C. J. UNDERWOOD.

DENTAL BRIDGEWORK.

APPLICATION FILED DEC. 16, 1918.

1,299,067. Patented Apr. 1, 1919.

Fig. 1.

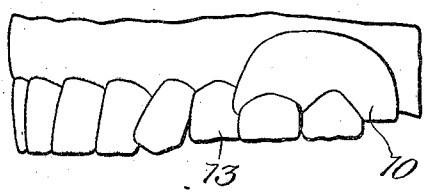


Fig. 2.

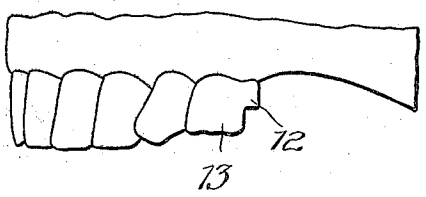


Fig. 3.

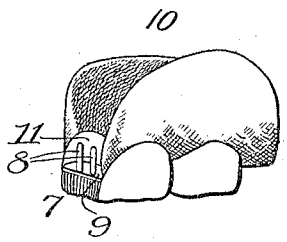


Fig. 4.

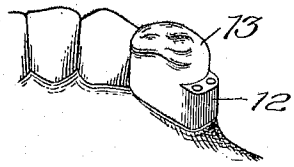


Fig. 8.

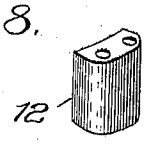


Fig. 5.

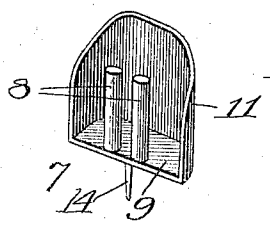


Fig. 6.

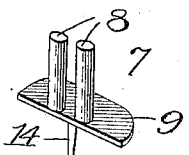
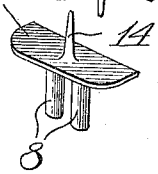


Fig. 7.



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UNITED STATES PATENT OFFICE.

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DENTAL BRIDGEWORK.

1,299,067. Specification of Letters Patent. Patented Apr. 1, 1919.

Application filed December 16, 1918. Serial No. 266,971.

To all whom it may concern:

Be it known that I, CHESTER J. UNDERWOOD, a citizen of the United States, residing at Elgin, in the county of Kane and State of Illinois, have invented a new and useful Improvement in Dental Bridgework, of which the following is a specification.

My invention relates to an improvement in the pin-and-socket feature employed in dental bridgework for hitching the bridge to an abutment by inserting the pin-member on the one into the socket-member on the other.

In the prior state of the art, as it is known to me, the pin and the socket are each single, the pin forming a pivotal connection with the socket, whereby the bridge is unstable in position in the mouth by reason of a tendency to oscillate, in working the jaws, on the center afforded by the pivot. Splitting the pin longitudinally and expanding it to adapt it to resiliently bind itself against the socket-walls has proved not only ineffective, since it obviously does not overcome the oscillating tendency, but it attenuates and thus unduly weakens the pin.

To overcome the defects referred to, I provide, as the pin-member, a plurality of the pins (preferably only two, since they serve the purpose), on a common head, the pins being either parallel with each other, or slightly divergent for the purpose hereinafter explained; and as the socket-member, I provide a corresponding number of sockets, each to receive a pin.

In the accompanying drawing—

Figure 1 is a view in side elevation representing a set of upper-jaw teeth with a bridge in place provided with my improvement; Fig. 2 shows the same with the bridge removed and illustrating the socket-member on the abutment; Fig. 3 is an enlarged view in perspective of the bridge provided with the pin-member of my improvement; Fig. 4 is a similar but inverted view of a series of the teeth showing my improved socket-member in place; Fig. 5 is a similar view of the pin-member in a shield; Fig. 6 is a similar view of the pin-member alone; Fig. 7 is Fig. 6 inverted to show a prong adjunct on the pin-head, and Fig. 8 is a perspective view of the socket-member unattached.

The pin-member 7 comprises two similar pins, 8, on a head 9. As shown, this male member 7 is housed in the concave end of a bridge 10, being soldered about the edge of its head in the sheet-metal shield 11 ordinarily provided in the present class of dental bridgework, for the well-known usual purpose; and the female or socket member 12, provided with two sockets, one for each pin, is shown to be on an abutment-forming tooth 13.

To hitch the bridge to the abutment, the pins are introduced into the sockets; and the connection may be tightened, if or when required, by slightly spreading the pins apart, so that they have to be compressed into parallel relation to register with the sockets for introducing them into the latter, wherein they will then resiliently expand and bind against the socket-walls.

By thus providing the two pins and the two sockets to receive them, a pivotal center, afforded by the prior single-pin construction of the device, and resultant instability of the bridge in place are avoided.

A prong-like projection 14 is shown to be formed on the head 9, at which to grip, with a suitable implement, the member 7 for convenience of manipulation in the work of preparing the bridge. The original form of the head is circular, or of more or less oval circumference, but in its finished condition it is cut off to render its exposed or advance edge straight, as represented, thereby to avoid its projecting and obstructing desirable close fit of that end of the bridge against the opposing surface of the abutment.

I claim:

The improvement, in dental bridgework, on the pin-and-socket device for separably attaching a bridge to an abutment, comprising a pin-member having a plurality of pins provided with a common head, and a socket-member having a plurality of sockets, one for each pin.

CHESTER J. UNDERWOOD.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."