

W. S. KELLY.
 DENTAL SPLINT.
 APPLICATION FILED JULY 8, 1914.

1,146,264.

Patented July 13, 1915.

Fig. 1.

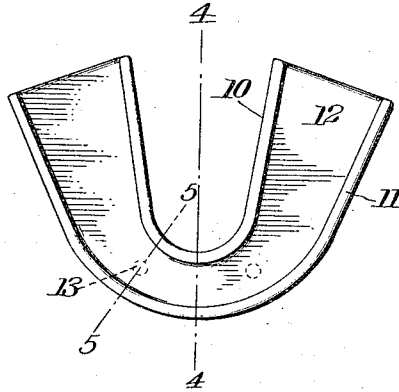


Fig. 2.

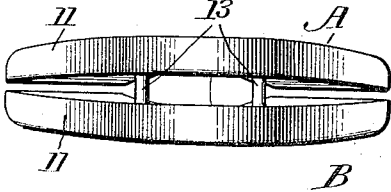


Fig. 3.

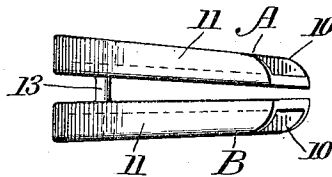


Fig. 4.

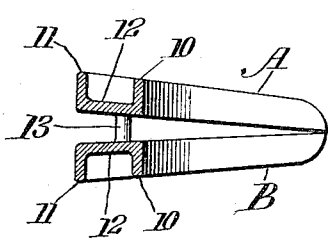


Fig. 5.

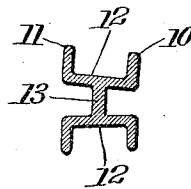
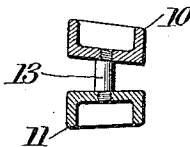


Fig. 6.



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DENTAL SPLINT.

1,146,264.

Specification of Letters Patent.

Patented July 13, 1915.

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To all whom it may concern:

Be it known that I, WILL S. KELLY, a citizen of the United States, residing at Wilkes-Barre, Luzerne county, State of Pennsylvania, have invented certain new and useful Improvements in Dental Splints, of which the following is a specification.

My invention comprises two U-shaped trays adapted to receive the upper and lower jaws, the trays having marginal flanges to confine the cement or compound which holds the jaws in position, and the two trays being connected by one or more pillars of malleable or bendable material so that the angle of the trays may be adjusted to the natural angle of the jaws of the patient when in position for setting a fracture.

The invention will be described in detail in connection with the accompanying drawing, in which,

Figure 1 is a plan view of a dental splint constructed according to my invention; Fig. 2 is a front view of the same; Fig. 3 is a side view showing the two members of the splint slightly separated at the rear; Fig. 4 is a section on the line 4—4 of Fig. 1 showing the two members of the splint arranged at a less acute angle than in Fig. 3; Fig. 5 is a section on the line 5—5 of Fig. 1; and Fig. 6 is a similar section illustrating a modification.

Referring to the drawing, A, B, indicate the upper and lower members of the splint. These members are substantially identical in shape and construction. Each member is generally U-shaped and provided with an inner marginal flange 10 and an outer marginal flange 11. The channel formed by the U-shaped plate 12 and its marginal flanges 10, 11 is preferably narrow at the middle where it receives the front teeth of the patient and wider at the rear open ends where it receives the double teeth. The flanges are sufficiently high to confine the cement or other material in which a fractured jaw is set, but low enough so that they do not interfere with closing the jaws or annoy the patient by cutting into the gums.

The U-shaped members A, B, are arranged back to back, to register with each other, as shown in Figs. 2 and 3, and they are connected by one or more pillars 13 which may be integral with the members A, B, as shown in Fig. 5, or suitably con-

nected therewith, as shown in Fig. 6. The U-shaped members of the splint may be constructed of metal, hard rubber or other material of a sanitary nature. The connecting pillars, which are preferably arranged near the front of the device, are preferably made of malleable or pliable metal which can be bent to change the angularity of the members A, B, and which will hold the members in any desired relation. When the jaw members A, B, are of metal the pillars may be of the same metal, if suitable, or they may be of a softer metal and integral with or attached to the jaw members.

In using my improved dental splint the device is placed in the mouth of the patient and the jaws carefully closed thereon until the teeth fit against the plates 12. In fitting the splint it is preferable to separate the rear ends slightly and then permit the bite of the patient to adjust them to the natural angle of the jaws when the teeth are pressed against the upper and lower plates 12.

When the splint has been adjusted as described, it is removed and the channels are filled with cement or a suitable compound or composition. The splint is then replaced in the mouth of the patient and the jaws are brought together and pressed into the compound until the teeth touch the plates 12. During this operation care must be taken to properly adjust the fractured portions of the jaw or jaws. When the cementing material has set or hardened it will adhere to the splint and to the teeth and the jaws will be held indefinitely in proper position without the use of a bandage. In case of a jaw unprovided with teeth a bandage must be used.

When the splint is in position it need not be disturbed until the fractured bones have reunited. The patient may be fed by inserting food between or adjacent the pillars 13. The exposed portions of the splint are smooth and there are no joints or crevices in it to render it unsanitary. The exposed parts can be readily cleansed and disinfected without annoyance to the patient.

The splints may be made in varying sizes. A set of three or four different sizes will answer for all cases. In a case where one jaw naturally protrudes beyond the other the malleable pillars permit of suitably adjusting the members of the splint.

Having described my invention what I claim and desire to secure by Letters Patent is:

- 5 1. A dental splint of unitary construction having two U-shaped members adapted to receive the upper and lower jaws, and one or more pillars connecting said members and holding them in proper relative position.
- 10 2. A dental splint of unitary construction having two U-shaped members adapted to receive the upper and lower jaws, and one or more pillars connecting said members and holding them in proper relative position
- 15 and being sufficiently soft to permit of relative adjustment of the members and sufficiently stiff to hold them in adjusted position.
- 20 3. A dental splint comprising two U-shaped plates each having inner and outer marginal flanges, and a pillar connecting the plates and rigidly secured thereto.
- 25 4. A dental splint of unitary construction having two U-shaped plates each having inner and outer marginal flanges, and one or more pillars connecting the plates and being sufficiently soft to permit of relative adjustment of the plates and sufficiently stiff to hold them in adjusted position.
- 30 5. A dental splint comprising two U-

shaped metal plates, and an integral bendable pillar connecting said plates.

6. A dental splint of unitary construction having two U-shaped flanged plates separated in front sufficiently to permit of feeding between the plates, and two symmetrically arranged pillars connecting said plates at the forward part thereof.

7. A dental splint comprising two U-shaped flanged plates separated in front sufficiently to permit of feeding between the plates, and two metal pillars connecting said plates at the forward parts thereof, said pillars being bendable to permit of relative adjustment of the plates.

8. A dental splint comprising two U-shaped members arranged one above the other in angular relation and with their extremities spaced apart, and one or more pillars connecting said members and bendable to permit the space between said ends to be changed or to permit one member to be bodily displaced relatively to the other.

In testimony whereof I affix my signature in presence of two witnesses.

WILL S. KELLY.

Witnesses:

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