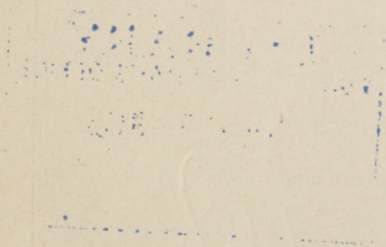


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ADDRESS

DELIVERED BEFORE THE

HARVARD ODONTOLOGICAL SOCIETY,

AT ITS

FIRST ANNUAL MEETING,

HELD AT THE

REVERE HOUSE, BOSTON,

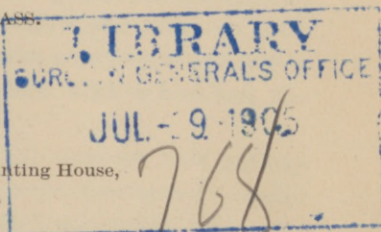
JULY 2d, 1879,

BY

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OF BOSTON, MASS.

—
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ADDRESS.

Mr. President and Fellow Colleagues of the Harvard Odontological Society :

We gather here to-day to celebrate our first anniversary. A more than usual interest have we in this our annual meeting, for besides the object of comparing experience, to which our monthly and semi-monthly meetings are exclusively devoted, we have to-day a desire to unite socially, and with feelings mutual, free from all thoughtful care, spend an hour in joy and festivity. Yes, we feel like shaking the fraternal hand with a firmer than usual grip, a grasp at once suggestive of all that is past in the history of this society, even bringing us back to the days of college associations, when at the *alma mater*, on the same benches and at the same chairs, we were taught together the theory and practice of this our chosen calling.

Kindred thoughts and such as are more intimately connected with the history of this society are all reflected in our memory to-day when we set down to the social table. For it is with fraternal feelings towards one another and with a filial affection towards our profession, that we look back to one year ago to-day, when yonder, on that warm July evening, five of us congregated and organized this society, in order that we may have an organization in which we could meet and bring with us the thoughts and ideas our daily labors evolve to weigh them in the scales of criticism and follow co-operative experience, and find out how high or how low the heavy weight of truth measures them.

If we look back on the year gone by, consider how enthusiastic and eager some of its originators were, and further consider how many and manifold the thoughts of each member have been du-

ring the past year in producing the essays and expressing the opinions; if we reflect on all this, we see that the first cycle of our existence as a society, has been one composed of immense minor individual impulses, which were all recorded to make up this its first epoch. Our record of the past year I think is indicative that we have combined in this society material which promises productions that will be of real benefit to our profession. For it was the sincere wish and hope of the originators of this society, that it might be a scientific body, whose deliberations should be interesting and instructive, ever pressing onward towards that stage of professional perfection when all ailments that come within our special domain can be, if not entirely prevented, at least more efficiently treated.

In order that we might stand on a more equal footing, we have limited our membership to those only who have a professional collegiate education and who are graduates of the Dental Department of Harvard University, the dental school which is acknowledged, and by right, as the one occupying highest ground in required dental education. Let each member then do his best in order that our expectations may be realized.

As a profession we are eagerly interested in the welfare of the human race, for the special department of the healing art to which we are devoted treats many woes; we are called upon many a times for the alleviation of suffering, as much of the happiness of an individual depends upon the condition of his teeth.

From infancy, with its characteristic metabolism, to old age, when the metabolic activity is least, the teeth play a very important part in the human economy. Take, for instance, an infant of seven months of age when dentition begins, and follow it to the age of fourteen years, when it is, with the exception of the third molar, completed, and then notice what a change takes place in the time covered by dentition. It is during these years that the whole physical and mental organization undergoes the most marked changes. At its beginning the embryonic habits are laid aside, and with its completion the individual has arrived at maturity. It is during those years when our services are of most importance, in the way of preventive as well as curative treatment.

I said, much of our happiness and physical welfare depends

directly and indirectly upon the conditions of the teeth. Take, for instance, a child of the age of three or four years, when decay of the teeth so often, yes rather generally begins, and let it be without the proper attention of a competent dentist, what a disastrous, lamentable and unjust condition will it produce, how much suffering, how many sleepless nights, to both child and parent, inability of attending school and general incompatibility of promoting and enjoying the happy days of childhood. And all this is due to carelessness and ignorance. What a different picture is presented to us when parent and dentist do their duty, when proper attention is given to the deciduous teeth and proper and sufficient food is provided for the system to perfectly form and put into position those organs which form, so to speak, the gateway of this our body, and which are brought to view by every motion of the tongue and lips. How unfavorably are we impressed by the very sight of an individual whose teeth show the marks of carelessness and neglect, how unsightly—for did not Ovid write :

“ Let not the nymph with laughter much abound,
Whose teeth are black, unsightly, or unsound.”

