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Addresses.

ON THE ADVANCEMENT OF SURGICAL PEDIATRICS.

CHAIRMAN'S ADDRESS, DELIVERED BEFORE THE SECTION ON DISEASES OF CHILDREN, AT THE FIFTY-SECOND ANNUAL MEETING OF THE A. M. A., AT ST. PAUL, MINN., JUNE 4-7, 1901.

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SURGERY IN PEDIATRICS.

I wish to offer some remarks on the advancement of the surgical side of pediatrics. Surgical pediatrics was later and slower in its development than was medical pediatrics. It is evident that the advance of such a science and art may be measured in many different ways. For instance: 1. By the recognition of the necessity and importance of it. 2. By the increase of actual knowledge concerning it—the discovery of new facts. 3. By the spread of knowledge through text-books and other literature, teaching in the medical schools, and in that kind of post-graduate schools wherein all are professors and all are pupils—namely, the medical societies. 4. By the extent to and the manner in which knowledge is applied in practice, both private and in hospitals, and the number and enthusiasm of those who devote themselves to it.

Obviously it will be impossible for me to trace elaborately the advance in this department, which would involve a complete history of the branch. I shall merely touch here and there certain salient points indicative of progress, or the lack of it.

Among all these indices one may usually measure very well the status of any department of learning by its own special literature; although it may happen that the facts or principles which should be combined into a science remain too long isolated or connected with various other groups, their own natural relationships unrecognized.

As we all know, numerous writers from the ancients down have alluded to the behavior of disease in children, the surgical, occasionally, as well as the medical; and yet as late as 1846, when Coley wrote an introduction to his "Practical Treatise on the Diseases of Children," he made the following statement: "I am not aware, however, that any author, British or foreign, has published a work comprehending all the diseases incident to children and their appropriate surgical as well as medical treatment. This omission may be accounted for by the division of the profession, which has limited the education and practice of physicians who have

hitherto been the principal or only writers on infantile disorders."

This remark Dr. Coley makes after professing himself acquainted among modern writers, with the works of Astruc, Armstrong, Hamilton, Cheyne, Heberden, Becker, Plenk, Auvity, Burns, Capuron, Clarke, Gardien, Comet, Gölis, Dewees, Underwood, Billard, Meissner, Marley, Maunsell and Evanson, Barrier, Barthez and Rilliet, Rees, etc. I am ready to vouch that Dr. Coley's statement is well founded, for on perusal of many of the authors he mentions, and others not in his list, it becomes evident that none of them had given adequate attention to the surgical side of children's diseases.

Take for example Underwood—writing in 1795—who devoted 188 pages, or Part I, of his second volume, to "All such complaints as may fall under the province of the surgeon, with others that may be said to be of a mixed kind which," as he says, "should be all familiar to every accoucheur." But Underwood addressed his text as much to the laity as to the profession, and there is little or nothing in it to enlighten or guide the surgeon.

Even John Syer, surgeon, of London—who, being a surgeon, might be expected to do better in this respect—in his treatise, written in 1812, presented no topics which might be called surgical, excepting purulent ophthalmia, croup, and rickets. Under croup, he did not even mention any operative measures. However, tracheotomy, although known, was little esteemed until Trouseau's revival of it in 1850-57. As to rachitis, Syer gave no definite account of the deformities and only a general description of deformity apparatus. For these, as for other diseases, he presented "the General Principles of their Domestic Treatment."

Dewees' "Treatise on the Physical and Medical Treatment of Children" (1826), included ophthalmia, croup, hip-disease, hydrocele, herniæ, and several skin affections, but even these few surgical topics can not be said to have been handled surgically.

Eberle's book (1833) had practically nothing surgical.

Billard—the English translation of whose work appeared in 1839—included in his treatise diseases of the skin, herniæ, prolapse of the rectum, intussusception (at least the kind found postmortem), malformations of various parts, and also fractures—intra-uterine, and of the new-born. But he pointed out no differences between those abnormalities and similar conditions in the adult, nor did he give the treatment for them. His attention was centered on "Recent Clinical Observation and Investigations in Pathological Anatomy," for this was the period of a new enthusiasm in that branch of medical science.

