they will be able to recognize a very fatal malady in the infancy of its career, when there is hope of checking it before it reaches that almost hopeless condition now known as Bright's disease, and that you will be surprised many times to find that cases which you, or other doctors, had been treating for other diseases, pass after careful examinations and treatment into the second and third of these classes, and will by proper attention get still better, and after a time entirely recover. On the other hand, you will be equally surprised to find that patients you had been treating for dyspepsia, anæmia, or nervous prostration, will begin to pass albumen and casts, and be horrified at the knowledge that your patient has at last chronic Bright's disease.

THE EDUCATION OF THE DENTIST, YESTERDAY, TO-DAY AND TO- MORROW.

Read at the Joint Meeting of the American Dental Association and the Southern Dental Association, at Louisville, Ky., Aug. 29, 1888.

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It does not require a Methuselah to look back to the birthday of Dentistry. She has made such rapid strides forward among the sciences, that, though comparatively young, she demands and receives recognition at the hands of the most erudite. Her ranks are filled by all kinds and nationalities of men, who have all varying degrees of natural fitness. But there was a time when this Cosmopolitan condition did not exist. Then the field was new, and filled almost entirely by uneducated men. There were, however, a few daring souls, who appreciated its importance and who felt an impulsive urging from within of a bias for its special duties and demands. They were the self-elected leaders of a forlorn hope, as it were, and did not expect much but hard work and poor appreciation of their services. But like Gideon's little band, they were filled with that indomitable determination to succeed that almost always wins the battle, tunnels the mountain, or gains the victory of any kind. Conversely to a survival of the fittest, they were the fittest, volunteering themselves to do or die in a chosen life-work.

The point I mean to make, is, that each candidate for the then questionable honor of being a dentist was, by reason of his self-election, generally equipped with a special aptitude for dentistry. There were exceptions to this general rule, doubtless, but they were only sufficient to prove the rule, not invalidate it. The outcome was so uncertain that each applicant for the then questionable honor, determined his fitness by a thorough investigation of his own powers, and then fully consecrated himself to his work. Each

filled his own proper niche in life. Each had a single purpose and was devoted to his cause. Each was willing to work in the very face of poor opportunities to learn, and poorer facilities with which to work. It was by dint of effort often repeated, and against failure as constantly recurring that success was at any time to be achieved. General education was rare, not the rule. Professional generosity was not born, and narrow-minded jealousy stood ready to kill the inquisitive learner. And it was not strange that each was so niggard with his hard-earned store, when we remember the daylight was not broad, but only the dawn threw its uncertain beams upon them. Our Pilgrim Fathers constantly carried their arms against the ever possible attacks of the destroyers; so, these, our professional fathers, guarded their small secrets and jealously kept them against the treachery of others, as they understood it. To be sure, it is not our way, but the customs of that day and this differs widely, and the sun of professional generosity had not dispelled the mists and fogs of ignorance that still obscured the landscape. In the light of the present they appear almost contemptible, and would be so, but for the extenuation, found easily in their different surroundings, which puts them within the pale of a generous charity. Let him, who would have been better under the circumstances that enthralled them, cast the first stone. I do not condone the fault, but I demand, a fair and right, considerate, not to say lenient, judgment for the doers.

And yet they need no defender. They did too much, in the very face of confessed disadvantages, to make the foundation upon which we of to-day stand, for us to deny them credit, or refuse to be grateful. The perfection of an invention is certainly very commendable, but while we honor the perfecter, we must not lose sight of him who conceived the idea from which it grew. Those honest-hearted ones held firmly to their convictions, and dared to promulgate them with their whole lives. They irresistibly command our respect. The world in its ignorance denied the necessity for their work and refused, except from the direst need, to allow them a chance to prove its value. Against the tide of these and all other opposition they urged the bark of dentistry into the haven of respectable recognition. It was a struggle, in effect, like that of the Colonies for Independence, against Tory doctors within the scientific world, and all the opposition from without combined. We have much for which to thank these foundation builders of the past, and we would be recreant to all professional heredity to refuse it. They developed appliances; we use them. They founded colleges of special learning; we are the learners. They questioned all methods and put infinite pains upon each; we are easily able to select the best for each case. They were

the garnerers; we the feeders that live upon their grain. Thus in all things the planters of yesterday feed the open mouths of to-day.

