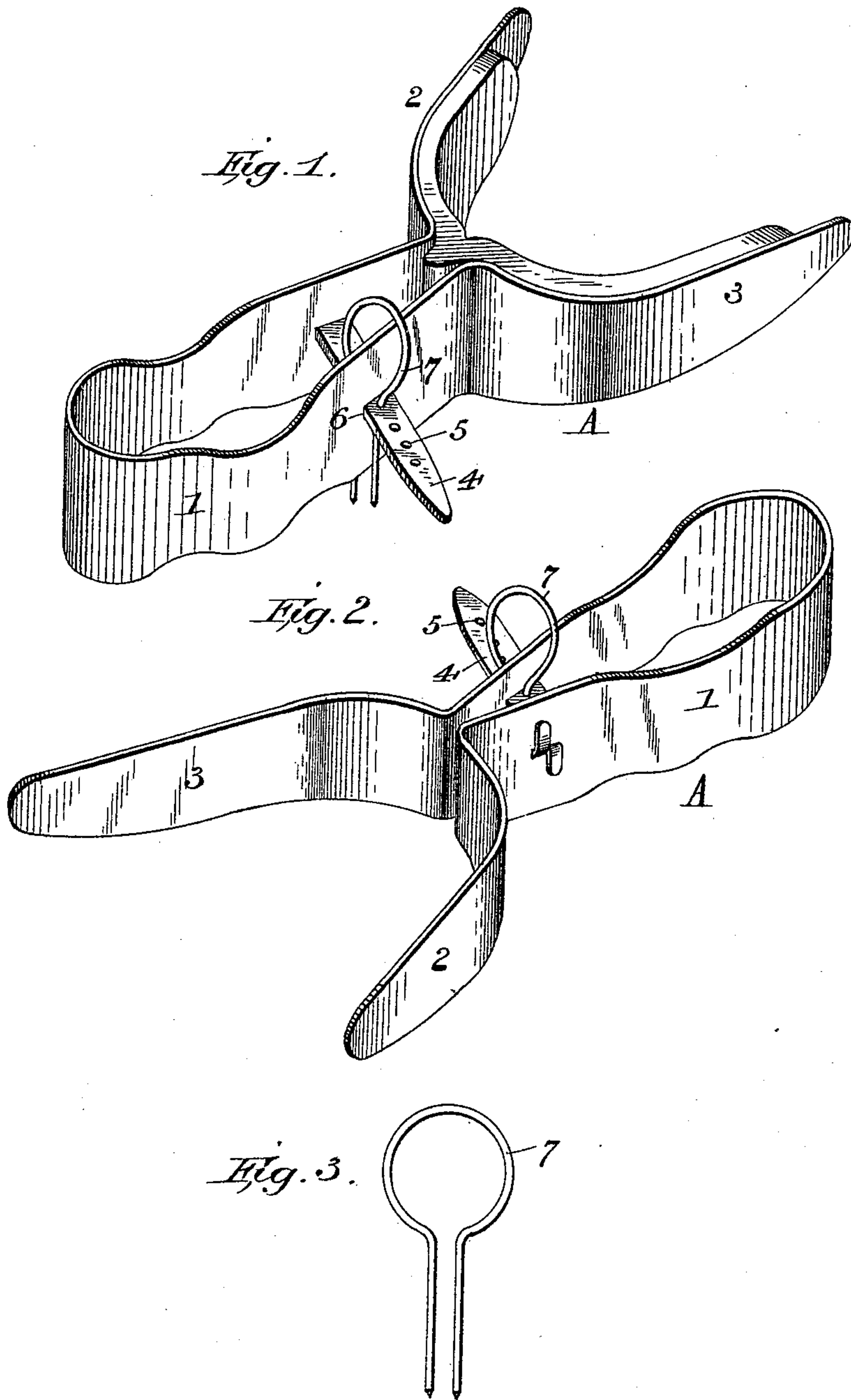


(No Model.)

F. E. HANSÈN.
DENTAL ARTICULATOR.

No. 516,529.

Patented Mar. 13, 1894.



WITNESSES
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UNITED STATES PATENT OFFICE.

FLORIAN E. HANSEN, OF MINNEAPOLIS, MINNESOTA.

DENTAL ARTICULATOR.

SPECIFICATION forming part of Letters Patent No. 516,529, dated March 13, 1894.

