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THE COMEDY OF EXPANSION AND THE TRAGEDY OF RELAPSE

By

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"You can't grow here," said the Dormouse.—(*Alice in Wonderland*).

I HAVE been stimulated to write this paper by the knowledge that a very considerable number of dental practitioners in this country are practising expansion as a panacea for many orthodontic ills. It is still being taught as routine practice in some of the schools, and very large sums of money are being paid out of our pockets under the Health Scheme for such treatment,

the permanence and ultimate benefit of which is open to very grave doubts. What is even worse, many unfortunate children are being saddled with uncomfortable appliances which are worn for long periods and which, as we shall see, by the very nature of things can be doing no good and sometimes positive harm.

The quotation from Lewis Carroll's immortal work, which heads this paper, seems particularly apt as a criticism of those dental practitioners who practise

expansion of the maxillary and mandibular arches in the hope that by doing so they will stimulate bone growth and so allow the jaws to accommodate a full complement of teeth in regular order and with a high degree of permanence of position.

Angle's Teaching

This misguided belief stems from Angle's early teaching that the loss of any of the teeth by accident or design was a major dental catastrophe, and that so long as the inclined planes of the cuspal arrangement of the teeth were put into a favourable relationship, the forces of mastication would permanently maintain them in that relationship. Such was the influence of Angle upon the study and practice of orthodontics that many of his followers continued vehemently to support his doctrine or very grudgingly to give way to the teachings of newer schools of thought. There is today, among many practitioners, a sense of guilt and shame when teeth are extracted in the treatment of an orthodontic case. It is regarded as something of a confession of failure, a compromise between idealism and expediency when, as a matter of fact, it is probably doing something in a few moments that evolutionary processes have been trying to do over many æons, namely reduce the number of teeth in the human dental arches which, according to Hooton, are in a state of decidedly retrogressive evolution and seem to be shrinking¹.

It may be profitable to spend a few moments considering the views and concepts of some of the men who have been leaders of thought in this controversy. First, Angle in his uncompromising fashion makes the following statement: ". . . there is a law for determining the best balance of features, or at least the best balance of the mouth with the rest

of the features, which artists probably know nothing of and one which for our work is far more unvarying and more reliable than even the judgment of the favoured few. It is, furthermore, a law so plain and so simple that all can understand and apply it. It is that the best balance, the best harmony, the best proportions of the mouth in its relation to the other features require that there shall be *the full complement of teeth, and that each tooth shall be made to occupy its normal position—normal occlusion.*"²

Angle went on to say that "this law may be regarded as one of the corner stones of the new school of orthodontia in contradistinction to the teaching that has always dominated the practice of the old school—that of leaving to the individual judgment of the operator, without any standard or law, the determination of the requirements in orthodontic operations in each given case." He refers in the next paragraph to the "pernicious teaching and practice of extraction," which he considers "will doubtless soon become mere matters of history."

Sir Frank Colyer

This is strong meat of the sort one would expect after a study of the photograph of E. H. Angle, and this dogmatism coming as it did from a very brilliant man was to influence orthodontic thought and practice for many years, and one saw little reference to the work of an equally brilliant if not quite so domineering Englishman, J. F. Colyer—later Sir Frank Colyer. Let us consider what he said in 1900³.

"The methods available for the treatment of crowded mouths are: (1) Expansion of the arch; (2) extraction; (3) a combination of expansion with extraction.

"Expansion of the arch as a remedy

for crowding was first suggested by Dr. Coffin, and consisted of moving all the teeth or a large number of them in an outward direction. In a previous chapter the question of the movement of the teeth when treated mechanically was discussed, and it was shown that with the majority of appliances the tooth for all practical purposes may be considered to swing on its apex. In expansion, then, the crowns are made to occupy a greater arch, but the apical positions remain in practically the same crowded condition. There is, therefore, no true relief to the crowding and hence a relapse frequently takes place. Expansion of the arch sometimes results in considerable disarrangements of the occlusion of the teeth, while the extreme slope at times given to the anterior teeth is most unsightly. The method has, however, the advantage of bringing the teeth into a regular arch without the loss of any of their number, and this is a great attraction to many.

"Extraction for the relief of crowded mouths possesses many advantages: (1) Room is gained not only for the crowns but also for the roots of the teeth; (2) mechanical treatment is lessened and in many cases dispensed with; (3) isolation of the teeth is often obtained, which is a point of great therapeutic importance in the treatment of caries; (4) the bite is but little disarranged provided the extraction is judiciously carried out; (5) the teeth invariably assume better directions.

"In the large majority of cases extraction is far preferable, and is certainly more rational than expansion of the arch."

