
ENDODONTICS

Third Edition

JOHN IDE INGLE

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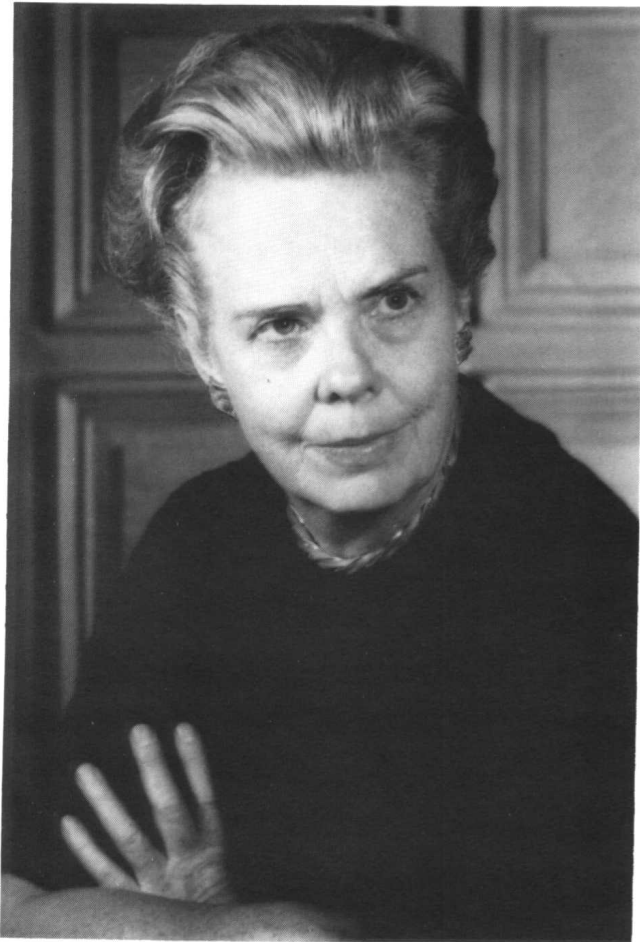
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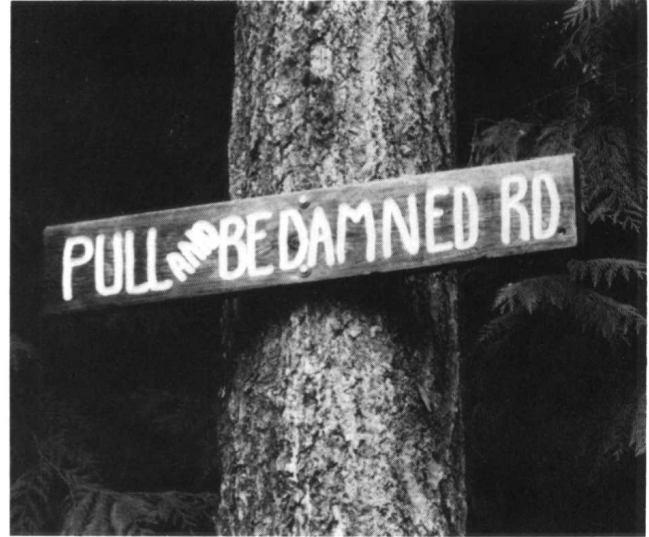
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Preface to the First Edition



The original sign for Pull and Be Damned Road has been pilfered so many times the authorities have had to place a new sign over 20 feet above the ground. (Courtesy Dr. James Stephens.)

This book was begun at Snee-oosh Beach, a quiet retreat overlooking Puget Sound and the San Juan Islands. At Snee-oosh it is possible to escape from complex civilization, and to concentrate upon the job at hand—writing a text.

Hard by Snee-oosh is an old Indian trail called PULL AND BE DAMNED ROAD. One can hardly imagine a more fitting location while writing a text on the *pulpless tooth* than nearby PULL AND BE DAMNED ROAD, for “Pull and be damned” could well be the motto of the dental profession from its inception.

PULL AND BE DAMNED ROAD goes down to the shores of Skagit Bay, an inside passage of the gentle Pacific leading ominously to DECEPTION PASS. This delusive inlet which so easily deceived the early explorers, reminds us how our profession has practiced *self-deception* over the years. Unfortunately, many pass into the “pull and be damned” deceptive phase of dental practice, never to return.

Inside DECEPTION PASS, however, lies HOPE ISLAND, a symbol of the future. HOPE we must have, coupled with resolve. HOPE that the future of dentistry will noticeably improve. HOPE that an enlightened profession will be guided by the concept of *retention* and *rehabilitation* of the dental apparatus. HOPE for the rejection of “oral amputation.”

To say that the ideas contained within this text are ours or are original is ridiculous. Nothing really is new under the dental sun. We have liberally borrowed from our contemporaries as well as from the past. We only hope we give credit where credit is due.

The student who chooses this text for an encyclopedia will be disappointed. In this age of “do it yourself” this is a “how to do it” book. We have attempted to discuss and illustrate in great detail the operative aspects of endodontic therapy, for we estimate that in treating a pulpless tooth the dentist will spend at least 75 per cent of treatment time in endodontic cavity preparation, canal debridement, and filling. Operative endodontics is therefore presented first in the text, and a correspondingly significant section deals with these matters.

We leave to other authors the *detailed* discussion of anti-infectives, local anesthesia, or oral microbiology. Although these subjects are dealt with in this text, we have tried to keep the material in proper context; brief, and to the point. We have spent, however, an unusual amount of space and time in developing the chapter on DIFFERENTIAL DIAGNOSIS OF ORAL AND PERIORAL PAIN.

