S. D. RUGGLES.

DENTAL INSTRUMENT.

APPLICATION FILED SEPT. 22, 1911.

1,033,942. Patented July 30, 1912.

Fig. 1.

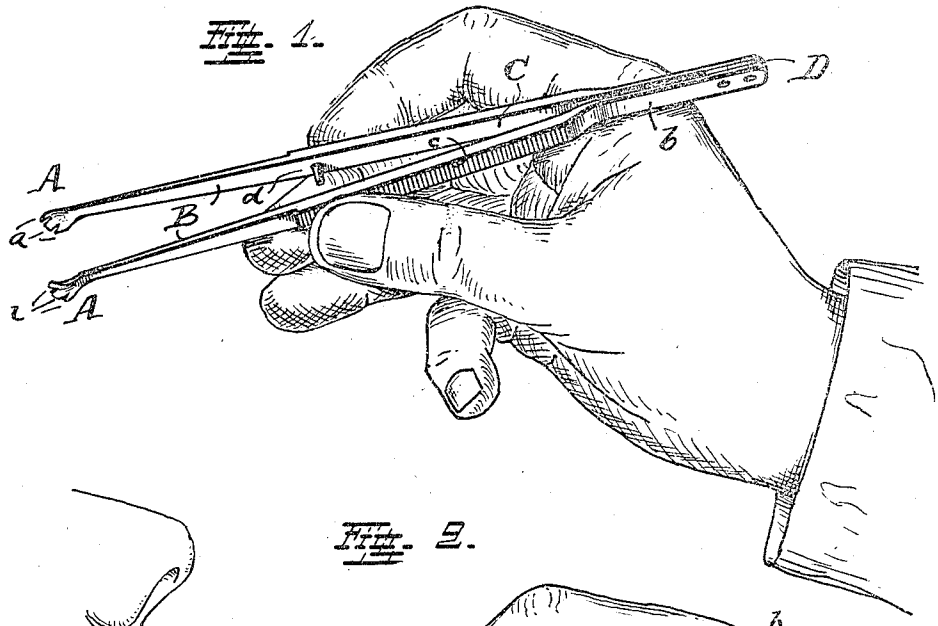


Fig. 2.

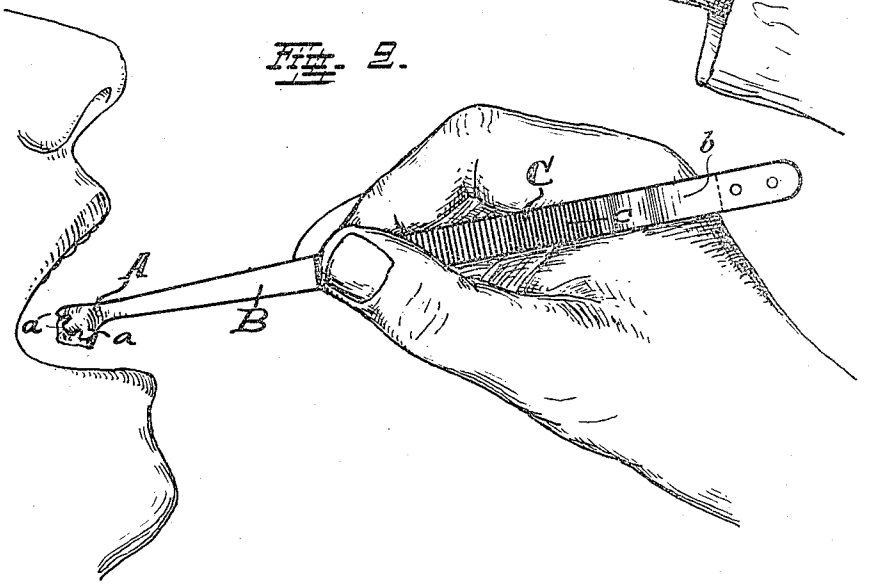
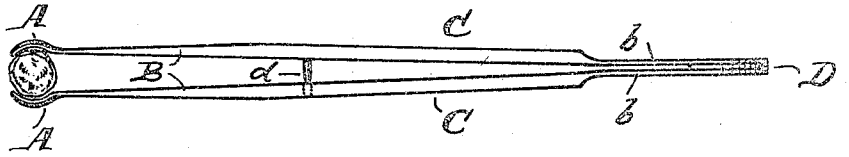


Fig. 3.



