Existing Trends in Specialty Education and Legislation with Particular Reference to Orthodontia*

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There is at present a widespread and increasing demand upon the medical and dental professions for a clearer definition of the qualifications consistent with the safe practice of specialties. This is an outgrowth of the tremendous accumulation of professional knowledge and technical advancement in the past fifty years. It is a physical impossibility for any individual to master all the departments of either profession. And if this were possible, adequate technical proficiency in these fields could not be retained, for the number of patients presenting to any individual practitioner will not give him equal and sufficient practice to maintain his proficiency.

As a natural growth of this condition men in general practice gravitated to partial and later to complete limitation of their practices, to fields in which they were especially adept or which were particularly to their liking. These men possessed general ground training and their specialization developed, on the whole, in consequence of particular skill. Later, however, young men, thru the inspiration of practitioners whom they admired, because of real or imagined preference for special fields or in anticipation of greater remuneration, set out to prepare themselves for limited practice. Dr. H. G. Weiskatten, Dean of Syracuse University, College of Medicine, from tabulations of statistics gathered at 5 year intervals, from graduates of Medical Schools—1915, 1920, 1925, reports that 70% of the men entering Medical School expect to specialize. He found that of the men graduating in 1915, 40.9% were limited to a specialty,—1920, 35.0% and 1925, 34.0%. This is only with respect to medicine. (Proceedings of the Am. Congress on Med. Education, Licensing and Hospitals, 1932—p.60).

It is at this period that the difficulty became a real problem. The industry of the pioneers in the specialties pushed further the frontiers of knowledge, increasing the educational undertaking of the student. The courses of study were established upon a plan incapable of adaptation except by the extension of time in the curriculum. This has now progressed almost to an

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absurdity,—certainly beyond the limits of the best social and economic interests. In medicine, a student desiring to enter the specialty of surgery, follows a four years college course, obtaining a bachelors degree with a four years medical course. Then, after spending one year in a general medical internship, takes another hospital year in surgery and, finally, after one to two years of surgical residency, is ready to start as a second assistant in a surgical practice.

In our own specialty we are forced to spend at least 50% of the four years dental course in technical procedures in which we have only an academic interest. The time thus occupied must be made up in expensive graduate instruction. Most societies limiting their membership to specialists in Orthodontia do not consider candidates as qualified with less than two years of practice, and many require five. And with all this added time requirement we have, in no satisfactory manner, given the public assurance that the products of this cumbersome plan are fitted to do the job which they have set for themselves.

While most specialties are concerned with this educational problem, Orthodontia is particularly so because of the nature of its technique and the character of the present dental school curriculum. In 1930 I tabulated the hours of ten leading and representative dental colleges with special reference to the percentage of time in particular groups of subjects and found that an average of 3.1% of the dental students time was spent in the theory and practice of Orthodontia (J.A.D.A. February, 1931, p. 299-309). I have, this month, repeated the analysis and find that it is now still less, 2.9%.

Of these ten schools, six, University of Michigan, Maryland University, Columbia University, Pennsylvania University, University of Illinois, and Western Reserve University, list in their catalogue no active work by students on orthodontic patients. While this is undoubtedly a kindness to the patients it is significant from another point of view. It is indicative of a trend in dental education. The dental school has recognized that in its present curriculum the place for adequate orthodontic training is in the graduate school. This feeling is expressed in the following catalogue description of an undergraduate course in orthodontia.

> "A sufficient number of cases are under treatment at all times to illustrate Course 1 and to give the interested senior student an opportunity adequately to judge the specialty before enrolling for graduate instruction in it." (University of Michigan, Vol. xxxiv, No. 60, June 17, 1933, page 40)

The idea is in no respect a new one. The profession as a whole has recognized it for many years. To supplement inadequate collegiate instruction, men have taken students into their offices and students have been willing to revert to the preceptor method which in most educational fields has long ago been discarded. I must make it clear—I refer to the matter of gaining fundamental orthodontic training, not clinical experience. It is for the same reason that the short-term courses found such favor, and inadequate as they were, they served to stimulate many men to better performance. Lastly, it is for this reason that the universities are replacing post-graduate short-term courses with graduate courses which carry suitable recognition for time and character of the scholastic undertaking.

