

Don't Forget About

NITI OPENED COILED SPRINGS



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Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9



Fig. 10



Fig. 11

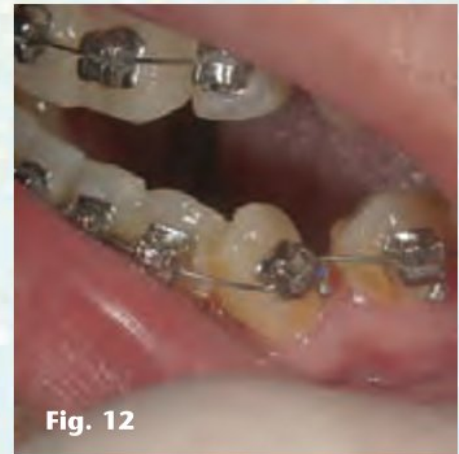


Fig. 12



Fig. 13

These springs are an excellent way to create space between teeth to eliminate crowding, and provide room in the arch for unerupted teeth. Compressed during placement, the springs exert continuous force against the teeth as they return to original length.

I am always amazed with what we can do with an opened coil spring in orthodontics, such as creating space for a tooth to come in, creating space to rotate a tooth or proclining front teeth to make room for canines. These are just a few uses, as you'll see in this article.

The rule-of-thumb is to compress the spring 2 mm or the width of a bracket – so, if you use a spring, just measure from bracket to bracket. If the length is 12 mm, then cut a 14 mm niti opened coiled spring.

Making room for a single tooth (Figs. 1-7):

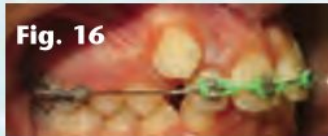
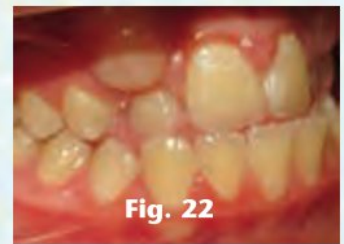
- 1 Non-extraction case
- 2 Overbite and narrow lower arch
- 3 Braces on– placed open. Coiled spring between the LL1 and LR3 to make room for the LR1 as we

expanded the lower arch, plus leveled and aligned the arches. We did 0.5 mm of IPR between the LR and LL 3-4.

- 4 Once room, we bracketed the LR1 and moved it into place
- 5 Finishing case now.

Making room for a rotated tooth (Figs. 8-13):

- 1 Non-extraction case
- 2 LL3 badly rotated
- 3 Place opened coiled spring between LL2-4 to create space to rotate tooth plus chain from 3-3 in lower (button on LL3)
- 4 Once rotated some, we place a 12 nit to finish rotating tooth into place.



Proclining front teeth (Figs.14-20):

- 1 Non-extraction case.
- 2 No room for upper canines.
- 3 Proclined front teeth using opened-coiled springs plus a lock nut as a stop.
- 4 Once room for canines, we bracketed them to move into place.
- 5 Now there is no room for UL2, so we used an opened coiled spring to make room. Placed eyelet button on UL2 and used 12 Niti to bring into place.
- 6 Finishing case.

Proclining front teeth to make room for canines (Figs. 21-25):

- 1 Non-extraction case.
- 2 No room for upper canines.
- 3 Placed opened coiled springs using lock nuts as stops.
- 4 Once room for canines, we placed brackets and moved into place with a 12 niti.

Proclining front teeth (Figs.26-36):

- 1 Non-extraction case.
- 2 No room for upper canines plus LL3 to come in.
- 3 Start case with upper 14 Niti and opened coiled springs from 2-4 to make room for upper 3s.
- 4 Once room, placed brackets on the upper 3s to move into place.
- 5 LL3, placed opened coiled spring from LL2-4 to create space for LL3.
- 6 Once space was created, we had surgeon expose and bond teeth. We are now bringing tooth into place.

How to use a lock nut as a stop (Figs. 37-42):

- 1 There are several ways to make a stop. One can bend a stop in the wire, use a crimpable stop, or just replace with open-coiled spring with a longer one as the space increases.
- 2 A lock nut just slides on the wire.
- 3 Every time the patient comes in, you just loosen the lock nut and slide it back 2mm to compress the open coiled spring, which makes for easy recall appointments to procline the anterior teeth.

Overall, the open-coiled spring can be a great assist to your orthodontic treatment plans.