It should be realised that Colyer was thinking in terms of the expansion devices which were in use at that time; the split Coffin plate was one which was followed by screw-pattern plates of the Badcock type. None of these appliances

has much effect upon the apices of the teeth. They merely tilt the teeth as Colyer says. It was to move apices that Angle devised first the pin and tube appliances and later the edgewise arch, which moved teeth bodily off the basal bone. We know from our prosthetic practice the unwisdom of setting up artificial teeth "off the ridge." This is precisely what the early followers of Angle did with the natural teeth, thus producing a state of instability which was bound to relapse when retention was abandoned.

Differing Concepts

The opinions of Angle and Colyer are so diametrically opposed that a suspicion is aroused that prejudice is entering into the story somewhere. Both writers were in all probability aiming at the same target, but with different ideals and concepts behind their reasonings. Angle was probably thinking in terms which I expressed in these columns a short while ago⁴.

"The orthodontic concepts based on these philosophies (those of Spencer and Rousseau) premise that nature, in her beneficent wisdom, intended that every child should grow up with beautiful teeth arranged in regular order in arches having the correct relation one with the other. When this does not occur then something has gone wrong with the original plan. . . ." Colyer, on the other hand, was probably thinking in terms of the evolutionary teachings of Darwinism. He realised that the physical endowments of the individual varied from one to another and that the basic shape of the jaws was often an inherited factor which could not easily be changed, and if it had been brought about by environmental circumstances, the damage done by those circumstances was usually past mending by the

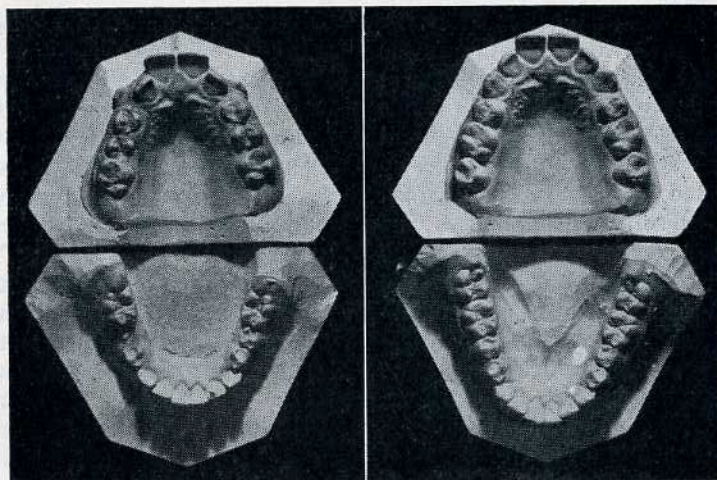


Fig. 1. A treated case, the success of which depends upon the removal of 4/4. The end result is completely satisfactory, both as regards æsthetics and permanence

time it came into the orthodontist's hands.

Let us consider our problem from the anthropological and evolutionary viewpoint. In a paper read at the meeting of the British Society for the Study of Orthodontics in 1921, by Sir Arthur Keith and George G. Campion,⁵ it is stated that "The so-called adenoid face, the narrow, deep palatal arch, the irregular eruption of teeth, are not due to a simple mechanical cause such as enlarged tonsils, or of adenoid vegetation in the respiratory tidal way. We are dealing with an arrest or a disturbance of the elaborate machinery which underlies facial growth." The writers go on to speculate on the nature of the underlying pathological condition which they consider may be dietetic imbalance which causes a nutritional disturbance which in turn affects the normal working of the hormone systems of the body. It should be remembered that dietetics—particularly the influence of vitamins—were very much in the air at the time this paper was given.

Another speculation put forward was the evergreen supposition that our modern diet failed to stimulate the teeth, jaws, and muscles of infants and children to the full extent.

Twenty-five years later, Ernest A. Hooton,⁶ Professor of Anthropology at Harvard University, goes several steps farther than Keith and Campion. He draws attention to the fact that we see defective development of the face in parents "paralleled and exaggerated in their children. It is hard to see how these conditions could be duplicated except through heredity, especially in modern families in which the children are carefully reared from infancy on diets prescribed by orthopædists and modern nutritionists, whereas their parents, for the most part, were like Topsy in that they 'simply grewed' without benefit of cod-liver-oil, capsulated vitamins, spinach, orange juice and the rest of it." Hooton continues ". . . it is all too evident in the white race . . . there is a long-standing and deep-rooted evolutionary trend towards both reduc-

tion of the bony structure of the face and diminution in size of the dental arcades and of the teeth themselves. This trend manifests itself in different ways and to different degrees in various racial and sub-racial types. Broad-faced, short-faced, round-headed peoples, for example, are more likely to suffer from impacted molars due to insufficient posterior development of the jaws than are long-faced, narrow-faced, long-headed peoples. These latter are prone to malocclusions involving insufficient width of the palate and mandible, defective or arrested mandibular development, as contrasted, perhaps, with lack of the anteroposterior growth of the middle-face in round-heads.

