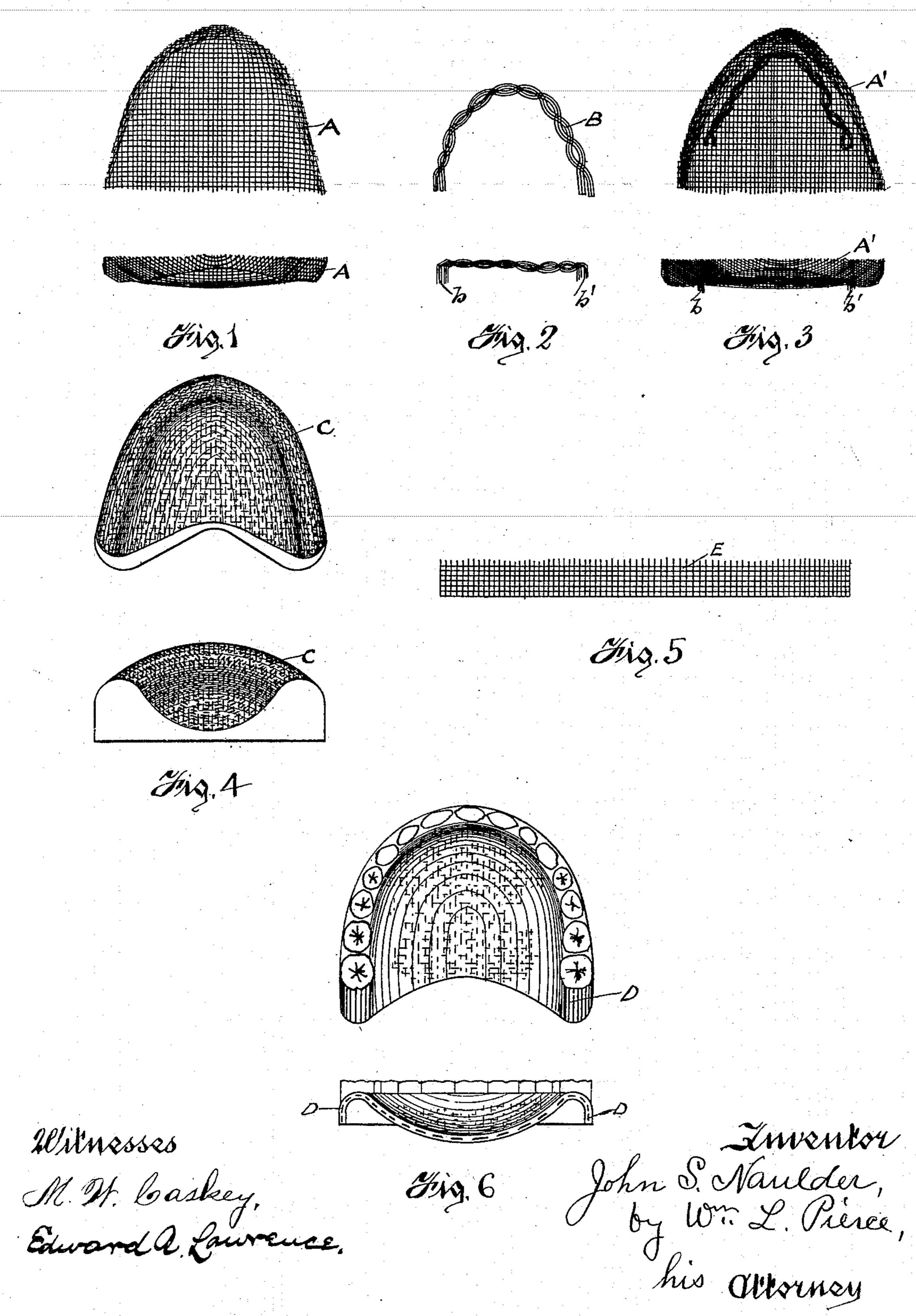
No. 615,405.

