge, and in reply says, "it was rejected for a different reason, altogether."—Now, as the correspondence between the Editor and the writer of the letter, touching its rejection was confidential—the sacredness of which the Baltimore Editor most fully honors by carefully refraining from mentioning the cause—nothing can be done, therefore, on the part of the writer, towards settling the point in dispute. All that he can do is to gratify, as he has been informed he will, a very great desire and curiosity of the Dental Public to see the rejected letter; a feeling that has been solely excited by the combatants before referred to. This he now aims to do by laying the letter before the Profession in pamphlet form.

Philadelphia, Aug. 25th, 1852. THE AUTHOR.

LETTER.

JONES' HOTEL, PHILADELPHIA, PA.
December 10th, 1851.

DANIEL DRAKE, M. D.

Dear Sir:—My attention has been directed to the October number of the "Dental Register" of the West, containing a number of questions propounded by you, in the year 1846, to the "Mississippi Valley Association of Dental Surgeons." These questions, it appears, were at that time entrusted to a committee taken from this body of Dentists, with instructions to make a report thereon to the next meeting of the Society. But these instructions were, it is to be regretted, neglected year after year, until the late meeting of the Society for 1851. The committee was then re-organized, and your interrogations "taken up in committee of the whole at an interlocutory held the first evening of the meeting of this Society at Dr. Goddard's."

The Reporter says, "We feel that it would be impossible to give to a hasty "report of this kind, that zest and interest which was elicited in the discussion "of these important question," and adds; "The discussion was elicited and "notes taken to aid in the making out of a report which Dr. Drake wishes for "the third volume of the work he is now publishing."

It is, therefore, very evident, that the report which is now being prepared for you, will embrace the same views and doctrines, which were elicited in the discussions of your questions, before the society; of which discussion, copious notes are published in the number of the "Dental Register" before referred to. To call your attention to this discussion, and to the very erroneous opinions promulgated by this society, upon the subject matter of your interrogations, will be the object of this and other letters I may address to you.

In advance of this undertaking, I feel that it is but due to you and to myself, to state that I have no acquaintance whatever, with any gentlaman, whose name appears in connection with this discussion.—Therefore, I can have no enemy to annoy, no friend to praise in any thing I may say respecting it. I am solely actuated by a desire to serve you. to whom I am under personal obligations, and the cause of Dental Science, a profession in which I am engaged. With these remarks introductory, I will now beg leave to state the order I propose to observe in the arrangement of my communications, and will then proceed at once, in as concise a manner as possible, to carry out the design.

In the first place, I propose to address you a letter upon each of your questions, as taken up and discussed by the society before named; giv-

ing the remarks of each member upon each question, with comments of my own upon these remarks, and then answers of my own to each of your interrogations. If in my examination of this discussion, I shall be so fortunate as to make myself useful to you, or aid in any way in establishing the claims of Dental Science, I will be content. I will then feel alike indifferent at the smiles or the frowns my letters may provoke.

"Question 1st.—What is the nature of that diathesis or constitutional predis-"position or disorder (if any) which so often occasions decay in the teeth of "our children?"—(*Drake.*)

"Dr. Allen opened the debate and remarked, that much of the decay in chil-"drens' teeth may he attributed to want of cleanliness, inducing a vitiated con-"dition of the secretions of the mouth. The too frequent and injudicious use "of calomel in the treatment of those diseases peculiar to childhood, is a cause "contributing much to this derangement of the secretions; and to the use of "this remedy much of the diseases met with in the deciduous teeth, may be "traced."

