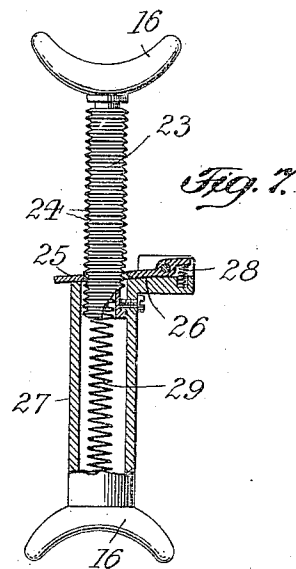
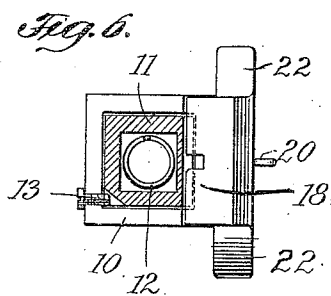
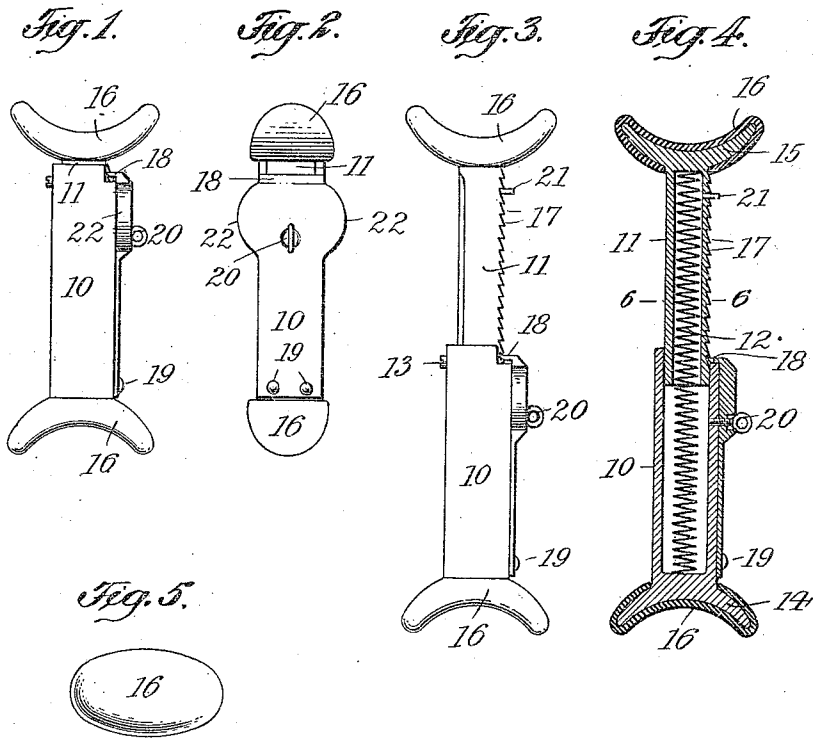


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DENTAL MOUTH PROP.
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959,684.

Patented May 31, 1910.



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WILLIAM ADELMAN, OF HOBOKEN, NEW JERSEY.

DENTAL MOUTH-PROP.

959,684.

Specification of Letters Patent.

Patented May 31, 1910.

Application filed March 17, 1910. Serial No. 550,046.

To all whom it may concern:

Be it known that I, WILLIAM ADELMAN, a citizen of the United States, residing at Hoboken, county of Hudson, State of New Jersey, have invented new and useful Improvements in Dental Mouth-Props, of which the following is a specification.

This invention relates to a dental mouth prop of novel construction, which automatically expands in length upon a recession of the patient's jaws, but does not contract upon an attempted compression of said jaws. In this way the mouth is always locked in its maximum open position, so that the teeth are freely accessible for dental operation, while the prop is not liable to drop out owing to a play of the jaws.

In the accompanying drawing: Figure 1 is a front view of my improved prop; Fig. 2 an end view thereof; Fig. 3 a front view, showing the plunger raised; Fig. 4 a longitudinal section of Fig. 3; Fig. 5 a plan; Fig. 6 a cross section on line 6—6, Fig. 4, and Fig. 7 a longitudinal section of a modification.

The prop consists essentially of a tubular post 10 within which plays a centered plunger 11. A spring 12, contained within post 10, and entering an axial bore of the plunger, tends to project the latter out of the post, an entire withdrawal of the plunger being prevented by a suitable stop 13. At the bottom the post 10 is provided with an arched cross piece 14 adapted to engage the lower jaw of the patient, while the top of plunger 11 carries a similar cross piece 15 adapted to engage the upper jaw. Both jaws 14, 15 are preferably provided with a soft rubber cushion 16, as shown.

The shank or plunger 11 is provided with a series of downwardly inclined teeth 17 to constitute a rack, which is engaged by a spring catch 18 secured to post 10 at 19 and limited in its play by a screw-eye 20. The cooperation of the rack and catch is such, that while the latter permits a free ascent of the plunger, under influence of spring 12, it effectively checks the descent of the

plunger. Normally, the plunger is pushed down, (Fig. 1), and is held in its closed position by catch 18 which extends over a pin 21 projecting from the top of rack 17. After the device has been fitted into the patient's mouth, catch 18 is drawn back by a suitable finger-piece 22, so as to snap into the teeth of the rack below pin 21. The plunger will thus be effectively locked against descent, while its ascent will be freely permitted. In this way the plunger, under the influence of spring 12, will follow up any increased spread of the jaws, so that the mouth will become locked in every newly assumed open position and a loosening of the prop will be prevented.

With the construction shown in Fig. 7, the shank of plunger 23 is provided with a series of circumferential grooves 24 constituting a rack and adapted to be engaged by an apertured catch 25 which encompasses the plunger and is supported upon an inclined rest 26 of post 27. Catch 25 is influenced by a spring 28 and permits an elevation of the plunger, under the influence of spring 29, while the descent of the plunger, under pressure from the jaws, is effectively prevented.

I claim:

1. A dental mouth prop comprising a tubular post, a freely raisable plunger engaging the same, a spring tending to project the plunger out of the post to its maximum extent, and means for locking the plunger against descent.

2. A dental mouth prop comprising a tubular post, a freely raisable plunger centered within the same and having a series of teeth, a spring inclosed within the post and bearing against the plunger to place the same under a constant raising tension, and a catch carried by the post and adapted to engage the teeth, whereby the post is locked against descent.

WILLIAM ADELMAN.

Witnesses:

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