The dentists of to-day are the legitimate result of their determined adherence to principle. We stand so nearly related to them that we are necessarily the objects of their benefactions. We deserve no special credit for being even better than those of yesterday, for we can easily obtain the benefit of their work without a tithe of their labor. The sun of scientific enlightenment has revealed the fact, now fully recognized and conceded by the scoffers of the past, that dental science is necessary to the world, and the profession itself is just as reputable as any of the so-called "learned ones"—that is, in fact, one of the learned ones. The world admits that dentistry is a branch of the general healing art, without reference to its being or not being a specialty of medicine, and as such is entitled to all consideration. I cheerfully give the meed of praise to the dentist of yesterday, who, as he was in many instances uneducated, suffered from a narrow view, yet who carried within him the sign-manual of the Creator, manifesting itself in a special aptitude for the work. We, of to-day, do not flatter ourselves unduly by claiming that, with like careful selection, and better facilities for preparation, we can show greater advancement. But there is a trouble engrafted on us as a body professional, the consideration of which brings us to consider the dentist of to-morrow, namely, that the painstaking, introspective, self-examination, is not practiced in the selection of dentistry as one's life-work, as it was formerly done. It is too often the case that the idea of great emolument (?) proves the allurements, and the question of natural fitness is not even considered, much less settled. In other words, too many men are dentists (so-called at least) without self-election, in the sense of being naturally fitted for the work. One becomes a dentist because his father was a dentist, and he loses sight of the fact that heredity has stamped him his *mother's* boy; another becomes a dentist because a boy friend, who is unusually well fitted for it, is succeeding, although he may be entirely incomparable to his friend.

Dentistry now on a plane with other professions, must expect to suffer like them from the entrance of ill-advised votaries, enticed by adventitious inducements. It is an irrefutable fact that men are to-day forging ahead in the professional world by dint of main strength, where pride and intelligence are backed by fair cultivation, who would evince the grandest human ability in other vocations. It is a pity that inherent power should be misapplied. This could not always be prevented, but judicious selection, based upon mature consideration of character, should be the highest duty of parents. The pride to be this,

that, or the other, developed prematurely in a child, should be most sedulously avoided. Too much care can not be expended to ascertain the trend of the composite inheritance of a child. Pride of station and ancestry should be overcome in the all-important selection of a thoroughly congenial and compatible life-work. The most earnest scrutiny should be kept upon the formative forces bearing upon the child, so that they are not allowed to prove deformative processes, to warp a splendid success into as splendid a failure. The children of any profession are the natural recipients of any hereditary qualification for that profession, but we must not lose sight of the fact that the flow of hereditary is deflected and often changed entirely by the other side of the family. Hence, no invariable rule can be set to govern people who are not invariable. All of Phrenology may not be true, but enough to prove its general truth is found in human faces, built upon substantially the same anatomical bases and with parts that differ but slightly, and yet how different! None can doubt that different men have different qualities of mind as well as different faces, and that, therefore, they are better fitted to pursue some profession than any profession, to advantage. And yet, there is a general intelligence that enables some to follow almost any profession with credit, when faithful application is made. Such men may be thrown out of the channel best suited to them, and, still, against a natural bent, they develop success out of failure. None will dare to deny, however, that they would have done more, gone higher, or reflected greater luster on themselves in that calling that satisfied their whole nature than the work in which they had been perfunctorily engaged. If this is true, then the special work of dentistry offers the best field for some of the diverse minds of the world.

These very ones I commend, out of which to make the dentists of to-morrow. They are Heaven-elected dentists, if they properly qualify themselves to discharge its obligations.

