

F. O. JAQUES, JR.
DENTAL SWAGING BLOCK.
APPLICATION FILED JAN. 13, 1913.

1,059,300.

Patented Apr. 15, 1913.

Fig. 1 .

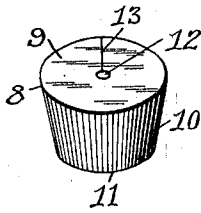


Fig. 2 .

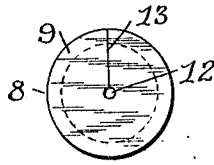


Fig. 3 .

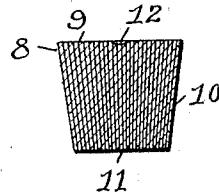


Fig. 4 .

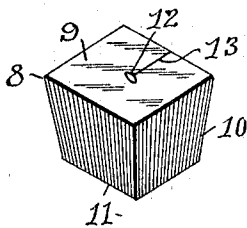


Fig. 5 .

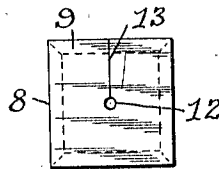
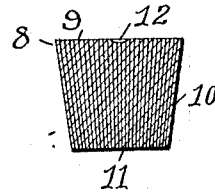


Fig. 6 .



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DENTAL SWAGING-BLOCK.

1,059,300.

Specification of Letters Patent.

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Application filed January 13, 1913. Serial No. 741,794.

To all whom it may concern:

Be it known that I, FERNANDO OSCAR JAQUES, Jr., a citizen of the United States, residing at Cranston, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Dental Swaging-Blocks, of which the following is a specification.

This invention has reference to an improvement in the art of dentistry and more particularly to an improvement in dental swaging blocks used in forming tooth crowns.

In the use of the dental system which includes steel tooth forms as shown in the United States Patent No. 971,274, issued to me Sept. 27, 1910, the gold shell is placed on the steel tooth form and compressed on to the form, thereby forming a tooth crown having the size and shape of the tooth to be crowned. In practice I find that the best results and a more perfect tooth crown is obtained by driving the steel tooth form with the shell into a block formed of a yielding material, such as soft pine and so constructed that the block has a density which gradually increases from the minimum at the top of the block to the maximum at the bottom of the block.

The object of my invention is to improve the construction of a dental swaging block whereby as the tooth form and shell is forced into the block the pressure of the block on the shell gradually increases thereby giving the greatest pressure on the end portion of the shell to form the crown where it is required more so than on the sides.

A further object of my invention is to construct such a swaging block with a central indicating mark so that the tooth form and shell may be always driven centrally into the block, thereby giving a uniform pressure on the sides of the shell.

Another object of my invention is to construct the block with a radial indicating line which coincides with an indicating mark on the block holder, whereby the block may be removed from the holder when necessary and replaced in the holder in its identical original position.

My invention consists in the peculiar and novel construction of a dental swaging block, said swaging block being formed of a yielding material and constructed to have a density which gradually increases from the mini-

mum at the top to the maximum at the bottom of the block and details of construction, as will be more fully set forth hereinafter and claimed.

Figure 1. is a perspective view of my improved dental swaging block. Fig. 2. is a top view of the block. Fig. 3 is a longitudinal sectional view through the block. Fig. 4 is a perspective view of a modified or square form of block. Fig. 5 is a top view of the modified form, and Fig. 6 is a longitudinal sectional view taken lengthwise through the modified form.

In the drawings, 8 indicates my improved dental swaging block which is formed preferably of soft pine with the grain running lengthwise or from top to bottom of the block. The block is constructed to have a flat top 9, tapered sides 10 and a flat bottom 11. An indicating mark or gage 12 is formed centrally in the top 9 and a radial indicating line 13 is formed in the top 9, as shown in Fig. 2. The block 8 is constructed preferably round in cross section but may be square, as shown in Fig. 5. The cutter which cuts out the block from the stock is internally tapered and has the same form and size as the completed block so that as the block is being cut out it is gradually compressed from the top 9 toward the bottom 11 and when the cut is completed and the block removed from the cutter the block has its greatest density at the bottom 11 which density gradually diminishes from the maximum at the bottom 11 to the minimum at the top 9. When formed of pine with the grain running from the top to the bottom of the block, the grain of the wood is compressed so as to have its greatest density at the bottom 11 and the grain of the wood diverges from the axis and from the tapered sides 10 of the block from the bottom to the top, as shown in Figs. 3 and 6.

When in use the swaging block 8 is placed in a correspondingly tapered bore of a metal holder. A shell is placed on the required tooth form, the end of the form and shell placed on the top 9 over the gage 12 and driven centrally into the block to the required depth. As the form and shell is driven into the block the shell is gradually compressed on to the tooth form thereby forming the tooth crown. By this construction of a dental swaging block the shell is

easily started into the block, the greatest pressure is given to the end portion of the shell as is required in forming a tooth crown, a uniform pressure is given to the sides of the shell and the pressure on the end and sides of the shell may be increased as required, by driving the tooth form and shell farther into the swaging block. When the operation of forming the crown is completed, the swaging block is removed from the holder, split open centrally from top to bottom and removed from the tooth form. The gold tooth crown having the exact size and shape of the tooth to be crowned is now removed from the tooth form.

It is evident that the swaging block may be formed of any suitable yielding material capable of being compressed so that the block has a density which gradually increases from the minimum at one end to the maximum at the other end of the block.

Having thus described my invention I claim as new:—

1. A dental swaging block formed of a yielding material and constructed to have a density which gradually increases from the minimum at one end to the maximum at the other end of the block.

2. A dental swaging block formed of a yielding material and constructed so that one end has a greater density than the opposite end.

3. A dental swaging block formed of a yielding material and constructed to have a flat top, tapering sides, a flat bottom and a density which gradually increases from the minimum at the top to the maximum at the bottom of the block.

4. A dental swaging block formed of wood and constructed to have a flat top, tapering sides, a flat bottom, the grain of the wood running from the top to the bottom of the block and compressed so that the block has a density which gradually increases from the minimum at the top to the maximum at the bottom of the block.

5. A dental swaging block formed of wood and constructed to have a flat top in which is a central mark or gage, and a radial indicating line, tapered sides and a flat bottom on the block, the grain of the wood running from the top to the bottom of the block, said block being compressed so that the grain of the wood has a density which gradually increases from the minimum at the top to the maximum at the bottom of the block.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

FERNANDO OSCAR JAQUES, JR.

Witnesses:

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