cutting has been efficient, and has thoroughly relieved the constriction. (This certainly will not be disputed by the new school.) If this is found not to be the case, the urethrotome should not be re-introduced. * * * The way (he further says) to avoid a second cut is to make the first one deliberately, to locate it accurately, and to make it deep enough. * * * The after-treatment consists of the use of the conical steel sound at appropriate intervals." (See pages 101 and 105, this volume.) It will thus be seen that notwithstanding Dr. Keyes, in his preface, has raised his voice, for what it was worth, against "the new school in urethral pathology," he is constrained to adopt, as his own, some of the most important points which distinguish this so-called school. The good taste in such appropriation, without credit, and while assuming the position of an adversary, may be questioned.

I fully accept the distinction made by Dr. Keyes (page 297) between the so-called physiological and the inodular stricture, and that the former is much less likely to be a cause of trouble; but, when it is "carried to excess" (as Dr. K. puts it in the case of a meatus congenitally no larger than a pin hole), then it *may* give rise to as much trouble as any inodular stricture. The simple fact that the division of such a stricture leaves no traces of its existence which can be recognized by microscopic examination, does not prove that it never existed; it simply proves that the material constituting the contraction was homogeneous with the structures of the part; was, as he says, a physiological contraction, and not the result of a cicatricial deposit. The fact that such contractions occur at various points in the urethra is well recognized. This the author believes he was the first to bring to absolute demonstration, in a case quoted by Dr. Keyes, on page 297 of his work, and upon which Dr. K. relies mainly to prove that physiological contractions *do not* constitute stricture. In this case, a number of contractions were amply verified, by the author of the present work and others, on repeated occasions, before operation, by means of bulbous sounds. After division by the dilating urethrotome they

could no longer be felt, or their sites in any way recognized. This operation, as Dr. Keyes states, was complicated by the external perineal section in a man the subject of profound disease of the bladder and kidneys. Death occurred from pyelo-nephritis on the sixteenth day. Macroscopic examination of the urethra showed a dense cicatricial knot at the site of the perineal stricture, but *no trace of any stricture in the anterior portion of the canal.* The parts were subjected to a further examination with the microscope by Dr. Francis Delafield (Prof. of Path. Anat. Coll. Phys. and Surgeons), who failed to find any trace of cicatricial tissue at the points in the anterior portion of the canal, where strictures were *proven* to exist before the operation. The effort to make a difference between a *stricture* and a *contraction* (physiological or otherwise) must fail, until our language is reconstructed. Anything which *constricts* produces *stricture.* There are, as is well known, various causes of stricture, and some, under circumstances which must determine, to a certain degree, the amount and character of the trouble to which they will ultimately give rise. It is this *trouble* which calls for operative measures, without regard to the fact of whether the stricture is of inflammatory origin—idiopathic, specific, or traumatic—or whether it is the "physiological condition carried to excess."

One count which Dr. Keyes makes against the new school, etc., in his preface, is, that "its claims seem to leave out of view, that the disease for which the patient seeks relief, is only a symptom, and that such symptom may be due to a variety of causes." The answer is, that the disease which is taken into account, is the *stricture*, and that the stricture is not a symptom but a mechanical obstruction. The symptom, gleet, leads to examination for the stricture, which, when found (according to the new school in urethral pathology), is treated preferably by division, if in the pendulous urethra; by dilatation, if division is contraindicated. The contra-indication being when the stricture is not a close one, and is in the deep urethra, or when the patient will not consent to any

cutting operation, after being informed that it is the quickest, and surest, and an equally safe way of getting rid of the stricture, and the only one holding out the chance of radical cure. If, after this, the patient chooses dilatation, he can have it, and, if he continues of the same mind, stick to it as long as he lives. This differs from the old plan, inasmuch as it *proposes* immediate and permanent relief, and before the patient is worn out in mind, body, and estate by a long course of dilatation.

