

Question and Answer Department

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Question: Can you tell me where I may get information regarding the comparative flexibility of wires of various gauges that are commonly used for springs?

Answer: An article on Flexibility Studies on Gold Alloy Wires and Orthodontic Appliances by F. A. Peyton and G. R. Moore will give you the information you desire. These articles appeared in the August and September issues of the *International Journal of Orthodontia* and *Dentistry for Children* in 1933.

The authors give a detailed account with graphs and illustrations of their method of measuring displacements and pressures and the effect that the wire diameter, spring length and spring design have on pressure.

R. C. Brumfeld has articles of a similar nature in the same Journal, Volume 16, page 1050, for 1930 and Volume 17, page 5, 1931.

Question: In the light of the new findings of Oppenheim and his deduction that there is no such thing as "biological tooth movement" is the orthodontist still justified in performing extensive tooth movements?

Answer: The benefits derived from orthodontic treatment when expertly administered so far overbalance the effects of damaged tooth tissues that we feel the orthodontist need not hesitate to advise corrective procedure, even when a great amount of tooth movement is demanded. The tooth tissues affected have the ability to repair themselves just as have the osseous structures that are changed so markedly when tooth position is modified. Clinical data gives sufficient evidence of perfection of these reparative processes, as demonstrated by the excellent functioning of teeth and dentures twenty to thirty years after orthodontic treatment. This report of Dr. Oppenheim's, however, should be an incentive to all orthodontists to acquire the greatest skill possible in technical procedures and to perform all tooth movements in such manner as to favor physiological processes in tissue reactions. It is one more proof of the need for thorough preparation in the fundamental science of biology, in the full scope of its meaning.

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