Diagnosis of pain is an area of dental practice which more frequently is falling into the province of Endodontics. It has often been said that any well-trained person can practice the mechanics of dentistry, but that proper diagnosis is the discipline that separates the really competent dentist from the merely mechanical; hence the extensive coverage of the subject.

A great deal of thought and talent was put into developing the four chapters on the normal and pathologic pulp and periapical tissues. This discussion builds the background for diagnosis of endodontic problems and sets the stage for a better understanding of oral and perioral pain.

Snee-oosh Beach is no Walden Pond, nor we Thoreau for that matter. But we may learn a lesson from Walden. "Simplify, simplify!" was Thoreau's text, and simplification is one text we may well take to heart. There has been far too much complicated mumbo-jumbo in endodontic treatment, a significant factor in discouraging the profession from including endodontic therapy in their practices.

We will attempt to present the subject not only in a simplified form but in a systematic manner; for the simplified systematic practice of endodontics will lead to successful results achieved with pleasure and profit. We have attempted to remove the mystery and retain the basic core of the subject. We only hope we succeed in bringing some order out of the present chaos.

Finally, we would like to eulogize Dr. Balint J. Orban to whom the first edition is dedicated. Dr. Orban's death was a great loss to the profession and an even greater loss to those of us fortunate enough to have known him well. His ability to clarify and delineate a problem is apparent in the *Classification of Pulpal and Periapical Pain* which we discussed just prior to his death. The profession is forever in the debt of Balint Orban; not the least for his matchless descriptions of pulpal histopathology. We are proud to be the recipients of this priceless collection of microscopic material. We are more proud to have been his friends and disciples.

Seattle, Washington
1964

JOHN I. INGLE

Preface

"The Jury's Still Out"



In large part this revision for the Third Edition of EN-DODONTICS is being done at the foot of Mount Rainier. A far cry from Snee-oosh Beach and Pull and Be Damned Road, but perilously close to Mount St. Helens.

Why these geographic allegories for an endodontic text? At the time of the first edition, we were truly concerned about the disgraceful tooth extraction rate, hence Pull and Be Damned seemed symbolic of the miasma from which we hoped to emerge.

For the Second Edition, the symbolism of the Washington Monument dealt with the monumental integrity that seemed badly needed in the discipline at that time.

And now Mount Rainier, a massive base rising to a spectacular crest. As one reviews the mountain of endodontic accomplishment over the past several years, one must be impressed with the solid base of substantial research and observation that has brought us to this peak in our progress. We are literally being overwhelmed by an avalanche of ideas, techniques, instruments, all of it exciting, some threatening, much untested.

In all honesty, one must admit there are those of us who have been forced to reevaluate our endodontic tools and techniques. The pristine splendor of our "mountain" has been threatened. Could Mount Rainier become another St. Helens? Must we admit there can be faster yet safer and more thorough ways to care for our patients? Can we still hold to the Hippocratic admonition, **primum non nocere**, do no harm while doing good?

Well, The Jury's Still Out! Yes, much of the innovation in endodontics is exciting, but no, it is not tested. Not thoroughly at least. Yet one cannot hold up a textbook revision until the jury's in.

Endodontics will take a radical turn in the 1980s to a less tedious, less costly, more polished discipline of dentistry. We hope this edition is a bellwether of the best of this change.

*Inglewood
Mt. Rainier, Washington, 1984*

JOHN I. INGLE, D.D.S.

Acknowledgments

Somewhere there must be a definitive text on any subject—Izaak Walton's *Compleat Angler*, for example. Well this book is *Compleat Endodontics*, if you will, an attempt to cover the field totally, not just hit the high spots or pander to specific prejudices. In order to be complete, brevity must sometimes be sacrificed. Brief or not, we have still tried to keep the text simple and enjoyable.

Braudel spoke to the problem of simplicity in the preface to his monumental book, *The Structures of Everyday Life*, eleven years in preparation. "I have started the chapters you are about to read four or five times over," stated Braudel. "I have written and rewritten them from start to finish. And I am not at all sure that my final version is the clearest. I console myself," said Braudel, "with a remark by the British historian, Frederic W. Maitland (1887) that 'simplicity is the outcome of technical subtlety; it is the goal not the starting point.' With luck we may achieve it in the end."

The contributors to this text were selected for their expertise—each a specialist within the specialty. Hence, each has a great deal to contribute. I am particularly indebted to these contributors, many of them authors of texts in their own right.

In production I must first thank my wife Joyce—patient, indefatigable, efficient, accurate and, above all, loving. At UCLA I am indebted to S.B. Khalsa, the department secretary, as well as Rhoda Freeman, Michalle Kirsh, Barbara Mersini, and Roseanna Espinosa in word processing; Richard Friske, Catherine Boras Siegel, and B.J. Coburn in pho-

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At the University of Washington, Dale Leukhold and particularly Assistant Professor Phyllis Wood, a superb artist, came to my rescue. The lasting efforts of the late Virginia Brooks and of Clifford Freehe, also from the University of Washington, are once again gratefully acknowledged.

Special recognition must be paid to Dr. Seiichi Matsumiya, who supplied us with new photomicrographs to replace his classic examples of oral pathology. While serving as dean of Tokyo Dental College, Dr. Matsumiya personally took the time to retrieve the negatives and have printed the microphotographs that were so badly needed to replace the worn plates at the printers.

Finally, I must once again thank the four partners of Lea & Febiger, all descendants of the founders of America's oldest publishing house. At Lea & Febiger I am also indebted to my senior editor, Martin Dallago, as well as Dorothy Di Rienzi and Jonathan Goodman, special editors, and Thomas Colatezzi and Samuel Rondinelli in production. The confidence and patience shown by the staff at Lea & Febiger could not be surpassed.

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