I would pass these remarks of Dr. Allen by without comment, were it not that he is a Dentist of some note, and a Professor in the Cincinnati College of Dental Surgery. His position, then, (if his opinions do not,) entitle him to some notice, and he shall not be neglected.—If the "want of cleanliness induces a vitiated condition of the secretions of the mouth"—a condition "that much of the decay in children's teeth, may be attributed to"—why are not all children's teeth affected alike from this cause, where cleanliness is alike neglected? The same cause would certainly produce the same effect in all cases, if there is no difference as to strength, or weakness in children's teeth of a consittutional type; and that there is no such difference in Dr. Allen's opinion, may be safely inferred, because he says nothing about it. Although the want of cleanliness according to Dr. Allen, induces much of the decay in children's teeth; yet this is not the sole cause of decay in these organs. "The too frequent and injudicious use of Calomel," he asserts, is another cause, and that "to the use of this remedy, much of the disease met with in the deciduous teeth, may be traced." Now "the too frequent and injudicious use of calomel in those diseases peculiar to childhood"—if this remedy be so used by the Medical Profession—is a singular, and astounding fact for a Dentist to discover, considering his usual want of opportunity, as well as qualification, to investigate such a laborious and intricate as ubject. But in regard to tracing much of the disease met with in children's teeth, to this remedy, I shall show it in the proper place to be an assertion, particularly doubtful. I will now call your attention to Dr. Ulrey's opinion.

"Dr. Ulrey cannot believe that there is a constitutional disease or diathesis "inducing decay; but agrees with Dr. Allen that vitiated secretions from the "administration of mercurials, prove very injurious to those teeth, and attri-"butes the early decay of the deciduous teeth to the neglect of cleanliness.—"Thinks, also, that sweatmeats, candies, &c., are very pernicious, and thinks "that the teeth of children raised in the country, and generally kept from the "use of such articles, better than those raised in the city."

Thus, Dr. Ulrey cannot believe that there is a constitutional disease or diathesis, inducing decay in children's teeth, but agrees with Dr. Allen, that mercurials prove very injurious, and attributes the early decay of children's teeth to the want of cleanliness. Is it not truly most morti-

fying, to perceive how little these gentlemen know respecting the pathology of this disease; neither of them appeared to be informed of the simple and notorious fact that the early decay of the deciduous teeth, which they would fain attribute to the use of mercury, more frequently attacks the teeth of children who have never taken a dose of this drug, than the teeth of those who have even taken it "too freequently and injudiciously;" this every medical man well knows. In regard to Dr. Ulrey's opinion of the pernicious effects of sweetmeats and candies upon the teeth of children, I have only too add, that it rings upon the ear more like a maternal dogma than an opinion of deep and truthful research; more I need not say. Dr. Fitzpatrick next addressed the society.

"Dr. Fitzpatrick would trace back the cause of decay in the deciduous and "also permanent teeth, to the chemical constituents of the teeth-bone. A de-"fectively organized tooth caused by an impaired secretion, cannot so well re-"sist the action of agents inducing disease, and sees but little differeuce in the "decay of children's teeth among the rich and poor. But, perhaps, the latter "have the worst teeth, and this may be accounted for because more neglected."

Now if I understand Dr. Fitzpatrick aright, he means to say that the reason some children have caries of the teeth at an early age, and others have not, depends upon sound or defectively organized teeth—the soundly organized teeth resisting the action of agents, inducing decay, the defective falling a prey to them. Now had the Doctor explained what these agents were that induced decay, whether constitutional or local in their character, he would then have met the question, As it is, we are lost in a labyrinth of conjectures—whether he means that the decay is induced from the want of cleanliness, the use of calomel, the partaking of candies, or some other cause not referred to by the society, nor expressed by himself. The next speech was made by Dr. Griffith.

"Dr. Griffith attributes the early decay of the deciduous teeth to the de-"composition of foreign matter about the teeth, believing a chemical agent to be "thus evolved which decomposes the tooth substance. He cannot, however, "decide as to the effect of temperament or a particular diathesis of the system, "finding good and bad teeth among those of all temperaments."

Now as the the early decay under consideration most frequently attacks the teeth of children who depend almost solely on the breast for nourishment, it is difficult to imagine the kind of decomposition of foreign matter to which Dr. Griffeth refers. He cannot mean particles of food; no, the very nature of a child's food at this time of life forbids that. He cannot mean the formation of tartar, for this deposite is scarcely, if ever, found upon the teeth of young children. He cannot mean anything arising from the "too frequent and injudicious use of mercury," for this drug rarely, if ever, terminates to the mouth of children so young as those in whom this kind of caries most frequently begins. I have, therefore, only to yield the point that the Doctor in his remarks has conveyed an infinite deal of nothing in a very few words. Now hear Dr. Goddard:

"Dr. Goddard does not think that they decay earlier, relatively, than the "permanent; that they full as well subserve the purposes for which they were "intended. He believes in cleanliness as the great preservative to children's "teeth, and enforces this in all cases; and with his own children it has proved "all sufficient, decay only commencing in one instance, and that between the "front incisors of his daughter; these he filed and they remained sound until "pushed out by the permanent ones."