The profession should demand three things to be done, one by them, one by itself and one by the schools. *First*, demand that a broad foundation of primary education should be laid, as preliminary to all other intellectual preparation. I go back of professional training in this and demand the same educational qualifications that the most learned profession ever demands. To prepare for law, they search all fields of educational lore, drink at all fountains of knowledge, and then put on a capstone of law. Just such a course, I claim, is best, if not always possible, for a dental student, and even more important, since the issue of life and death is, at times, in his hands. More is demanded of the studenthood to-day in all branches than ever before, and dental students must expect exactions commensurate with any other. Minds trained primarily and cultivated

persons, added to that trend of character that is the natural qualification, should be considered the *sine qua non* for correctly prepared dental students. Trained minds, that they may bring skillful intelligence to work out the conceptions of our high and progressive science; and cultivated persons, because our intimate personal associations demand that we be agreeable in necessarily painful duties. Such only would rise to the highest conceptions of our future. The beginners are on an average too crude from which to obtain the best results. They deem themselves well qualified to meet all requirements, when they decide to honor our profession with their patronage. The will is essential, but not all-sufficient. The day has come when better methods must prevail. Years ago, it was excusable to commence the study of dentistry without a proper foundation, but I insist that such a course is not up to the requirements of the times. A log cabin or a wigwam might be built upon the level earth, but a Washington Monument, or a Liberty Enlightening the World, must have a deeply laid and a well constructed foundation. Dentistry of to-morrow must over-top dentistry of to-day, and the basis must be deepened and broadened as the top goes upward. To do this the profession must awake to its responsibility and actively demand of our dental schools that they shall be more exacting as to a suitable preliminary education of their matriculates, and that they shall provide the means necessary and demand of their students a broader and more thorough knowledge of the fundamental sciences of medicine and surgery, before graduating them as Doctors of Dental Surgery.

Second, one by itself, and that is to establish a higher, better moral tone. The old idea that what was good enough for my father is good enough for me, must be supplanted by a more progressive, a more enlightened view of our calling, and the essential factors that constitute its higher standard. Such a revolution can not be accomplished in a day. Harvest is always preceded by a preparation and proper seeding, and a long time of patient waiting. But it ought to be done, it must be done, if we intend to rise with the tide of the general progress of the hour. Each dentist must become a radiant center of elevated moral tone, be the circle that surrounds him great or small.

Third, one by the schools, which must assist by a sensible elevation of the standard for entrance, a judicious extension of curriculum, and a more rigid demand for thoroughness before conferring degrees. Cast iron regulations can not avail, because the modifications at any point are not identical or comparable to those at any other point. Ends must be aimed at; means will take care of themselves. Let the sentiment be unanimous and utterances conform to it. The moral backing

thus developed will engender courage to begin the revolution. Be assured, it can not be wrought by chance, and indifference will result in forging more indissolubly the fetters that bind us to the traditions of our past. Schools can not do more than reflect the impress of the profession in the aggregate, as seen upon the collected pupils from all sides. Let every dentist constitute himself a committee of one to properly prepare one student. The great rolling river is just what its tributary springs make it, and dentistry will be elevated or depressed by your efforts and mine. It behoves us to rise to the emergency and do our best to discharge the obligation that we assumed in the marriage vows of our high calling. It is unquestionably essential that the schools shall be more thorough, but our duty lies back of their work. We have one responsibility and we must act, we must work, or die out of the way of those who will.

MEDICAL PROGRESS.

EFFECT OF COFFEE ON THE URINE.—DR. DUMONT, of Louvain, has undertaken a series of researches on the effect of coffee drinking on the urine, from which it appears that, though the diurnal quantity of urine is not seriously interfered with, the composition undergoes a very decided change. Dr. Dumont kept the subjects of his researches for some days on ordinary diet, the constituents of which were determined. During part of the time only was coffee added, the quantity being three cups—corresponding to about two ounces of roasted coffee—per diem. By regular and careful analyses of the urine, it was found that during the days when coffee was taken the urea passed was increased by about seventy-five grains. The effect on the urea was produced immediately the coffee was commenced, and as soon as it was omitted the quantity of urea returned to that which it had exhibited previously.—*Lancet*, Sept. 29, 1888.

ARSENIC IN RHEUMATOID ARTHRITIS.—DR. WILLIAM OSLER recommends Fowler's solution in initial doses of five drops three times a day in the treatment of rheumatoid arthritis. This dose is gradually increased to the limit of tolerance and then held there, the effects of the drug being carefully watched.—*Medical Record*, November 24, 1888.

ANTIPYRIN IN LARYNGISMUS STRIDULUS.—MR. MONTAGU PERCIVAL, of Waratah, Tasmania, reports successful results in 24 cases of laryngismus stridulus treated with doses of from 2 to 5 grains of antipyrin every hour. The cases were due to sudden changes of temperature, with damp winds.