"However we look at it, we are up against retrogressive factors which have got into the germ plasm and cannot be eliminated except by selective breeding in so far as they are hereditary. Bearing this unpleasant fact in mind, it is perhaps more practicable to attempt merely to restore function within the various patterns set by heredity than to oppose the whole evolutionary trend and try to reshape the face in an ancestral mould."

Hooton refers to defective and arrested growth referable to improper diets, pathologic conditions in the nose and throat, or generally poor health. He makes the point that mechanical corrections of malocclusions in an individual whose physiological condition is subnormal or disturbed is made more difficult. He says "There is no use in attempting to reverse an evolutionary trend in a deteriorated, sickly or malfunctioning organism."

He continues, "In the functional atrophy and shrinkage of an organ, whether due to hereditary or environmental causes, the different parts of that organ are probably affected in the order of their comparative plasticity. Thus, in

the masticatory apparatus the muscles are first decreased, then the bone, and finally the teeth. This is probably the explanation of the fact that the jaws are not big enough for them to erupt in their proper positions. It is easy enough for the orthodontist to move teeth, but they must have an adequate setting—a firm foundation—if they are to stay put. The extent to which mere readjustment of the occlusal relations stimulates reaction in new bone growth to stabilise the teeth in altered positions is doubtful. In many cases it probably does not take place at all. Hence I should regard it as probably a sounder practice in orthodontics to remove a few teeth in order to make room in an inadequate dental arcade for the proper positioning of the remainder, than to attempt to warp all of them into a position that cannot be maintained because they have nothing to stand upon." (Fig. 1.)

Although the policy of extracting teeth as recommended by Colyer continued to be practised extensively in this country, it was done by many practitioners with a certain sense of shame, as I have previously indicated, and nearly all the American disciples of Angle—Hellman, Sved, Strang, and many others, condemned it as a therapeutic measure, save in extreme cases, in very strong terms.

In 1928 a Swede, Axel F. Lundström, caused something of a revolution in orthodontic thought in a paper entitled "Malocclusion of the Teeth regarded as a Problem in connection with the Apical Base."⁷ The conclusions which Lundström drew from this piece of research are so important in the study of our problems that I quote them in full, more especially as they are not readily available in the text-books.

"During the last two decades orthodontic practice has been dominated by the view that the movement of teeth is

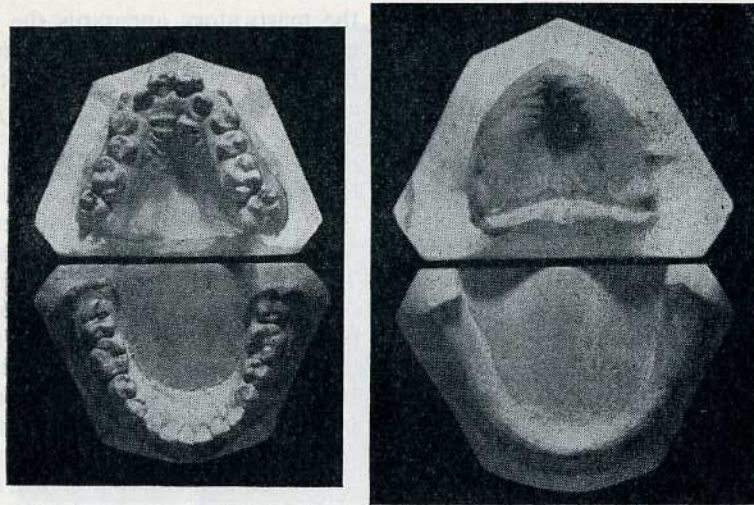


Fig. 2. Disparities in size of apical base between maxilla and mandible. In these cases the mandibular teeth are often quite regular—the maxillary teeth very crowded. Extraction of mandibular teeth will not cause the mandible to collapse and expansion of the maxilla will not allow the operator to arrange and maintain with any degree of permanence the maxillary teeth in regular order and in correct relationship with those of the mandible. The edentulous models tell the story of the apical base as it exists in the other models in which the teeth are present. Cases such as these present serious problems from both the orthodontic and the prosthetic standpoint

capable of so affecting the surrounding regions that the latter adapt themselves to the new position of the teeth, *i.e.*, that occlusal conditions are able, by means of function, to determine the size and form of the apical base. In the foregoing it has been shown that this is not the case.

“Abnormally narrow and abnormally wide apical base has been observed in cases where the abrasion of temporary teeth gives evidence of an intensive masticating function.

“A normal apical base is common where lack of abrasion gives evidence of slight masticating function.

“A normal apical base may exist where the condition of the antagonising teeth is incompatible with a normal functioning capacity.

“A normal apical base may exist in the one jaw simultaneously with an

abnormally large or abnormally small apical base in the other. (Fig. 2.)

“The very different results of similar orthodontic experiments show that a normal occlusion attained by mechanical treatment is not necessarily accompanied by a development of the apical base in harmony with the positions of the teeth, with the result that the occlusion attained cannot be maintained. The spontaneous growth of the apical base that sometimes occurs, resulting in the expansion of the crowded arch, may be assumed to take place even in those cases where mechanical treatment is applied, and the success of the treatment can therefore be ascribed to this spontaneous development.