How different though when they show signs of care and personal pride, when enamel clean, perfect, highly polished and white, shines among rosy lips like diamonds in the sunlight.

It is as if the very soul and inward purity were shining through them.

As a profession we are rapidly progressing, our services are more and more becoming necessary to all civilized mankind, and though but a century old, we have passed through periods of constant evolutions, and our field of operation is ever widening. In such a calling no one can enlist for a successful career except he be by nature a progressionist and student. Operating upon complicated, delicate, precious and sensitive organs, and coming in close contact with our patients, we should be skillful, cultured and high toned gentlemen. Nothing unclean, nothing rude, nothing unsympathetic; constantly acting and administering as true physicians, looking towards the dawn of that day when human misery and suffering will be much more counterbalanced by mental ease and physical perfection.

Our profession must in future look more towards preventive treatment, and here a most difficult and delicate act is to be performed, one requiring all the qualities of a true educated gentleman. For purely preventive treatment must go far back, antedating birth, conception, marriage. We must give suggestions and instructions to mothers of young children and to young women themselves, and in this way the ideal dentist, the one true to his high duty and alive to the interests of his race, can accomplish much. Nor can we approve that wrong system of education which indulges in premature and excessive mental activity at an age when physical development should be the prime, if not the only consideration, and which is so much the direct cause of dwarfing bodily growth and enfeebling the special organic functions, making the ill-shaped bodies with their unsymmetrical trunk and disproportioned extremities.

This fatal indulgence of emotional prodigality is a most lamentable wrong to which the present generation is subjected, and shows itself very plainly in the effect it has upon the whole body, forcing it to a decisive deteriorating differentiation, very plainly noticeable in dermal structures like the teeth and hair. But in order to do all this, we must be qualified, and must understand the governing laws of health and development, histology and such important questions as food, habits, intermarriage, etc.

Our curative treatment must also begin early; the average American born child will need the services of a dentist at the age of four or five years, and from thence till past the meridian of life, if not up to death, is in need of his services five times to that of one of a physician. This, with the fact that there are about 15,000 practicing dentists in these United States, gives us some slight idea of how much time, labor, thought and money there is expended for the conservation of the dental organs. But still much remains undone, many teeth remain unsaved and succumb to the unscrupulous dentists' cold steel and force. The last ten years have seen a great improvement in the unnecessary application of the *forceps*, and the coming half score of years will see a still more conservative use of that fatal instrument from which there is no resurrection. Any

tooth or part of a tooth that can be restored to comparative health and comfort, is worth saving, and among my most appreciated operations, as well as most satisfactory to myself, has been the restoring to health and comfort of roots, where the patient had anticipated that nothing but extraction could be resorted to.

The future Dentist, besides perfecting himself in the preventive as well as curative treatment, sees also eventually, and not in the too far future, a further enlargement in his calling, by bringing within his sphere the whole domain of Oral Surgery.

And, gentlemen, besides being deeply interested in the minute microscopical structures of the different tissues of the teeth and their immediate surroundings, we have also a vital interest in all biological sciences.

It is yet too early to conceive and clearly understand facts, which tooth structure or its correlative is able to tell in the long history of evolution of animated beings. But the fact strongly stands forth, that tooth structure, tooth arrangement, and with it the whole masticatory apparatus are among the first, if not the very first, in which is perceived a modification, either individual or general. As scientists and specialists of the oral cavity we cannot afford to be ignorant nor disinterested regarding the tales those very organs can tell which we are called upon, and which it is our duty to preserve. We have in tooth substance, as presented to us in the human being, a complication of phenomena of vital energy belonging to the highest and most complicated kind, a perfection of nervous, vascular and hard structures, which, when compared with the simplest forms of life, have passed through an endless long period of differentiation. But in whatever complicated form this same vital force is presented to us, whether in the form of nervous filaments as fine and delicate as those of a tooth-pulp, or as complex in functional ability as that of human brain substance, we see always in it the same simple molecular dynamics, with an endless variation of form and functional ability.

There is a wide difference of form and conditions in animal organisms in which nervous structure and function exist. The Med-

usae or jelly-fishes, which are the lowest and simplest form of animal life where nerves have been traced and where nerve function is eliminated, differ very widely from that highest of all animals, man, in whose body nerve function is in its highest and most complicated form.