Dr. K. says also, in the same connection, that "a serious criticism upon the methods of the new school is that it does not generally, in its lists of published cases, give any prominence to those cases which have been cut without relief of the symptoms complained of." All the cases published by the author up to the issuing of the first edition of this work, as well as in this edition, were taken *seriatim*, as they occurred in his practice. One hundred will be found tabulated at page 106 *et seq.*, and one hundred and thirty-six more at page 323 *et sequitur*, and an abstract of the same on page 317. The results—good, bad, and indifferent—will be found distinctly stated opposite each number. In return, it would be fair to ask where Dr. Keyes has reported his successful cases, by the new methods, and where some of the tabulated unsuccessful cases treated by the old plans may be reached.

"In short" (says Dr. Keyes, in the conclusion of his preface), "the pathology and treatment of the new school are narrow, and tend to encourage routine practice in the young, to the detriment of a careful study in each case."

The breadth of the practice of the old school, before the appearance of the new, was equivalent to the breadth of the bougie; if the young practitioner could pass it skilfully, he was accepted as an expert in the treatment of stricture. The new school broke through that routine, and made the study of urethral science necessary—"*hinc illæ lachrymæ.*"

As has been previously remarked, it cannot be expected of experts, learned in the views and traditions, and skilled in the procedures of the past, that they should yield their positions as authorities in such matters without a struggle. It may, however, be claimed, that on the whole, the advances made by Dr. Keyes, in the new departure, are not inconsiderable, and it may also be reasonably expected, as it is sincerely to be hoped, that at no distant day he will be enabled to lift up his voice wholly and unmistakably in behalf of "*the new school in urethral pathology.*"

One of the most important points claimed as a result of the operation upon urethral strictures by dilating urethrotomy, is the *radical cure of stricture.* (See Point 9, of concluding chapter, page 322.) In regard to this, on page 309: sixty-seven cases are reported, where re-examinations had been made, from one month to six years and six months after the complete division of strictures, and had demonstrated complete absence of recontraction at any point. Also, at page 262, twenty cases re-examined by Prof. Pease, from six months to two years after complete division of strictures, were shown to be free from any evidence of recontraction. Dr. Bumstead's testimony, already given (page viii), in favor of radical, permanent, cure of stricture, after the operation of dilating urethrotomy, yet claims that *time sufficient has not elapsed to enable any one to speak with absolute certainty on this point.*

In answer to this it may be stated that within the present month (May, 1880), the author has examined two cases, operated on OVER EIGHT YEARS SINCE, and found complete absence of stricture in each case. The first case was the one for the division of whose strictures, especially, the dilating urethrotome was constructed, and in whom a single stricture at one and a half inches from the urethral orifice was divided, Jan. 12th, 1872. Three subsequent operations were performed on deeper strictures in this case. The last was on March 4th, 1872. The cut surfaces were kept asunder by the occasional passage of a sound, until March 11th, 1872, and no further treatment resorted to. Re-examination of the patient (Mr. A.), seven months after, showed the urethra free from every trace of stricture. An account of this case (first published Feb., 1873), will be found on page 43 of this volume.

Mr. A.'s case was again examined, by a committee of sur-

geons, Dec., 1873 (see page 48), and at this date *not a trace of stricture* could yet be detected with No. 30, metallic bulbous sound.

The final examination in this case was made by the author, May 4th, 1880, EIGHT YEARS AND TWO MONTHS from the date of the last operation. This examination was made with the urethrometer, which was introduced closed, to the bulbo-membranous junction, and there expanded to 32F. At this size it came easily through the entire anterior portion of the canal, without pain, and without giving evidence of the slightest obstruction or lack of suppleness at any point.