“The size of the apical base is not dependent upon the masticating function in this respect, that a certain amount of such functioning has not

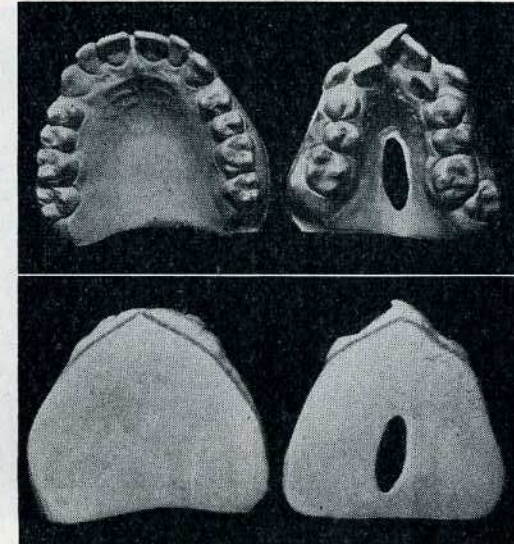


Fig. 3. The models of a normal mouth and a very crowded mouth have been trimmed down to the approximate positions of the apices of the teeth. It will be seen that although the teeth in the regular mouth are smaller than those in the irregular mouth, the sizes of the apical bases are reversed

been proved capable of affecting its development. On the other hand, the development of the apical base may, under certain circumstances, be arrested by an extensive loss of tissue following extraction of the teeth or the masticating muscular system being injured. If the apical base is abnormally large or small, and the spontaneous capacity of development just mentioned does not exist, a movement of the teeth does not effect the desired change of the apical base.

“The prognosis for the successful treatment of a case of malocclusion, therefore, depends upon the state of the apical base. When the latter is normal or has a natural disposition to become so the prognosis for the maintenance of normal occlusion is good. When that is not the case, and a spontaneous power of development neither exists nor shows any signs of appearing, a normal occlu-

sion cannot be maintained without a permanent retainer. (Fig. 3.)

“Since in an ontogenetic sense the occlusion is not able to control the apical base, while on the other hand the latter is in a high degree capable of affecting the occlusion, it is necessary, instead of regarding from a therapeutic point of view the anomalies of the positions of the teeth as simply or principally occlusal problems of the apical base, and the object of treatment will be the attainment of an occlusion (in harmony with the given or potential apical base) possessing a functional and hygienic optimum. From what has been observed above it is clear that in a considerable number of cases this optimum cannot be normal occlusion. The most urgent duty of mechanical orthodontics, therefore, is to endeavour to determine how, in every given case, such an optimum is to be attained.” (Fig. 4.)

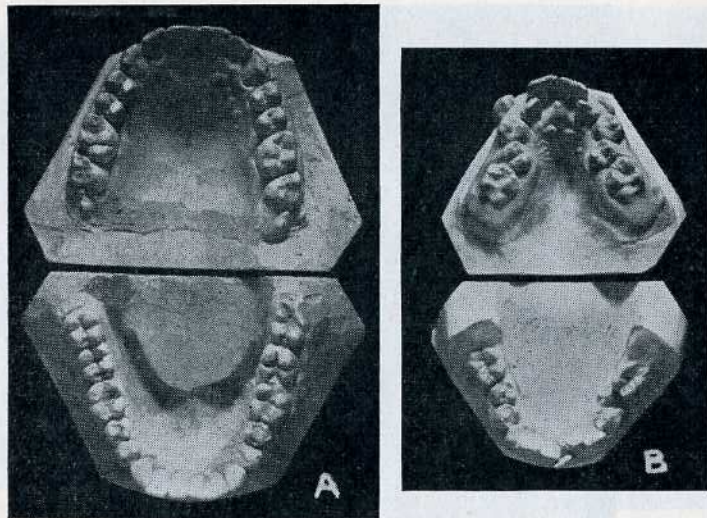


Fig. 4. Two upper dentitions, the individual teeth of both being approximately the same size. In the first we have a completely adequate apical base, in the second a completely inadequate one. To attempt to produce a result like "A" from the basic material of "B" would be the height of folly

Lundström's work pin-pointed several facts which had been overlooked by the workers in the Angle school. First, it developed the scientific realisation that the shape and size of this apical base was an inevitable and unalterable morphological feature of the human dentition. That it was largely genetic in its origin, growth and development, and capable of little alteration by environmental circumstances, good or bad. It also caused certain workers, notably Sim Wallace⁸ in this country, Tweed⁹ of Arizona, and Grieve¹⁰ of Toronto to get back to one of the earlier anatomists who had studied the growth of the jaws, namely John Hunter who, in 1771, said "The jaw still increases in all parts till twelve months after birth, when the bodies of all the six teeth are pretty well formed but it never increases in length between the symphysis and the sixth tooth; and from this time, too, the alveolar process, which makes the anterior part of the arches of both jaws,

never becomes a section of a larger circle. . . . After this time the jaws lengthen only at their posterior end. . . ."¹¹

These observations of Hunter emphasise the fact that enlargement of the jaws in the sense of expansion in the width of the bony arch is impossible. Any increase in the size of the arch to accommodate crowded teeth must be gained either by pushing out the incisors or pushing back the molars. The first device is usually aesthetically indefensible, and the second difficult and inadvisable because of the innate tendency of these teeth to move forward, which tendency will most probably cause a relapse.