You are all familiar with these jelly-fishes, their body resembling the dome of a mushroom and constituting what is called its swimming-bell. By the contraction of this swimming-bell and the ejection of the water from its open mouth backwards and consequent reaction, the animal is propelled. In this contraction and dilatation, in these swimming movements, systole and diastole follow one another with as perfect a rhythm as they do in the beating of a heart. And from this jelly-fish, the lowest and simplest form of animal in which nerves have been traced, to the highest and most complicated nervous mechanism there was an endless differentiation of form and functional activity growing and developing in the direction they are exercised, for nerve centers grow and develop always in directions in which they are exercised. So we see that in man whose nervous mechanism is superseded by the brain, there exist a regular neural current, a molecular propagation, afferent and efferent, traveling at a respective velocity of about 130 and 140 feet per second.

The more recent investigations upon the hard structures of the teeth show them in a much more close relation vascular and nervous than has heretofore been thought of, and why is this not so? Why should organs who are the instruments of a most powerful and ever active set of muscles, and which prepare most of the material necessary for the building up and supply of wear and tear of this, ever active machine, our body—why should they not be in close connection with their immediate surroundings as well as the whole organism? If this was not necessary, if there did not exist in and between the structures of the teeth a free interchange of those vital unctions carried on through the vascular and nervous systems as well as through each protoplasmic mass, if this was not so, there would not be closed up in each tooth that highly vascular and sensitive little organ, the tooth-pulp, which like the brain is at each

heart's beat lifted heavenward, and in which I have seen three times to my recollection the rhythm of cardiac systole and diastole as clearly and distinctly as it can be felt at the radial artery.

Under such conditions it does not seem strange at all that systemic and local affections leave traces in the teeth, when they occur during their development, as well as that they should be effected afterwards by disease, nor that carries, at least when it reaches dentine or cementum, is much more than a simple chemical process. For who can tell, of what struggle there is going on in the cells or protoplasmic masses of tooth structure, when its surroundings are abnormal enough to dissolve calcified lime salts.

The highly sensitive conditions, in which dentine, cement, yes, enamel at times are found, show a high state of ability for conducting pain by vibration, as well as by actual channels of sensation, and this I am convinced, can exist long after the life-pulp ceases to be. The variable degree of sensibility of tooth-bone in different persons and in the same person at different times, all suggest a close relation with the nervous and nutritive functions of the whole body. The diseases and accidents then to which the teeth are liable demand from us, in order to intelligently understand and best treat them, a broad knowledge of all biological science, of everything pertaining to life, and life governing laws, as well as a high ability in delicate manipulative work.

All this is demanded from us in order to work successfully upon life and precious material. A vocation requiring such qualities, is necessarily laborious, taxing both mental and physical powers. Under such conditions it becomes our duty, both as to ourselves as well as to our patients, to keep in good health, that we may be able to perform the work we are called upon, to our best ability. In order to do this we need a healthy body, a clear head, a steady hand, educated and refined manners. For a man is judged by his looks, from his sayings and by his doings. As dentists we should have combined in us the real qualities of educated gentlemen, and the ability to converse on other things than those relating to our occupation. There is a time for business, there is a time for pleasure, there is a time for professional talk, and there is a time for social talk.

I was once asked by a friend whom I usually met at dinner,—“Doctor, I never hear you talk about teeth or Dentistry!—Besides telling him the narration about Curran, the noted Irish lawyer, who boasted that he could tell any man’s occupation by a fifteen minutes conversation, and who one day so skillfully detected that cultured and well versed tailor by the use of the word “skirts,” in an expression regarding a transaction which, as he expressed it, “had taken place on the skirts of Flanders,” when Curran exclaimed: “Sir, you are a tailor; for a gentleman of any other occupation would have said borders instead of skirts,”—besides telling him this I said, “No sir, I seldom talk about Teeth or Dentistry outside my office, unless I am questioned about it, for I consider that there is a time and place for everything and as it would not be becoming for you, as a Theologian to talk always on Theology, so would it not be becoming for me, as a Dentist, to always talk about Teeth or Dentistry.” In reply he said, “You are quite right, sir.”