As it is no uncommon circumstance to meet with children from one to two and three years old with decayed teeth, it is certainly very remarkable that Dr. Goddard "does not think that they decay earlier, relatively, than the permanent ones;" and still more remarkable that he should believe "in cleanliness as the great preservative to children's teeth;" a remedy which I fearlessly assert, never has nor never can be enforced in one child out of every thousand. Its practicability is, therefore, as ridiculous, as its pretended merits are worthless, particularly in regard to the prevention of the complaint now under consideration. This I hope plainly to show when I come to speak of the true cause and nature of the disease. Then spake Dr. Somerby.

"Dr. Somerby remarked that the free use of sweetmeats, candies, &c., is the "principal cause of decay in children's teeth. The presence of sugar induces "the formation of oxalic acid, one of the most destructive to the teeth. Many "of the candies are colored and prepared with very deletrious articles sufficient-"ly strong to exert an injurious effect on the teeth; but doubts very much if the "teeth are often injured when in a pulpy state, by febrile diseases."

Of Dr. Somerby's maternal-like opinion that "sweetmeats, candies, &c., is the principal cause of decay in children's teeth," I have only to say that it is not worthy of any serious comment. As reasonable was the old bachelor's theory—who declared that it was solely the too great sweetness of the ladies' lips that caused their teeth to decay! Just look at the idea of "sweetmeats, candies, coloring matter, &c., being the principal cause of decay in children's teeth!"

Dr. McCullum's remarks are the last I shall quote.

"Dr. McCullum thinks that the first primary cause is hereditary, and that the "child inherits much in this way from its mother; and that the mother laboring "under disease cannot impart to the child firm and compact osseous structure. "The second cause he regards as the too frequent periods of taking food. The "saccharine matter forms an acid in the stomach, this is taken into the circula-"tion, or through the stomach to the teeth, and decomposes them. The teeth of "children have less earthy matter, hence are more easily acted upon by agents, "and decay faster. The food when taken into the stomach too frequently under-"goes fermentation, and thus is unfit for nourishing the system, or supplying "material for a good osseous structure."

Dr. McCullum is mistaken when he supposes that the premature cause of decay in children's teeth is hereditary. The decay often shows itself in children whose parents have never been sufferers from anything *like hereditary disease of the teeth*. Nevertheless, I am free to admit that there is such a thing as hereditary decay of the teeth. To the second cause he assigns—that of taking food too frequently—he should have added in taking food in too large quantities; thereby injuring the digestive organs, impairing the general health, and inducing vitiated secretions of all kinds. Then he would have been more near the mark than any opinion yet given by the Society respecting one of the remote causes of this disease. I have now noticed fairly and fully *as reported*, every relevant remark made on your first question before the "Mississippi Valley Association of Dental Surgeons," and upon a rather careful analysis of the same, you will perceive that the Society gravely came to this conclusion, if a conclusion it may be called, "that the causes of decay in the deciduous teeth of our children" are NON-CLEANLINESS, CALOMEL AND CANDY; unfortunate, very unfortunate for

the Dental Profession, that such an opinion should emenate from such a body of its professional men.

I now come to the second object of this letter, that of attempting an answer to your first question, which, according to my understanding of the subject, the "Mississippi Valley Association of Dental Surgeons" have utterly failed to give. In making this effort I shall be very brief. I shall content myself by simply stating facts, without entering into any minute details.