Witnesses.
H. E. McGrath.
T. LeBeau.

Inventor.
Stewart D. Ruggles
by C. Spengel atty

UNITED STATES PATENT OFFICE.

STEWART D. RUGGLES, OF PORTSMOUTH, OHIO.

DENTAL INSTRUMENT.

1,033,942. Specification of Letters Patent. Patented July 30, 1912.

Application filed September 22, 1911. Serial No. 650,710.

To all whom it may concern:

Be it known that I, STEWART D. RUGGLES, a citizen of the United States, and a resident of Portsmouth, Scioto county, State of Ohio, have invented a certain new and useful Dental Instrument; and I do declare the following to be a full, clear, and exact description of the invention, attention being called to the drawing which accompanies this application and forms a part thereof.

This invention concerns devices used in dental practice and it relates more particularly to an instrument intended for use in operative dental surgery. In its specific use it is intended to serve as a means to hold and to manipulate work such as artificial teeth, crowns, bridge-work, devices used in orthodontia while being placed in position within the patient's mouth, etc.

The leading point of the invention is a construction which permits the particular object which is to be manipulated to be firmly held while the work is readily carried out in any part of the mouth without obstructing the view of the operator.

In the following specification and particularly pointed out in the claims at the end thereof, will be found a full description of my invention, together with its manner of use, parts and construction, which latter is also illustrated in the accompanying drawing in which:—

Figure 1, shows in perspective view, the instrument and the manner in which it is held. Fig. 2, shows a side-elevation of the instrument while the same is used for placing an object in position within the patient's mouth, which object might be a tooth-crown. Fig. 3, shows a top-view of the implement as it appears in the preceding figure.

The object to be manipulated is held between two jaws each consisting of a concave or spoon-shaped part A, the edge of which terminates in a number of prongs *a*, preferably three. These jaws are each carried at the end of a shank B, of which they preferably form an integral part. The width of these shanks, in the plane of the jaws, is gradually increased to present sufficient surface as shown at C, to form handle-parts to permit the implement to be firmly held. These handle-portions are roughened on their outer side by closely spaced corrugations as shown at *c*. Beyond these handle-portions the thickness of these shanks is reduced as shown at *b*. These shanks are rigidly connected at their extreme ends, these being also the ends of the reduced portions *b*, a spacing plate D being placed between these ends. This connection may be in any suitable manner, as by rivets, soldering or brazing.

The shanks are of steel and their connection is so that in the normal condition the jaws stand apart, as shown in Fig. 1. The reduced part *b* of each shank forms a spring to permit them to yield when pressed toward each other to cause the jaws to close upon the work and to permit the same to be firmly gripped as shown in Fig. 3. A pin *d* on one shank adapted to occupy an opening opposite it in the other shank serves to preserve the alinement of the jaws when they approach each other in consequence of action on the shanks.

The shanks between the jaws and the point of their connection to each other are substantially straight so that, when the jaws are compressed, the size of the instrument transversely considered, is not any larger than the distance between the outer sides of the jaws. Nor does any part of the jaws project above the upper edge of the shanks when the instrument is held in position for operation (see Fig. 2,) which is due to the fact that the upper prong in each jaw is formed in line with the upper edge of its respective shank and the jaw proper is formed below this edge. As a consequence the operator may freely manipulate his work within the mouth without interference from any part thereof and without obstructing his view of the work by any part of the instrument back of the jaws.

Having described my invention, I claim as new:

1. In a dental instrument, the combination of two substantially straight shanks, each having a gripping jaw at one end which is spoon-shaped and has a pronged edge, a portion reduced in thickness at the other end serving as a spring and flat handle-portions between these ends, a spacing plate between the outer ends of the reduced portions of the shanks and means to connect the shanks at these ends with this spacing plate between them.

2. In a dental instrument, two oppositely arranged straight shanks, each shank having one of its edges continued substantially

straight and formed into a prong and additional prongs provided contiguous to the first prong and forming therewith a gripping jaw one of the shanks having an inwardly projecting pin between its ends and the other shank having an opening located opposite this pin and adapted to be occupied thereby when the shanks approach each other so as to preserve the alinement of the jaws opposite each other.

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

STEWART D. RUGGLES.

Witnesses:

EMMA V. WHITE,

MERLE O. DUDUIT.