There is, therefore, the dawn of another day in the pedagogic attitude toward the specialty of Orthodontia. The change is gradual and much of the present instruction and facilities are below our most advanced standards, yet it is better than it was. Educational, like social changes, take endless time to effect but perhaps they grind as rapidly as the average level of the profession and the public are ready to accept them. It is probable that as coming years unfold we may expect to see a change in the undergraduate curricula and certainly as rapidly as teachers are developed, we will find more satisfactory graduate courses being instituted. It falls to the profession to place the responsibility upon the college. There will, for a time, be many poor graduate courses as there was a time when the percentage of poor dental schools was greater. They will improve as the teaching personnel improves and the specialty finds its place in the university family. But, for a profession that has its roots in the basic biological and physical sciences, to remain coddled in the manger of private short-term courses is as absurd as to advocate obstetrics in the home when the facilities of a modern hospital are at hand. I am in no way forgetful of the tremendous value rendered in the past by private schools. Orthodontia is greatly indebted to the work of men trained in these institutions but in the same manner that the preceptor method in medicine has been outgrown, so the present development of orthodontic science has passed beyond the limitations imposed by this manner of instruction. An adquate library; anatomical, histological, physiological laboratory facilities; the contact, association and balancing discussion with teachers and students in other fields, are indispensable to the advancement of orthodontic science.

Inseparably linked with these educational tendencies is the change in the responsibility of the specialist to the public and this is gradually finding expression in statutory law. The medical profession has been struggling

with the problem for several years. The echoes of their discussion sound from many corners but most emphatically from proceedings of the American Congress on Medical Education, Licensure and Hospitals. The trend of thought in this organization is, at present, centralizing the responsibility for the specialities in the respective Boards of the profession. The American College of Surgeons was an effort in this direction. The American Board for Ophthalmalogic Examination and, similarly, the American Board for Otolaryngologic Examination has attempted to set up standards for the protection of the public in their respective fields. Gynecology and Obstetrics as well as Dermatology are fields that have taken similar steps. There are committees for the organization of similar bodies in Pediatrics, Neuropsychiatry, Orthopedic Surgery and Radiology. Many of these departmental societies require the certificates of their respective Boards as prerequisites for membership. It has been advocated that they also be required by hospital departmental staffs.

Several foreign countries have instituted legal measures—Denmark requires a three to six years course by a committee of the Danish Medical Association. In Austria a four to five years course gives membership in the 'Verbond der Forcharzti'. Germany has a plan not unlike Austria's. In Alberta, Canada, legal minimum standards are in the hands of the University of Alberta. In Turkey the Medical Faculty has power to approve specialist certificates. (Proceedings of the Annual Congress on Medical Education, License and Hospitals, Feb. 1933, p. 45). Dr. Sanford R. Giffard (ibid) says, "without some form of legally required certificate to practice a specialty, which would of course be a great advance and may some day prove possible, the extension of this recognition of certificates of special boards by Medical Schools and approved Hospitals would seem to offer the most hope for the protection of the public.

Walter L. Biering, Sec., Treas., of the Federation of State Medical Boards of the United States, a year later, suggested a plan including the following points:—

1. Specialists be required to fulfill the requisites for general licensing.
2. They obtain certificates from the respective special Board.
3. They be accepted by the State upon endorsement of the special Board.
4. That the State register all specialists.

I have burdened you with these references from proceedings with which you may already be familiar because they illustrate that we are somewhat slowly but very steadily progressing to specialty legislation.

In dentistry there has been less agitation and, with the exception of orthodontia, the situation is less imperative. The dental graduate is far better able to render adequate dental service than is the medical graduate. He has been doing clinical work the greater part of his last two years in school. In prosthetics, operative dentistry and crown-and-bridge he is well trained, in most of the dental colleges. He has a fair tho less comprehensive concept and technical skill in extraction, minor oral surgery and children's dentistry. Orthodontia is an outstanding exception. Many schools give him no clinical experience, relying upon his professional conscience to prompt him to seek further instruction if he accepts patients for orthodontic management. The State is content with the endorsement of the dental school, while the public is ignorant of the condition, tho mindful and now resentful of the damage he does.