Evanson and Maunsell (1843) included syphilis, rachitis, skin diseases, foreign bodies in the larynx, fractures, herniæ, nevi, tongue-tie, hare-lip, spina bifida,

and ophthalmia, imperforate anus, and various deformities of the genito-urinary organs. Although they sometimes advised and described the treatment then considered appropriate for these difficulties, their general attitude seems to be expressed in a remark which appeared in connection with making an artificial anus in the groin (page 138), as follows:

"The operation would be a very hopeless one; but a consideration of its merits, and of the exact modes of performing the other operations, belong rather to the province of the surgeon, than of the child's physician—who, in that capacity, has merely to ascertain the nature of the deformity, and must draw upon his own general knowledge of surgery, or apply to another practitioner for the means of its removal." Their position on this point is again stated when treating of hare-lip (page 139). "The consideration and treatment of this deformity belongs to the surgeon—all that the child's physician, as such, has to do with it, is to consider *when* the operation should be performed. If the child can suck, it is better not to submit it to the hazards of an operation in early infancy. But cases occasionally occur in which such a degree of deformity exists as to demand immediate assistance in order to give the infant a chance for life. The nature of the operation, and modes of performing it, belong altogether to the province of surgery."

These authors mentioned are but examples. Others who might be cited—for instance, Stewart, 1843,—were much like them. So that it appears to be true that physicians had until then "been the principal or only writers upon infantile disorders," and had made little progress in surgical pediatrics.

But Coley purposed, as every good author should, to do better than his predecessors, and in the matter of the surgical diseases, he in some degree succeeded. He not only discoursed on the herniæ, imperforate anus, clubfoot and other distortions, hare-lip, laryngotomy and tracheotomy, foreign bodies swallowed or lodged in the pharynx, or in the vermiform appendix, prolapsus ani, pyothorax, vesical and urethral calculus, imperforate urethra and vagina, phimosis and paraphimosis, diseases of the joints, burns and scalds, spina bifida, and other surgical topics, but he advised and described the surgical treatment which experience or the literature up to his time had taught him. He also treated of diseases of the eyes, and of the skin, quite extensively. But Coley's book seems to have attracted little attention.

J. Forsyth Meigs, writing in 1848, presents nothing surgical, although his work more nearly equalled the quality of those on general medicine than had any upon diseases of children up to that time. Nor can the lectures of Charles West, the most admirable clinician and oft-quoted writer of his time, be said to deal with both sides of his subject.

In Churchill (1850), a few topics, as tracheotomy, paracentesis for pleurisy, hare-lip, cleft palate, imperforate anus, and spina bifida receive some surgical handling. Condie does not consider that surgical subjects fall within the scope of his treatise.

But by this time the knowledge of anatomy, of physiology, of pathology, and of the history of diseases and injuries had increased to such an extent, the observations of practical surgeons had so accumulated and the establishment of hospitals for children had so improved the facilities for the study of their diseases that their peculiarities and their importance could no longer be quite ignored by the profession.

About the year 1850, in Paris, while Trousseau taught the diseases of children, the surgical side was taught by Giralde, who, however, published little in permanent form until later. In 1855, J. C. Forster, in London, had been making "A few remarks on the surgical diseases of children," and in 1860 his 8vo volume was published. It was also in the year 1860 that A. A. W. Johnson delivered, at the Hospital for Sick Children, a course of "Lectures on the Surgery of Childhood."

In 1863 we find that the council of the Medical Society of London, "recognizing the importance of this subject, have been led to believe that the interests of its members might be promoted and the profession benefited by having their attention drawn from the broad field of general medicine and surgery to the comparatively small one of the diseases of children; and on the strength of this belief have, abandoning the custom by which they have been hitherto bound, defined the subjects for the Lettsomian lectures"; and they nominated as lecturer, Mr. Thomas Bryant, who delivered three admirable lectures on the surgical diseases of children.

M. Giralde, in Paris, had been followed as the leading teacher, by Guersant, whose "Notices sur la Chirurgie des Enfants," a series of very pointed and practical papers, found their way into an English translation in 1871. Giralde prepared his clinical lectures for publication about the same time.