The work of Broadbent, with his roentgenographic cephalometer, work which was analysed by Brodie and his co-workers in 1938,¹² added further evidence to the case which was piling up in favour of reduction of tooth substances rather than expansion as logical

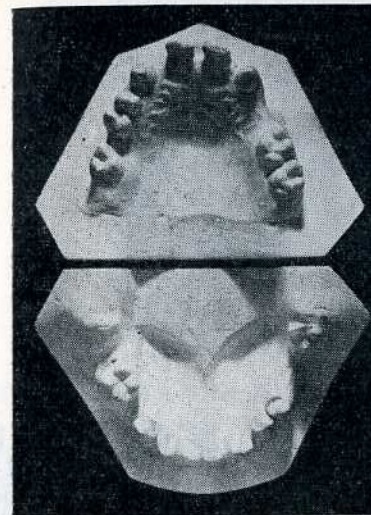


Fig. 5. A case of partial anodontia with completely adequate basal bony arches in spite of the fact that 862 | 2458 are congenitally absent.
7542 | 26
Their absence has had no influence upon the development of the basal bone.

orthodontic procedure. Brodie said, "Tooth movement does not seem to be as great as clinical observation had led us to believe. Apparently, growth and development count for a considerable part of the changes which take place during orthodontic treatment." Later in the report we find the following: "Actual bone changes accompanying orthodontic management seem to be restricted to the alveolar process."

In a further exhaustive study by Brodie, he shows that inherent growth tendencies cannot be depended upon to augment the ministrations of the orthodontist to convert an undesirable basic facial pattern to an harmonious one, since he found that cranio-facial pattern is established at birth and changes but little thereafter.¹³

The practitioners of the Angle school were somewhat puzzled by the fact that while a number of cases which they

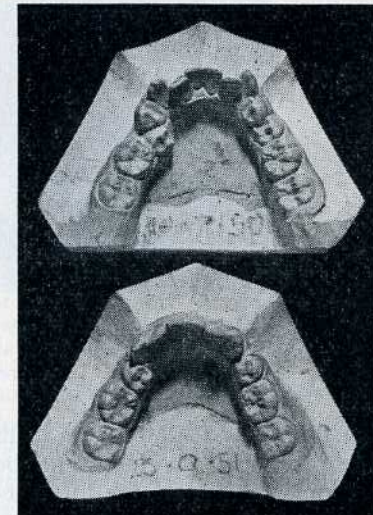


Fig. 6. An irregular mandibular dentition which has "uncrumpled" spontaneously following the extraction of 3|5

treated by methods of expansion stayed put, a number relapsed. Some explanation of these relapses had to be forthcoming, and this was attempted by Kelsey¹⁴. Kelsey suggested that certain cases did not "respond" to the treatment because of what might be called "osteoblastic sluggishness of varying intensity." Lundström criticised this view¹⁵ stating that he could find no evidence in medical literature that the so-called sluggishness was a clinical entity, and goes on to say: "Let us assume that we have at our disposal an individual with 'normal' jaws and a denture nicely developing along 'normal occlusion' lines, with every indication of a final 'facial harmony.' . . . We will assume that at a reasonable early age the attempt was made to expand the arches of one of these individuals . . . would we really expect the basal regions to have become remodelled to such an ex-

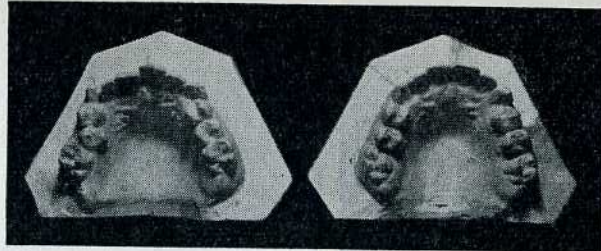


Fig. 7. It was necessary to remove 6|6 because of caries. With the minimum of mechanical assistance the arch "uncrumpled" and a well-balanced, stable dentition resulted

tent that the new position of the teeth would be permanent? Would we not be rather astonished if a relapse to something more or less approximating the 'normal' width of the arch did not occur? And would it be correct to attribute such a collapse to sluggishness? Certainly in an individual like this we would expect bone tissue to react with normal activity and to a normal extent."