Everywhere, in every station of life, in whatever occupation, the individual selects for himself a social position in accordance to his mental refinement and education. In Sociology as in Biology, the highly organized, the ideal, is only reached gradually through a long process of differentiation. This holds true to Sociology generally as well as to our Society in particular. In everything that changes, in everything that progresses, in everything in which there is evolution, in the animal as well as social kingdom, there must be retrogressive as well as progressive movements. For we do not always find a uniform rate of advance, but rather a succession of cycles, a rise, culmination and decline of higher and still higher dominant functions, principles, ideas, etc. As for instance in the individual human organism, there rise, culminate and decline, first in childhood, the nutritive functions, than in youth and early manhood, the reproductive and muscular functions, and lastly, in full maturity, the cerebral functions. Or take the whole organism of an individual’s life, and we have three great cyclical events, first, infancy and childhood with its characteristic metabolism, then maturity and middle age with its comparative stationary period,

and thirdly, old age with its well known gradual decline of all the functions.

In the development of the mind, there rise, culminate and decline, first, in childhood, the perceptive faculties and the memory ; then in youth and young manhood, or even beyond, the faculty of productive thought ; and finally, only late in life, and if life has been noble, the moral and religious nature.

We can see a somewhat similar development or mode of progress in our profession, if we take in consideration its history, for here again do we see that beautiful relation between Biology and Sociology, here again do we see not so much a uniform rate of advance, but rather a succession of cycles or periodical evolution, an advance of radical ideas, a practicing of distinct radical methods, at different times. To show this, it will here be only necessary to call to memory such methods and ideas as the extraction of each alternate tooth, the permanent separation of the teeth or so-called "Arthur method," the extensive or almost universal use of cohesive gold, the use of heavy mallets, either hand or automatic, and last the "New Departure."

All these have their time, their rise and decline, their advocates, virtues and defects, in not one of them do we find the perfect, the ideal, it remains for us to select the best for each individual case, is remains for the clear mind, the careful, firm and steady hand to select and apply that which ever is from the condition of things indicated. To be able to do this is not always an easy task, for instance, to tell with certainty when, and at what particular time in a certain case it would be best to extract the first molars, requires a broad knowledge, one must be able to fully comprehend the present conditions as well as to foresee what is likely to follow.

Every operation that we are called upon to perform, however trifling it may seem to us at the time being, deserves our most thorough attention, and in order to be able to give it that, we must be in good bodily and mental health, we can not do too much in a given time, nor work too many hours in one day, for inasmuch as our calling is an exhaustive one, we must have from time to time

rest and sleep,—the same condition which every animated being, possessing a well developed nervous system, is in need of. For among the shorter or longer cyclical events, the ever recurrent periodicities of this our body, none are more necessary than rest or sleep, its salient feature being the cessation of the automatic activity of the brain ; it is the diastole of the cerebral beat.

On occasions like to-day, it is becoming and pleasant to reflect and consider ; to take from some high elevated point a view that will command a consideration of things that have once been, of things that are at present around us, and of things that are yet in the future, that are yet to come, and of which we know nothing except that we may be able to see faint reflected shadows, the mere ghosts as it were, of things that perhaps have once been, but that are going to be again presented to us in endless form and endless variable conditions and circumstances, in endless variable time and space. For there is nothing new in the whole universe, not one atom more nor one atom less, not the least deviation in nature's laws from their prescribed sphere, everywhere, at all times, the same attraction and repulsion, the same law of gravitation, the same molecular dynamics.

Taking such a broad view from a professional standpoint, and comparing the past with the present, forgetting minor and to be sure numerous and often radical changes, not always for the best, what do we see?—A grand and constant evolution, a steady, grand upward march in our profession, from a mere, yes almost disreputable trade to a high-toned, noble, liberal profession and art.

From such a view one can forget the minor, the disagreeable, the difficult and the unappreciated. For we cannot expect that all our patients can always fully appreciate a difficult and nice performed operation, for it is in proportion that we understand the circumstances that we can appreciate corrected conditions.

But, Fellow Colleagues, let every one of us, in his own mind, take courage, never allowing himself to fail in his sense of duty, ever administering to our patients to our best ability and with kind and sympathizing feelings.

For truly, our professional horizon, throughout our large land as well as in foreign lands, has never been more fair, the number of bright stars never more numerous, our professional atmosphere never more healthy, and in the public mind our professional services never more highly esteemed. With such facts before us, who will quiver? Who will hesitate to keep in the front rank in that onward march towards perfection of professional ability, which has for its high object the alleviation of human suffering and the conservation of one of the most useful and beautiful set of organs the human race is endowed with.

In selecting me, Mr. President and Gentlemen, as your first Annual Orator, you have honored me to a degree and position for which I thank you most heartily. Let me ask of you to accept the foregoing, imperfect as it is, in as good faith as it is intended, and allow me to close this Address with the sincere wish and the hope of my heart, that the Harvard Odontological Society of Boston may prosper and be a scientific body whose motto shall be

LABORAMUS.

