and doctor alike; the doctor unskilled in locating abnormal conditions of the mouth, the dentist uninterested in the remote manifestations in the body of the patient. That humanity should so unnecessarily suffer from the maladjustment of medical and dental education is a serious reflection upon the intelligence of these professions.

Medicine and dentistry should no longer be divorced. Dentistry should at once take its place as a part of the science and art of medicine and should be practiced as a specialty. The intelligent consultation of doctor and dentist would remedy the evil; but no consultation can be intelligent until those consulting have a common ground on which to stand—a medical education.

The ideal dentist should be not only a graduate in medicine but one of hospital or practical experience extending over one or two years before actively engaging in the special work of his profession. He should have become familiar with pathologic conditions, not only in the mouth but in the body generally. His clinical training should be such that he can discern the effects of reflex irritations on the system as well as the results of infections on the patient generally. In fact he should have so comprehensive a knowledge of practical medicine that he can diagnose disease with sufficient accuracy to refer his work to its proper field in medicine, and then by his consultation and co-operation contribute materially to the welfare of his patient. But ideals are not easily attained. Still, we may always aim high, and while waiting for the advent of ideal education, may encourage the coeducation of doctors and dentists by bringing together medical and dental students in one institution and requiring the same course of instruction in the fundamental branches. We may offer the dental students the advantages of attendance upon medical and surgical clinics and gradually weave into their course those studies of the medical curriculum best adapted to broaden their education, until finally we may evolve the ideal dentist, the peer of any specialist in medicine.

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IS MEDICAL EDUCATION A NECESSARY QUAL-IFICATION FOR DENTAL PRACTICE?* BY R. R. ANDREWS, D.D.S. CAMBRIDGE, MASS.

At the dental section meeting of the American Med-ICAL ASSOCIATION, in Baltimore, some years ago, while speaking on the subject of dental education, I strongly advocated the formation of a medical university, an institution that should educate men in medicine, and have all the chairs necessary to thoroughly teach any specialty that the student should elect; and that there should be taught those principles which should give to each of its graduates the old and honored degreee, M.D. I can conceive of no reason why this idea might not become a reality in the presence of a noble enthusiasm for real progress. An undergraduate from Harvard elects his necessary eighteen courses, with the exception of the few required, distinctly different from another man in the same class, and yet both receive the same degree, that of A.B. This is practically true in the department of science, where he receives the degree of S.B., yet he may have specialized in chemistry, in engineering, or in

electricity, and it is also true in the medical department, where men specialize in the eye, the ear, in surgery and in other special studies. So far as I am aware, dentistry is the only specialty having separate schools, and giving a separate special degree. Dr. Chapen A. Harris, the father of American dentistry, who realized that the dentist should be medically educated, endeavored to establish a professorship of dental surgery in the medical department of the University of Maryland. The authorities of the university, not having a very exalted opinion of dentistry as it existed at that time, would not agree to this, and Harris, with his friends, founded the Baltimore College of Dentistry.

This was the reason for its separation; can we rectify the mistake? Does the oculist, the aurist, or the dermatologist have any better claim to be known in medicine as a specialist than the dentist? A decided advance in educational matters lies in the fact that our professional schools are demanding as an entrance condition, that men who are to become scientists, physicians, lawyers, or clergymen must have received a degree in letters from one of the recognized colleges. The high standard of our professional schools demands this. Is there any reason why we should not demand as much from the man who is to become a dentist? I do not believe that there is at present an independent dental school that could exist if the requirement for entrance were a degree in letters. Let the few then who have such qualifications acquire the medical education, and thus take a higher stand. The managers of some of our large dental schools in the past, partly in the mercenary spirit of competition, and partly from the low standard they have adopted for entrance examinations, are largely responsible for swelling the vast army of matriculants from year to year, graduating many improperly prepared men, who are not fitted for a professional life, men who have no educational, ethical, or professional standard.

This has been going on at an unprecedented rate; can we wonder at the consequence? We realize it on all sides. The number of well-advertised dental parlors, dental institutes, and dental departments of the department stores is greater than ever. These places are managed by men having a degree from one of these dental colleges, and they have under their charge young graduates or sometimes men who have not yet graduated. Many of them set at naught all tradition and sentiment, and resort to means or methods calculated to fill their purses at the expense of their patients. For this condition, dental colleges as conducted in the past are in part responsible; it is a pathologic condition of our profession, and should have a remedy—what shall that remedy be?