It would be tedious to put forward further evidence, but perhaps I might conclude with an essentially practical contribution made by Tweed in 1941.¹⁶ "It is evident that most orthodontists believe that if they establish a reasonably satisfying cuspal relationship regardless of axial inclination and of the relation of teeth to their respective bony bases, occlusion will invariably direct the growth processes so that the maxillary and mandibular base bones will themselves grow forward and under the mesially positioned teeth. I wish this was true. . . . I waited for years for the stimulation of occlusion to develop bases under the protrusive dentures of some of my patients, and in most of these cases I am still waiting."

The concepts upon which successful non-relapsing orthodontic treatment should be based are relatively simple. First, the realisation that a maloccluded dentition is a dentition in a state of

equilibrium in its total genetic and environmental complex. The aim of the orthodontist is to put the maloccluded teeth into an arrangement that satisfies the needs of aesthetics, and function with some assurance that they will remain in that position when treatment is completed.

Second, appreciation of the fact that teeth and bone are structures having quite separate genetic origins, therefore one may expect, and one frequently finds, imbalances between the relative amounts of these two structures.

Third, the realisation that from an evolutionary standpoint there is, phylogenetically speaking, very little margin for error between the size of the teeth and the size of the jaws, therefore it only requires a very slight disparity to throw the whole complex out of gear.

There are a number of concepts upon which many people build their systems of treatment which are of doubtful truth. We are told, for instance, that the growth of the jaws depends upon the presence of teeth and that if teeth are lost the jaws will "collapse." I can find very little evidence of this collapse in the dynamic sense in which it is used, and on the other side of the picture we have all seen patients suffering from varying degrees of anodontia, in whom the dental arches are well developed in

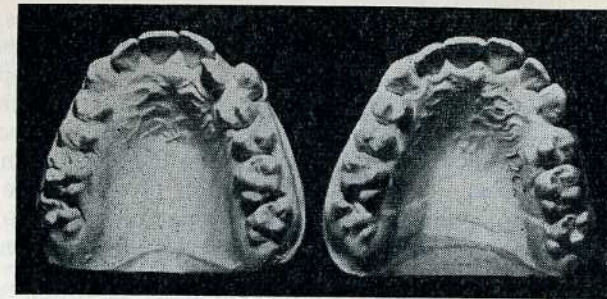


Fig. 8. Crumpling may be unilateral. In this case extraction of 14 gave a satisfactory result

spite of the fact that no teeth are present. (Fig. 5.) We are also told that the growth of the jaws depends upon the functional activity of mastication, speech, etc., yet we have all seen crowded jaws showing marked evidence of wear, and jaws with regular teeth in which little or no wear had taken place. I think we must come to realise that many of the environmental influences which have been blamed for certain types of malocclusion are not to blame at all, and that hereditary bony and muscular patterns are a very much greater factor in the production of malocclusion than we have previously thought.

One of the commonest causes of malocclusion appears to be a disparity in size between the basal arches of maxilla and/or mandible and the teeth. If the sum of the mesiodistal widths of the teeth, which we may call the dental arch, is greater than the bony arch in which they are to fit, then this dental arch will inevitably have to be crumpled in order to fit into the available bone. I prefer the term crumpling to collapsing. It is less dynamic and reduces the whole concept of many cases of malocclusion to the simple statement I have so often used, the impossibility of putting a quart into a pint pot. We are faced in these cases with a very simple problem. We must either make our pot of

quart capacity or reduce our quart of teeth. All the evidence goes to show that we cannot increase, by mechanical means, the capacity of our pint pot, so we are left with no other alternative—extraction and reduction of tooth substance, by doing so equating the dental arch to the basal arch of bone. It is so simple and so logical, yet as I said at the outset, endeavours are being made daily throughout the country to stretch this unyielding pint pot and fit into it this equally unyielding quart of teeth.

I am inclined to think that some of our difficulties of comprehension arise from our use of the word "dental arch." An arch has certain very definite properties which are not to be found in the teeth and jaws. Its stability depends upon the integrity of the units from which it is composed.

This only applies to the alveolar portion of the dental arches, using the term to indicate the complete complex¹⁷ of teeth and bone. A study of examples of partial anodontia should convince us of this. The basal portions of the bone are completely stable, hence our success in the science, art and craft of prosthetics. Again we talk about the six-year molar as the "keystone of the arch," whereas its position is a very peculiar one in which to find a keystone. Our use of the expression collapse is based on the arch analogy, and

"crumples" gives a very much better picture of what so often happens. The illustrations (Figs. 6, 7, 8 and 9) show that when room is made for the teeth the arches, of which the teeth form the composite parts, uncrumple, they do not—to coin a word—uncollapse.