The second case (case iii., this vol., page 47), J. C., operated on Jan., 1872, and again for deeper strictures in March and May of the same year. Re-examination by the author, Jan. 30, 1873, and found free from stricture. Again examined by a committee of surgeons in Dec., 1873 (page 48), with bulbous sounds 30F., and 31F., and yet no recontraction recognized at any point. Finally re-examined, May 4th, 1880, with the urethrometer dilated to 32F., demonstrating complete absence of stricture at any point, and this OVER EIGHT YEARS FROM THE DATE OF OPERATION. In view of the permanence of results in the two cases above cited—over eight years—and without the slightest evidence of any disposition to recontraction at the end of this long period, it may be now reasonably claimed that the possibility of the radical cure of stricture, through complete division, and subsequent treatment in accordance with the views and procedures set forth in this volume, *has, at last, been absolutely demonstrated.*

In addition to the above-mentioned cases, which have been subjected to a re-examination during the present month, is one operated on March 6th, 1875 (No. 15 of the second series of tabulated cases, page 327), for four strictures defined by 24F. bulb in a urethra of 36 mm. The urethrometer introduced closed to the bulbo-membranous junction was expanded to 36F. and withdrawn without the slightest pain or holding, or lack of suppleness at any point. The fact that these strictures occurred in a surgeon of some prominence in this city, and one quite ready to testify on all proper occasions to the completeness of his recovery, lends a special interest to this case. In addition to the foregoing the author has made, since the publication of the first edition of this work, twenty other re-examinations at dates varying from two months to six years after operation, and has found only three cases, in this number, where recontraction had taken place. He has also to add ninety-seven cases to the list of 635 operations, published at page 279 of this volume, five of which, first named, were combined with external perineal urethrotomy, "without a death or permanent disability of any sort."

As the result of this large personal experience in dilating urethrotomy the author desires to claim that complete division of stricture and after-treatment strictly in accordance with the plans proposed by him results in *radical cure* as a rule. Undoubtedly, exceptions may and will occur. When occurring they will probably be due either to incomplete division, faulty after-treatment, or, perhaps, in some cases most rare, when the tendency to production of inodular tissue is excessive. In some cases of recontraction after thorough operation, it is quite probable that the cicatricial material pervades the tissues to such a depth that makes complete division impossible.

A notable case of failure by dilating urethrotomy was cited in the previous edition of this work (pages 283–4), operated on for numerous close strictures, the deepest at 6½ inches, by Prof. R. W. Pease, of Syracuse, first with the instrument of M. Maisonneuve and then with the dilating urethrotome. Recontraction took place within a few months, and a second and similar operation was done in St. Luke's Hospital by Prof. Thos. T. Sabine. Epididymitis followed and prevented subsequent use of instruments to maintain the patency of the canal. In a few weeks the stricture had recontracted to a filiform size. A third operation was done by the author, making the urethra clear to 36 F. In closing the account of this case on page 284 of this vol., it is stated that, after a severe hemorrhage from the locality of the deep stricture, near the neck of the bladder, "the patient did perfectly well, and

when re-examined by me (in St. Luke's Hospital) about a month after presented no trace of stricture."

It was subsequently stated to the author by Dr. Sabine that the strictures in this case had again recontracted. That on examination two months subsequent to the operation, a stricture at 4½ inches was found to have recontracted to below 24F.* This would then present an example of stricture recurring repeatedly, and apparently after the most thorough division by men of experience in the best modes of operating. Such cases, however explained, must be accepted as standing in most gratifying contrast with the great majority of cases properly subjected to the operation of dilating urethrotomy.† Even if recontraction did occur in this case, and should occur in other and similar cases, it shows, not that the operation of dilating urethrotomy is a failure, but furnishes a weighty argument in favor of early operation upon stricture, before the urethra is contracted to any great extent, and while the operation is almost if not wholly free from risk, and in which class of cases the radical cure of stricture may be safely promised. It is a well-known fact that in nearly, if not quite, all the accidents that have ever occurred, through operations upon urethral stricture, by any method, the operation has been done upon *close stricture*, and for the relief of *difficult micturition*, without which relief, sooner or later, a fatal issue from retention or suppression of urine must have been apprehended.

Radical cure of stricture, even in the most desperate cases, may however be possible by dilating urethrotomy, as is shown in the case reported by Dr. Eldridge, in the appendix at the close of this volume.

* Just as this matter is going to press, I learn through Dr. Sabine, that this patient claims never to have had gonorrhœa, nor any venereal exposure since the date of the last operation, June 10, 1878, and that his intention is to submit himself to another operation at an early day, on account of gradually increasing contraction.