The work with both scalpel and pen, of the pioneers in this special line, had now become so valuable that still further interest was aroused and talent engaged in its behalf.

In 1869, Timothy Holmes issued his "Surgical Treatment of Children's Diseases," a book of nearly 700 pages, and in quality well worthy of its great author.

You will please observe that Holmes omitted, from the first edition, some special subjects, viz., diseases of the eye and ear, orthopedics and diseases of the skin, "not," he says, "because I am in favor of cutting up surgery into little pieces, but because the volume had already exceeded what I had intended; and these subjects are all excellently treated in works which are in everybody's hands." However, in the second edition—yielding to a sense of the fitness of things—he added a chapter on orthopedics. I mention this point in particular to illustrate the fact that the other specialties had advanced so much faster than pediatrics, and particularly than surgical pediatrics, as to have completely outstripped it in development as a distinct branch of our profession.

This statement is capable of verification by reference to the history of the other branches and is particularly shown by the specialties of the eye and ear, skin diseases and orthopedics, and later gynecology. Obstetrics, which synchronously with anatomy had become separated in the work of the medical schools from surgery, had remained in practice more distinctly in the hands of the general practitioners. But obstetrics, fecundated by its former companion, surgery, gave birth to a charming daughter, gynecology, who soon grew to maturity, came out in society with the greatest éclat, became the reigning belle and turned the heads of many susceptible young men for a long season. Thus gynecology, with the other specialties, chronologically took the lead of surgical pediatrics.

It is curious to observe in this connection that the "Compendium of Children's Diseases," of Johann Steiner, of Prague, which appeared about this same

time, had for its English translator no less a personage than Lawson Tait, who added a few notes on the "Surgical Ailments of Children." One can not but speculate on what might have happened if Lawson Tait had felt a greater attraction for surgical pediatrics than for gynecology.

But my cursory sketch has brought me down to times almost within the recollection of the majority of my hearers. You are familiar with the record of the last thirty and the magnificent work of the last twenty years in the surgical diseases of children.

To continue a comparison among the recent achievements of those still active in professional life would require a nicer discrimination and might involve greater consequences than I care to assume; but I may at least mention, in passing, and almost at random, the names of Pooley, Marsh, Owen, St. Germain, Fumagalli, Willard, Wright, Ribiera y Sans, R. W. Parker, Charon and Gevaert, Karewski, McEwen, McClellan, Keen, Taylor, Wharton, Packard, Morris, Morton, Power, Phocas, and O'Dwyer, although I have omitted scores of worthy authors of books and writers of essays, brilliant investigators and able practitioners in this field. The new impulse came along with the grand impetus of general surgery occasioned by antisepticism.

There is now needed no elaborate argument to prove that there is a department of surgery as distinct from that of adult life as the medical diseases of children differ from those of their elders. As in medical pediatrics, so in surgical, we meet abnormalities found only in children, and also we meet those which, while they occur in adults as well as in children, are in the latter marked by different phenomena, manifest a different behavior, require a different treatment and often bring a different result from what would be usual in the same affections occurring in persons of mature years. It is only necessary to point out that the malformations, the early evidences of hereditary syphilis, separation of the epiphyses, croup, rickets, enuresis, cancrum oris and noma, as well as certain herniæ and hydrocele and certain varieties of tumor, belong to the class of troubles found only in children. While intussusception, prolapse and polypus of the rectum, hip-joint disease, post-nasal adenoids, enlarged tonsils, foreign bodies in the nose and ear, and cervical adenitis, although not exclusively found in children practically belong to the surgical affections of childhood.

Concerning the fractures and dislocations, empyema, and nearly the whole remaining list of surgical ailments—not to mention orthopedics or numerous affections of the eye and skin—we who have given the subject special study and are accustomed to surgical work among children know how common they are, and to a certain extent how different they are from similar afflictions in the adult. We are aware what peculiarities surround operative work upon children; how ill they bear hemorrhage or cold or prolonged shock, and how wonderfully they recuperate once the stress of the storm is past. The effects of anesthetics and of antiseptics, the art of dressing and bandaging and the use of medicines and diet in surgical cases—all these differ in children from similar cases in the grown up. Even if the specialists take all they dare there is enough remains of what might be called general surgery of children that is peculiar and requires special study and experience.