Patented Dec. 6, 1898.

J. S. NAULDER. DENTAL PLATE.

(Application filed Mar. 6, 1897.)

(No Model.)



United States Patent Office.

JOHN S. NAULDER, OF MCKEESPORT, PENNSYLVANIA.

DENTAL PLATE.

SPECIFICATION forming part of Letters Patent No. 615,405, dated December 6, 1898.

Application filed March 6, 1897. Serial No. 626,188. (No model.)

To all whom it may concern:

Be it known that I, John S. Naulder, a citizen of the United States, residing at McKeesport, in the county of Allegheny and State of Pennsylvania, have invented or discovered new and useful Improvements in Dental Plates, of which the following is a specification.

In the accompanying drawings, which make part of this specification, Figure 1 is a skeleton gauze plate. Fig. 2 is the lingual band. Fig. 3 is the lingual band attached to the gauze plate. Fig. 4 is the plate leaded. Fig. 5 is the woven facial band. Fig. 6 is the finished plate.

The purpose of my invention is to construct a dental plate from gauze metal reinforced by suitable bands which shall be lighter and thinner than it is possible to make a dental plate of any other material or combination of materials. At the same time there is sufficient metal in the plate to be healthful to the wearer's mouth.

I make the plate in the following manner:

I take a sheet of wire-gauze of suitable mesh, preferably less than No. 24, although coarser may be employed, but not so satisfactorily. The gage of the gauze I prefer to be as thin as it can be manufactured, although heavier gauze may be employed, but will be unnecessarily clumsy for my purpose. I now cut the piece to a suitable size and press it down to shape over the model, as seen at A. I then plait a wire lingual band B and turn the ends of it at right angles, b' b', place it in position

on the plate, force the bent ends in through the meshes of the gauze plate, as at A', which retains the band in its proper position during the remainder of the manufacture of the plate.

40 I cover the entire plate with sheet-lead C to keep the same clean and regulate the thickness of the rubber. A small band of wax is worked over the alveolar ridge in which to set the teeth. The teeth are then set and polished around the pins and above the teeth. The case is now ready to be invested in the ordinary way and is so invested. When the

plaster is hardened, the case is opened, the sheet-lead removed, and particles of wax so scalded out.

The gauze plate is set back on the flask,

small strips of warm rubber are placed upon the gauze plate, the flask is closed and vulcanized, and the plate is completed. The entire thickness of the plate is preferably only 55 about that of a postal card. The completed plate now consists of a wire-gauze base, with a reinforcing-band and rubber D incorporated into said plate. The rubber is applied so thinly that at intervals the strands of the 60 wire-gauze will appear above the surface of the rubber and by coming in contact with the mouth will promote a more healthful action than if the entire contact were with rubber. The wire-gauze may, if desired, however, be 65 completely hidden by the rubber. Where strength is required, a facial band is put in. It may be either plaited or woven, as seen at E.

In cases where extra strength is required 70 in the body of the plate the sheets of wire-gauze may be doubled. In such construction the lingual band is preferably placed between the two sheets.

While I have described the most desirable 75 way of manufacturing this plate known to me, a skilled dentist might make the same in a different manner, and I propose to cover the completed plate having its peculiar characteristics independent of the way it may be 80 made.

Having described my invention, I claim—
1. A base for a dental plate of wire-gauze, having a wire reinforcing-band interlocked through the meshes of the wire-gauze of said 85 base said gauze being partially or wholly exposed.

2. A base for a dental plate, consisting of a double sheet of wire-gauze and a wire reinforcing-band inserted between said sheets and 90 interlocked through the meshes of the wire-gauze.

3. A base for a dental plate consisting of sheets of wire-gauze swaged together and interlocked with rubber, the meshes of said 95 gauze being partially or wholly exposed.

In testimony whereof I have hereunto set my hand this 4th day of March, A. D. 1897.

JOHN S: NAULDER.

Witnesses:

WM. L. PIERCE, L. D. IAMS.