"Is medical education a necessary qualification for dental practice?" Most of the professions are older than dentistry, and in the main they will always be above the ordinary; the legal profession dares not stoop to pettifoggery, the clergy must keep up the standard of its sacred calling, physicians must not stoop to quackery: such an action would bring disaster and disgrace. I believe that it was the lack of ethical and professional training in the past that is largely responsible for the perverters of our profession. I am not unmindful of the great work that our dental colleges of the better class have done, or of the wonderful progress that dentistry has made under them. And this I believe is the very thing which is leading up to what we advocate—the ne-

^{*}Presented in a Symposium on Dental Education, before the Section on Stomatology, at the Fifty-first Annual Meeting of the AMERICAN MEDICAL ASSOCIATION, held at Atlantic City, N. J., June 5-8, 1900.

cessity for the old and honored degree of Doctor of Medicine. This degree would give to the dentist a broader education; would improve his social and professional status; would give a large and general knowledge of the scientific principles involved; a more specialized knowledge of the interrelations of general disease and local manifestations, and a greater familiarity with bacteriology as specially associated with the mouth. Then the mental training which would result from such a course in the higher qualifications must be of vast service • to him in his practice in after life. It has been held by some that we are likely to lose our manual skill attending to studies so largely theoretic, but do they not forget how much practical work is required for a degree in medicine? In physiology, chemistry, physics, and at the dissecting-table one gains a very large amount of manual skill, and also gains a very decided mental training which must result in a distinct advance when combined with the full special technical training of his chosen profession. This advance is meant in no way to be antagonistic to the standing of the degreed man of to-day.

The demand of the time is for a higher standard; the salvation of our profession is to be achieved through higher educational attainment, high enough to eliminate ignorance and incompetency. In the highest sense, dentistry is a specialty in medicine, and more time should be given in our special training to dealing with the abstruse problems in medicine which have to do with remote influences on the mouth and its diseases. All those remedies affecting nutrition and assimilation have a direct interest to the dentist; the art of prescribing the proper remedies should be known, and not neglected. as it is by the majority of dentists at present. We should know the human system thoroughly, and should know enough of medicine to be prepared to treat intelligently those general pathologic conditions that affect the organs which are our especial care. The surgeon not only understands the way to operate, but he knows as well the proper remedies. All must admit that the dentist should know enough of the human system to be thoroughly prepared in his special education. I believe that this can be better done in the medical school with a special dental training. We are now in a position to demand a higher standard, and the question comes to us, how can we better our profession in ethical and professional ways?

"Is medical education a necessary qualification for dental practice?" I think that the time has come when a medical education is necessary, and for the following reasons: We must admit that it is essential that the training during our college course should be full and complete. This century is pre-eminently an age of progress, and the more intelligently we prepare ourselves the better can we apply this acquired knowledge to the advancement, the elevation, and the wellbeing of humanity.

To me there is no question as to the desirability of the establishment of our profession on a medical basis. There will be opposition, but we must work to overcome it. It is full time to act on this important question, and to act like sensible men to raise the dental profession above some of the present questionable methods. The problem of medical education for a dentist is too pregnant with possibilities to act lightly; we must give it full and deep thought and discussion, and then act for

the true interests of our profession. A change must come, if not this year then the next, or the next. The best and truest friends in our profession should lend a hand to bring about this result. It is a result which must add greatly to our status as professional men. The question confronts us whether ours shall be a profession or a business? What is our remedy? Our leaders are thinking; as a result, our dental schools are fast becoming allied to universities having medical departments. The trend of dental education is certainly toward the medical, and the tone from the graduates of these schools is more ethical; here it seems to me lies our opportunity. We must give an ethical, professional, and technical education to the average graduate. We can not advance a profession faster than its average graduate. Let us urge the educators of universities to blend the dental with the medical, adding such chairs in the special dental courses as shall give a complete technical training. I, myself, have no doubt that this is coming, and present indications confirm my belief.

Harvard University is preparing to erect a medical university and will take in under one care all of its medical specialties, including the dental.. With the proper application of influence, we may look for the same degree which is now given to the oculist, the aurist, the surgeon and the dermatologist. Can this be brought about? In answer let me quote a sentiment from Dr. J. Leon Williams, in his paper, "Which Shall It Be, the Empirical, or the Scientific Method?" "Anything can be, that has the support of twelve or even six men . . . who have faith in themselves. It would be highly gratifying to me if these six wise and earnest men could be found in this society. The influence of this organization is world-wide, and it contains men of sufficient executive ability to carry this or almost any other movement into which they put their whole hearts, to a successful issue."

[The discussion on the Symposium on Dental Education will appear in next week's JOURNAL.—ED.]

HEMORRHAGE AFTER CONFINEMENT AND ITS TREATMENT.*

BY HERMAN E. HAYD, M.D., M.R.C.S., Eng.

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Hemorrhages at all times and under all conditions are matters of serious import; they signify responsibilities more or less grave, according to the organs involved and the amount of blood actually lost. Mere loss of blood, however, as measured and interpreted by ounces, does not necessarily indicate serious involvement of structure or function; and if not sudden and overwhelming in amount, this loss is in many individuals without apparent effect upon the economy, so quickly is the lost amount replaced by a new supply. At the same time, it is often surprising to see what inroads are made upon the system by small and repeated losses of blood continued only for a short period of time.

Hemorrhage after confinement presents itself in many interesting and important forms; and often demands the greatest skill and the best resources of the most accomplished medical man. Indeed, I can imagine no condition more terrible; none which is fraught with greater danger, which requires more coolness, more judgment and more surgical resource than a case of active post-

^{*}Read before the Fourth District Branch of the N. Y. Medical Association, Buffalo, May 8, 1900.