† This case may be found among the tabulated cases of Prof. Pease as No. 6, on page 265, this vol. In reply to a letter addressed to Prof. Pease concerning this case he writes, under date of May 13, 1880, "I cannot think that either myself or Dr. Sabine can be held responsible for the result in this case, neither can the result in the last operation be questioned, as my knowledge of the patient is such as to convince me of his entire lack of self-control. No sooner would he recover from an operation than he would contract a fresh clap, indeed the man's normal condition would appear to be that of a constant specific urethritis."—F. N. O."

In general terms the author feels justified in stating, as a result of his own experience, that proper instruments properly used, and with judicious after-treatment, may be claimed to warrant assurance of the radical cure of stricture in at least nine cases out of ten so operated upon.

In this connection, and in answer to many inquiries, the author would state that he considers the short, straight dilating urethrotome, figured at page 278, as the best in all respects for all cases of stricture occurring at any point between a point in the urethra corresponding with the base of the glans and the bulbo-membranous junction. In the exceptional cases where stricture occurs beyond this point, division of stricture, by any instrument, is a grave procedure on account of liability to hemorrhage beyond easy control, and should only be decided on, with the dilating urethrotome, after the most thorough appreciation of the attendant risks of operations in the deeper parts of the urethra. My opinion in regard to this matter has already been expressed in this, as well as in the former edition, at page 310. Fortunately, the great majority of strictures requiring treatment are situated anterior to the bulb—the apparent strictures, usually referred to as being "at the neck of the bladder" are purely spasmodic, and, as a rule, disappear on removal of the anterior organic contraction.

The correctness of my position in regard to the frequent occurrence and importance of spasmodic stricture, and its dependence in a large number of cases upon a reflex irritation, (as shown page 302 *et seq.*) has been amply proven during the past year, in the course of a discussion between Prof. H. B. Sands and myself, and which may be found in the columns of the *Hospital Gazette* of Feb. 13, April 19, May 3, June 28, July 12, and July 22. And it is, in my opinion, not too much now to claim that no operations upon strictures in the deep urethra are warrantable; until all pronounced localized contractions, in the anterior urethra, have been removed. I had hoped before this time to have published the volume on reflex irritations, announced as in preparation when the first edition of this book went to press, but various considerations

have delayed its appearance. It is proposed, however, to issue the volume during the coming summer, and its chief value will consist in its presentation of numerous well-authenticated cases of *reflex irritations* and *neuroses of the genito-urinary tract*, chief among which will appear a series of examples where spasmodic stricture of the deep urethra has been mistaken for organic stricture by the best and most experienced surgical authorities, and treated as such.

In addition to this evidence of the comparative safety of internal urethrotomy by the plans and procedures I have proposed, I am permitted to quote from a letter recently received from Dr. Stuart Eldridge, formerly Professor of Anatomy in the Georgetown Medical College, and at present Surgeon-in-Chief of the General Hospital at Yokohama, in which he reports over one hundred operations on stricture by dilating urethrotomy, according to my procedures. "Nearly one-half," says Dr. Eldridge, "were complicated with divulsions executed at the same sitting, the strictures being too small to admit your instrument, and I have not lost one." Dr. Eldridge confirms my claims of radical cure of stricture, in the most conclusive way, by publication of a case where the operation of dilating urethrotomy was performed upon a close stricture complicated with Bright's disease of the kidneys and tertiary syphilis. When the patient died, three years after, from syphilitic disease, at the *post-mortem* examination, *complete and permanent recovery from the stricture was demonstrated.* This account was published in the *New York Medical Journal* in the issue of July, 1878, with a carefully executed woodcut.

This example is considered so important as an absolute and indisputable proof of my claims in regard to the radical cure of urethral stricture, that the woodcut representing the specimen is reproduced at the close of the present volume, and the text of the case is quoted in full in the Appendix (page 353, *et sequitur.*)

No. 108 West Thirty-fourth Street,
New York, May 26th, 1880.

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