In view of all the splendid progress that has been made, it may appear ungrateful and hypercritical to

seem dissatisfied; and yet to be satisfied is to stop progress, and there remains a great deal to be done to advance this department.

The exact points and degrees of difference in the phenomena of diseases and injuries, their prognosis and their treatment are not yet all completely mapped out, while there is much territory never yet thoroughly explored by any in the profession.

A larger amount of work needs to be done in the diffusion of such knowledge as is available, and in the application of it in practice; for the available knowledge is yet but indistinctly and vaguely seen in the minds of many practitioners of general medicine and surgery, and the all-around pediatricist as often finds the surgeon as the physician at fault in his work upon children, for want of special knowledge of them—mistaking the condition, miscalculating the probabilities, misjudging the vital force. In fact, the profession at large has not yet even sufficiently recognized the necessity and importance of this branch.

In the colleges insufficient attention is paid to the surgical diseases of children. In 1896, in an address as president of the Ohio State Pediatric Society, I gave the replies I had received to inquiries directed to the various medical colleges of the United States and Canada, upon the point whether surgical as well as medical diseases of children were taught in the regular course. Sixty-three colleges replied upon this subject. Thirty-seven of them said that the medical side only was taught and twenty-six taught surgical as well as medical pediatrics. When I asked the question, "Does the teacher individually consider that pediatrics includes the surgical as well as the medical diseases of children," I was answered affirmatively forty times, negatively, thirteen, while the remainder either left the question unanswered or answered indefinitely.

In the medical journals and in the medical societies one finds evidence that too little attention is paid to these surgical subjects. Examine your journals and the program of any medical society, even a pediatric society, and see what a small percentage of papers is on surgical topics in pediatrics. Some of those which should be found in the pediatric appear in the transactions of other specialties.

There is still in the minds of the profession, as of the people, a degree of misapprehension as to the natural and proper scope of pediatrics. There are many, both in and out of the profession, who look upon the child's doctor as a kind of a male nursemaid, who limits his practice to mixing milk and inspecting diapers. Very important things to be done are these, but scarcely the only work of a pediatricist!

There should, if necessary, be children's surgeons as well as children's physicians; or if, as Holmes says, one "objects to cutting up surgery into little pieces," it should at least be required that the surgeon extend his knowledge to diseases of children.

As to whether one man can practice, successfully, both medical and surgical pediatrics, is a question somewhat aside from our present theme. In my opinion the answer must depend on the circumstances and the man.

In addition to the misapprehension I have mentioned as to the scope of pediatrics, and to the fact that other specialties have outstripped it and to some extent taken from it, it is evident that the long-time-ago state of affairs yet prevails—namely that more physicians than surgeons have devoted themselves to this branch. To

what extent this is a cause and to what extent an effect of the other causes, would be hard to decide. But I believe the present state of things will continue until earnest and devoted workers in this department succeed in gaining general recognition of its importance, and either more pediatricists turn their attention to surgery or more surgeons turn pediatricists.

My hope is that the attention of my hearers individually, and of the Section as an organization, may be aroused on this subject, and that you may be led to make further advancement in this beneficent and to me most delightful department of professional labor.

THE STUDY OF LARYNGOLOGY IN THE UNIVERSITY AND IN THE HIGHER MEDICAL EDUCATION.

CHAIRMAN'S ADDRESS, DELIVERED BEFORE THE SECTION ON LARYNGOLOGY AND OTOTOLOGY, AT THE FIFTY-SECOND ANNUAL MEETING OF THE AMERICAN MEDICAL ASSOCIATION, AT ST. PAUL, MINN., JUNE 4-7, 1901.

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Instead of making the usual report on the year's progress in the specialty, I will depart from the prescribed routine and call attention to a subject which is of vital importance both to the laryngologist and to the profession at large. At the outset I wish it to be distinctly understood that I shall speak only of undergraduate instruction in schools of the very first rank, and not of the more elaborate training of the post-graduate for special work.