We are well aware of the keenness and intensity of feeling with which this condition was realized by Dr. Angle. It was largely thru his influence that the dental profession became even remotely aroused to the situation. The State Law in Arizona, directly, and the formation of the American Board of Orthodontists of the American Society of Orthodontists, indirectly, trace their origin to him. As waves radiate from a stone that is thrown into a pool so the smooth surface of the present complacency of the profession is now and again disturbed by ripples which emanated from the splash made when the Arizona Law was thrown into the mill pool of dental legislation. That was several years ago and still the waters are not entirely smooth but the disturbances are local and often at cross purposes.

Here, in Illinois, in the last year a new dental law has been drafted by a combined committee of the Illinois Dental Society and the Chicago Dental Society. It was passed by the State Legislature and is now being tested in the courts. In it there is a section (Section 1, Par. 4a) that reads as follows:

> "The department is hereby empowered to establish higher standards for and make additional requirements of any licensee who announces or holds himself out to the public as a specialist or as being specially qualified in any particular branch of dentistry; and it is provided, further, that the department may issue a certificate, authorizing practice as a specialist in any particular branch of dentistry, to any licensee who has complied with the requirements established for that particular branch of dentistry at the time of making application, upon payment of twenty-five dollars ($25.00).
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> "No licensee shall announce or hold himself out to the public as a specialist or as being specially qualified in any particular branch of dentistry, unless he has been in the practice of dentistry for five years,

or more, prior to making application for certificate to practice as a specialist, and has complied with the additional requirements, established by the Department for practice in that specialty of dentistry.

"The fact that any licensee shall announce by card, letterhead, or any other printed matter using such terms as "Specialist," "Practice Limited to" or "Limited to Specialty of," with the name of such branch of dentistry practiced as a specialty, or shall use equivalent words or phrases to announce the same, shall be prima facie evidence that such licensee is practicing as a specialist."

At the present time the major difference in the lines of attack upon the problem in the Dental Profession and that of the Medical Profession is that the former has sought to place their provisions within the Statutatory Law of the Commonwealth and the latter has made a strenuous effort to keep out of the State Law and leave the matter to the respective Boards in the specialties. There are decided disadvantages to both methods. The State Law is within the influence of state and local governmental politicians, while the mechanism of the medical societies is subject to professional political influence. The public still remains between his satiric majesty and the briney deep.

The formation of the American Board of Orthodontists represents an attempt to solve the orthodontic problem more nearly along the lines of the medical attack. The criticism of lack of teeth in the measure, as well as the criteria upon which certificates are issued, has been offered but the essential objection to the measure lies in the small effect it has upon the public. The principal purpose is not the protection of the orthodontist but rather the public and there is a vast amount of education necessary before the layman will become aware of or concerned with the action of the Board.

We may consider that laws such as that of Arizona and Illinois and those of Canada and other countries, as well as the action of Sections and Boards of professional societies, are experimental measures thru which we may in due course of time arrive at an equitable solution of the problem. In the meantime, orthodontia as an honorable vocation is falling into deserved disrepute thru public and professional recognition of the damage which is continually being wrought by practitioners without proper training.

To summarize, may I remind you:—

1. We are experiencing a change in the concept of dental and orthodontic teaching made necessary by the accumulation and reorganization of a vast amount of theoretical and technical data in medical and dental science in order that this may be more efficiently applied in keeping with changing social and economic conditions.

2. This may entail radical changes in the present university curriculum.

3. Orthodontia must establish, maintain and justify a place as a department in the field of medical and dental science, to retain its birth-right.

4. There is a growing interest in the regulation of the practice of specialties to promote a more adequate protection of public interest.

5. Orthodontia, at the present time a specialty of dentistry, is perhaps the most outstanding example of this need.

6. The present experiments in specialty regulation should be carefully observed and evaluated to the end that a feasible mechanism may be developed with sufficient adaptability to meet the exigencies of local conditions and with adequate provision for the protection of public interest and scientific progress.

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