The strict interpretation of your question embraces an enquiry into all kinds of decay to which the deciduous teeth are liable. Now as there are two prominent causes of this kind of decay in the temporary teeth—causes which differ from each other both in their nature and the time of life at which they commence—it is important, therefore, that they should be here referred to. The one is almost identical with the prevailing cause of caries in the permanent teeth, and usually commences its ravages in the molars, and that about the fifth or sixth year of the child's age. The other may be said to be *sui-genus*. It shows itself most frequently in the incisors, and is liable to commence at any period, from the time the teeth first show themselves through the gums up to that when dentition is fully completed. Believing that your inquiries were intended only to embrace the last mentioned cause of disease in the deciduous teeth, I shall therefore confine my answer solely to a description of this cause; deferring all further notice of the other until I come to reply to your second question respecting the premature decay of the permanent teeth.

The "diathesis, or constitutional predisposition, or disorder, which so often occasions decay in the teeth of our children," is remotely constitutional in its nature, and appears to partake both of a scrofulous and of an acquired vice:—of a scrofulous vice, because it is most prone to attack the teeth of scrofulous subjects:—of an acquired vice, because the general system must be likewise much impaired for a shorter or a longer period before the immediate cause of the caries of the teeth is induced.

The immediate cause of the decay is a malignant ulcer, most generally peculiar to the gums, but occasionly attacking the cheek.

The ulcer is most liable to occur at three particular epochs of a child's life, and appears to increase in malignancy with the child's increase of years.

The first period, and most common and mildest form of the disease, occurs during the cutting of the incisor teeth. It sometimes commences with the first appearance of these teeth; sometimes not until they have all acquired their full length through the gums.

The ulcer is generally confined to the extreme edge of the gums, revealing only a small light, ash-colored, zigzag line, so small that it is rarely detected by either physician or nurse. Upon a close examination, the edge of the gum will be found separated from the teeth, and the body of the ulcer plainly seen between the edge of the gum and necks of the teeth.

The gum reveals but little signs of inflamation, is not very sensitive,

and may remain in the condition just described several weeks without any material increase or diminution of the ulcer.

The teeth become slightly loose, rough and dark colored, and are finally more or less destroyed, depending on the virulency and duration of the ulcer. *It is this form of the disease that occasions so many children to have dark colored, decayed, and broken off incisors, from the age of one year and upwards*, while the molars may be sometimes entirely sound. This form of the disease has never, before, so far as I know, been described.

The second period that the disease occurs, but much less rarely than the first, is about the time of cutting the molar teeth, and is sometimes very malignant. The ulcer usually appears on the gum at a point where a tooth is about to penetrate, and proceeds to a greater or less extent, often around the entire dental arch. The disease may appear in its mildest form, and run only along the extreme edge of the gum, or it may involve the greater portion of both the gum and alveolar process, loosening the teeth, turning them dark and softening them, as though they had bean exposed to the strongest acids. This form of the disease has been occasionally observed and described.

The third form of the disease is fortunately still more rare, but fearfully fatal. It usually appears during the shedding of the temporary teeth, and although always commencing on the gum, it rapidly extends to the cheek, often destroying both jaw and cheek, as well as the life of the patient. This form of the disease has been described by medical writers under the name of *cancrum oris*.

All three of the forms of the ulcer just described are liable, and have often been mistaken, for the effects of mercury. But the sharp, ragged, yet well defined edge of the ulcer,—the excoriating and corroding effects of the discharge—the slight tumefaction of the gums, and the terrible feter of the breath, even in its mildest form—a feter having nothing of the odor of that arising from mercurial salivation,—are characteristics sufficiently marked to say nothing of the roughness and discoloration of the teeth, to prevent any mistake of that kind, if closely observed.

I trust I have now pointed out to you the prominent cause of "the early decay of the deciduous teeth of our children,"—*a cause that is generated somewhere in the general system, and not in the buccal cavity as advocated by the "Mississippi Valley Association of Dental Surgeons."*

In due time, I shall do myself the honor of addressing you again upon the subject of your second question to the Society just named, and believe me,

Dear Sir,

Very Respectfully, yours, &c.,

SCRUTATOR.

NATIONAL LIBRARY OF MEDICINE
NLM 04140022 7

ARMY
MEDICAL LIBRARY