It would be ungenerous and unwise in a paper such as this not to make some mention of the work of Harold Chapman. Throughout his long professional life he has been concerned with "Compleat Anglers" on the one side and the extractionist school of Colyer on the other. His latest expression is to be found in the reference I have given.¹⁷ I have always had a great admiration for Chapman's sober judgment and I do not think I shall be doing him an injustice if I express his views briefly as follows:

"Expansion of the dental arch has a place in certain cross-bites, and in certain Class II, Division 1 (Angle) cases where intermaxillary traction is the method of choice and where it is necessary to widen the upper arch to permit correct occlusion when the mandible is forward. As a method of aligning teeth when the basal bone is inadequate it [expansion] is to be condemned in Class I and Class II cases, but the upper arch in the latter would require the necessary amount of expansion to accommodate the lower arch in the forward position if that movement, in addition to extraction, is part of the treatment."

After Chapman's half-century of orthodontic practice, it is interesting and illuminating to quote a personal communication to me: "It has been my experience that I would have got better results had I extracted more, not less."

What is the practical significance of all this? It would seem that the procedure of expansion of the arches, as is widely practised in this country, is, in

the large majority of cases, quite useless and indefensible on scientific grounds as it has no influence upon the basal bone of the jaws. It is in this basal bone where the roots of a maloccluded dentition, quite literally, lie, in a very large proportion of cases. The pattern and size of this bone seem to be predetermined early in life, and it cannot develop beyond its own potential for development. In cases where space seems to have been gained for teeth during the use of expansion devices, the space would probably have been gained anyway.

Spontaneous gaining of space and alignment of crooked teeth is a common observation of all who have made a study of the growth and development of the dentition. As this basal bone has an independent genetic origin from the teeth, there is no guarantee that the sizes of the bony arches and the dental arches will correspond. There is no guarantee that the bony arches of one jaw will correspond with the other, and incongruities in these respects are not uncommon. If the dental arch is small in relation to the bony arch and the teeth are spaced, the condition is accepted as inevitable, and no one would dream of attempting to contract the bony arch to fit the teeth. When the dental arch is large in relation to the bony arch and the teeth are crowded, it is just as illogical to expect to expand the bony arch by mechanical means to accommodate the teeth. There is, and can only be, one logical answer to our problem. We must extract certain units of the dental arch so that its size may be correlated to that of the bony arch.

The Dormouse's remark "You can't grow here," applies very forcibly to the basal bone of the human jaws, and as practical experience suggests that a very considerable proportion of cases of malocclusion are caused by disparities and

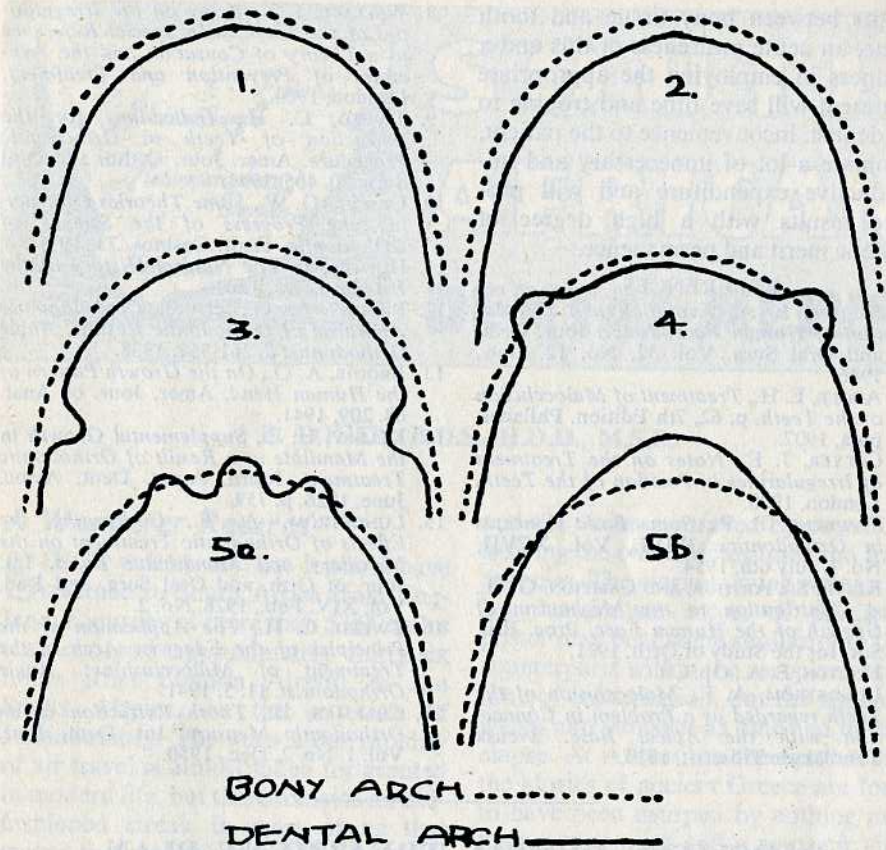


Fig. 9. Crumpling of Arches.