The study of laryngology has been grossly neglected in the medical schools of this country and Europe. It is either omitted entirely from the schedule of studies or, in many colleges at least, it is taught in a superficial, perfunctory sort of way that neither inspires faith in the instructor nor interest in the student.

Although the catalogue often tells in glowing terms of a course on laryngology, such a course will be found in practice to be like the "Co." in "A. Tetterby & Co.," "a mere poetical abstraction, altogether baseless and impersonal." In very few schools is it taken at all seriously, while in only one is it an obligatory study and a requisite for the degree. It seems to me, therefore, that the time is ripe for the discussion of its place in the university and in the higher medical education.

IMPORTANCE OF A STUDY OF LARYNGOLOGY AND ITS PROPER PLACE IN THE CURRICULUM.

I use the term laryngology in its broadest sense, to denote the anatomy, physiology and diseases of the upper respiratory apparatus, together with its connections and appendages, or accessory cavities. In this latter category may be placed the pharynx and the middle ear. The position assigned to laryngology in the university has been heretofore not at all commensurate with its importance, and yet of all the pure specialties, that is to say, those branches requiring special technique and special instruments and methods of precision, it is the most generally useful to the diagnostician and general practitioner. The time has gone by when it should be necessary to press the claims of laryngology to recognition of the highest rank. We no longer apologize—we demand. There was a time when laryngology meant little more than the art of laryngoscopy, and it was often prostituted to inferior use. It is no longer a simple method of examination and demonstration, but an

enduring, vital force in medical progress, which lives and breathes and has its being within the very heart of inner medicine itself. It is no longer the Canaan of the quack, but a fair land of promise for the highest order of research. It should, therefore, hold high place in the curriculum of the college and university. It should have a separate, well-equipped department and a full professorship. While I do not wish to over-estimate the relative value of laryngology in a scheme of medical education, and while I am fully conscious of the present congested condition of the schedule, and the future necessity of a large number of elective studies, I am of the opinion that, in view of its very great importance, it should remain, as it is in the curriculum of the Johns Hopkins University, an obligatory study. If laryngology and ophthalmology should ever disappear from the list of compulsory studies, they should be the last to go. Their exile from a curriculum in which they have been once established would be, not an act of progress, but of retrogression.

THE FUTURE OF THE LARYNGOSCOPE.

A knowledge of the use of the laryngoscope will in the future be as necessary to the equipment of the advanced physician as is now a knowledge of the physical examination of the chest. It is absolutely invaluable to the diagnostician, for it is especially useful in the early detection of disease, often pointing, long in advance of classic signs and symptoms, the way to grave disorder. Time was, not very long ago, when physical diagnosis of the chest was not required of the medical student, and when the special knowledge of the art was supposed to be, and practically was, confined to the few. Now every practitioner of medicine knows, or thinks he knows, it all. The laryngoscope will go the way of the stethoscope and become the common property of the general practitioner of medicine. It will be an absolute necessity in that specialty which, next to surgery, is the highest of them all—the great special study of the future—internal medicine. The time will come when the art of laryngoscopy will be linked to general medicine as the art of physical diagnosis has become its inseparable associate.

INCREASING GENERAL KNOWLEDGE OF LARYNGOLOGY.

When, twenty-three years ago, the conception of creating the American Laryngological Association, the oldest special society of the kind in the world, arose in the brain of its too-early-lost founder, it was hardly possible to gather together more than a corporal's guard of men of national reputation in this department of medicine. Now the complexion of things has entirely changed. While at that time the specialist was found only in the larger cities, now there is scarcely a hamlet in the land that does not contain a laryngologist—indeed, in recent years the laryngologist has, in some quarters at least, proliferated to an alarming extent.

There will come a time in the future—in the near future, perhaps—when the boundaries of the specialty will be almost indefinitely extended. The great advances which laryngology has made in recent years, the rapidly growing necessity of a knowledge of its special province in the elucidation of obscure conditions in adjacent and remote organs of the body, the popularity of its study and the accordingly rapidly increasing number and far-reaching geographic distribution of its votaries, will, in the course of time and in the nature of things, lead to such a congested state of the specialty that many will either be driven into the ranks of general medicine, or compelled to take up some other line of special work in