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To all whom it may concern:

Be it known that I, FLORIAN E. HANSEN, a citizen of the United States of America, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Dental Instruments for Taking the Articulating Bite; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention has relation to improvements in dental instruments for taking the "articulating-bite" or ascertaining the natural set or way in which the jaws or teeth close upon each other.

In the practice of dentistry, when the operator is called upon to provide artificial teeth for those lost or extracted, whether for a whole set or for a part set, after taking the impression of the parts before setting the artificial teeth upon the plates, must have a cast or mold of the manner in which the upper and lower jaws antagonize each other; this relation is ascertained and demonstrated by taking what is called the "articulating-bite." One of the ordinary ways to do this, is to soften a roll of wax or other proper material, curved to correspond with the general contour of the alveolar ridge of the human mouth, this material is then placed in the mouth and the patient required to close the jaws or teeth upon or through the material. In inserting and removing this soft material by the usual means it often becomes distorted from the proper shape, by the pressure it receives from the action of the muscles of the mouth, thereby rendering the result of the operation unsatisfactory, uncertain, and faulty in construction or conformation.

It is the object of my present invention to avoid and prevent these unsatisfactory, uncertain and faulty results; and this I accomplish by means of the instrument illustrated in the accompanying drawings, wherein—

Figure 1 is a perspective of the guard or instrument arranged on a wax-bite preliminary

to insertion in the mouth. Fig. 2 is a perspective of the instrument. Fig. 3 is a detail of the forked pin.

A designates the instrument or guard, made of a single strip of suitable metal, bent down on itself to form a handle 1, and having the guard portions or jaws 2, 3, curved outward to suit the contour of the human jaws, as shown in the drawings; the guards or jaws 2, 3, in contour being shaped to conform to the general line of the alveolar ridge of the human jaws. The guard is adaptable to different dimensions of the alveolar ridge by means of a gage-bar 4, having one end secured to one side or limb of the handle as shown, and provided with a series of holes 5, the plate being projected loosely through a slot 6, in the other limb of the handle, so that the jaws may be held in any determined relation by a forked pin 7, which straddles the limb of the handle and projects through two holes of the series, thus holding the jaws from undue movement or displacement in either direction. The adjustment may be made by other well known means, such as a screw and nut.

In the use of the instrument the dimensions of the alveolar ridge on its buccal line may first be ascertained by introducing the empty instrument into the mouth, the dimensions being retained by means of the gage bar and pin; a roll of soft wax or other suitable material is attached to and fitted between the jaws of the instrument. When the wax-roll held by the instrument is introduced into the mouth, properly placed, and while firmly holding the instrument, the patient is required to close the jaws or teeth in a natural manner onto, or through, the soft material, which being accomplished, the instrument with the material attached to and held between the jaws thereof, is withdrawn. It will be found that the guard has protected the soft material from being displaced or disturbed in its form by pressure at the corners of the mouth, either in the introduction or withdrawal, and that a perfect "articulating-bite" has been obtained with ease to the patient and convenience to the operator. The bite thus obtained may be used at once while soft or when hardened, in the manner well known to the profession; or the material used may be hard-

ened and removed from the guard without changing its form and preserved for use when required.

Another way by which the "articulating bite" may be taken with the guard is: by placing a suitable strip of soft wax or other suitable material within the jaws of the guard, introduce it into the mouth, have the patient close the jaws, the guard and material remaining free on the buccal side is then pressed against the jaws or teeth, thus taking an accurate impression of the buccal or labial faces of the jaws or teeth as they are held in a natural position by the patient.

What I claim is—

1. The dental instrument for ascertaining the "articulating-bite," herein described, consisting of a strip of flat spring metal bent down on itself to form a handle and having guards or jaws shaped to conform to the gen-

eral line of the alveolar-ridge of the human jaws, and a gage-bar in the handle to adjust and hold the jaws of the instrument to a determined capacity, as shown and specified.

2. The dental instrument herein-described, consisting of a flat strip of spring metal bent down on itself to form a handle and having outwardly curved jaws shaped as shown, and a gage bar having a series of holes, fixed to one limb of the handle and projected loosely through the other limb thereof, and a forked pin to straddle one part of the handle and engage in the holes of the gage bar.

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

FLORIAN E. HANSEN.

Witnesses:

CHAS. E. BOND,
J. L. DOBBIN.