- (1) Size of bony arch and dental arch in balance.
- (2) Bony arch small, dental arch large.

In order to approximate such different sized arches, dental arch must crumple. The commonest sites for this crumpling are:

- (3) Pre-molar region. Second pre-molars usually lingual.
- (4) Canine region. Canines usually labial.
- (5a) Incisor region. General crowding.
- (5b) Incisor region. Protrusion.

3, 4 and 5a are usually caused by disparities between dental and bony arches. 5b can be caused by this but other factors are sometimes operative which is quite another story

misfits between bony tissue and tooth tissue, an acute awareness of this and a boldness in employing the appropriate treatment will save time and trouble to the dentist, inconvenience to the patient, eliminate a lot of unnecessary and unproductive expenditure and will produce results with a high degree of æsthetic merit and permanence.

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RADCLIFFE DENTAL TREATMENT PLAN

Proposals for emergency dental treatment in the Oxford district have been approved at a meeting of the Oxford County and City Executive Council of the National Health Service.

A letter from the administrator of the United Oxford Hospital, Mr. E. J. R. Burrough, put forward certain suggestions for an emergency service as far as the Radcliffe Infirmary was concerned.

"If a patient presents himself at the Casualty Department with a history of dental hæmorrhage after a tooth extraction, the dental surgeon concerned will be approached immediately and asked to open his surgery if it is out of hours," the letter stated.

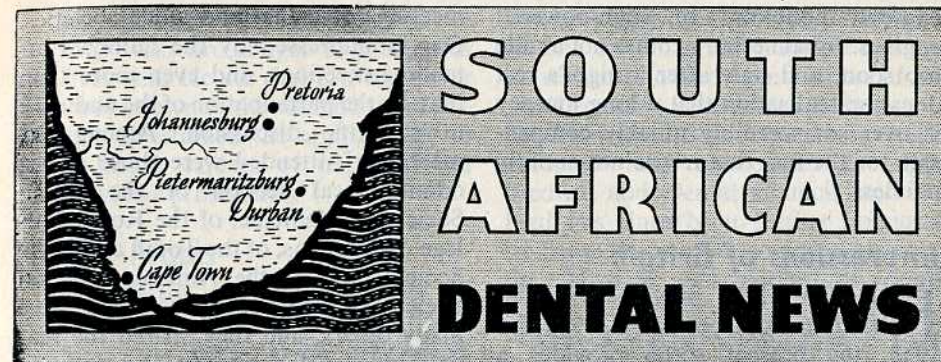
"This is except in those cases where there has been sufficient hæmorrhage to make it dangerous for the patient to go to the surgery, or where the patient has been referred by the dental surgeon himself for hospital advice and treatment."

The letter continued: "If a patient merely complains of toothache or has a dental abscess causing pain, he will be given sufficient relief to carry him on to the next day, if it is at night.

"He will be informed by day or night that he should go to his own dentist, if he has one."

If the patient was not on a dentist's list, the letter added, he would be told where he could consult a list.

—Oxford Mail



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A Wanderer Returns

SINCE writing my last letter, I have returned to South Africa from England, a journey of more than 5,000 miles that occupies approximately thirty-six hours from London Airport to Jan Smuts Airport, on the outskirts of Johannesburg. The miraculous rapidity of air travel is almost taken for granted in modern life, but there remains an old-fashioned streak in most of us that makes the overnight transposition from one continent to another a source of inward astonishment. Saturday morning, a lovely June morning in London, carries with it a memory of a last loving look along the Thames from the vantage point of Waterloo air terminal; can one then walk through the gates of the University of the Witwatersrand early on the following Monday morning without a moment of hesitation to make sure that it is really true? The man who can no doubt falls into the category of seasoned air travellers.

Air Travel

CONCERNING the intermediate period one must report, with regret, certain discrepancies between reality

and the vision portrayed by posters bedecking the offices of air lines and travel agencies. The elegant young woman and her immaculate escort of the travel poster may bear some similarity to their counterparts within the aeroplane at the time of embarkation, but the similarity wanes and vanishes as time and mileage elapse. At Athens, on the first evening, the glories of ancient Greece are found to have been usurped by nothing more than a restaurant and a souvenir shop. Cairo at midnight finds the young woman of the poster considerably less elegant and her escort somewhat creased as they stumble out of their flying metal box into a dreary airport building, far removed from romantic notions of the Sphinx, the Pyramids, and the Mena House in the moonlight. At dawn, Khartoum; no feluccas spreading their white sails serenely along the blue waters of the Nile—instead, another hot and airless restaurant for our heavy-eyed heroine and the irritable man in crumpled trousers with his collar askew. From there on mounting fatigue is alleviated only by stops at Nairobi and Livingstone and a wonderful view of Victoria Falls; alternately it is exaggerated by enforced idleness and the