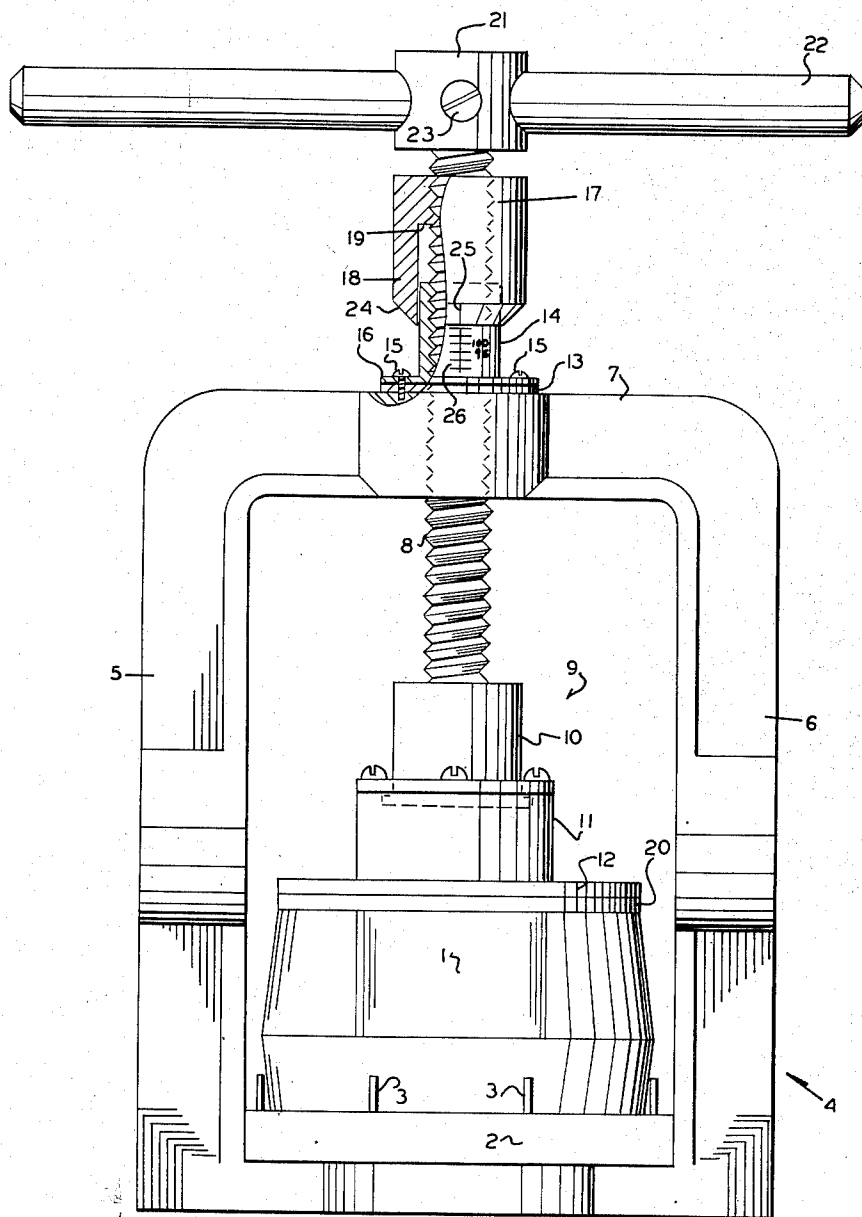


Sept. 4, 1956

S. MYERSON  
MEANS FOR PROCESSING DENTURES

2,761,175

Filed Nov. 16, 1953



INVENTOR.  
SIMON MYERSON  
BY *Eyckiel Wolf*  
his attorney

1

2,761,175

## MEANS FOR PROCESSING DENTURES

Simon Myerson, Waban, Mass.

Application November 16, 1953, Serial No. 392,329

3 Claims. (Cl. 18—33)

The present invention relates to a means of producing a denture and more particularly to a means for accurately reproducing original models or trial dentures.

This invention is a further improvement of my co-pending application filed October 27, 1953, Serial No. 388,494 and relates particularly to a modification of the device shown therein.

In making dentures, it is the usual practice to make a trial denture of wax or the like and to invest the trial denture in a two-part container known as a flask. After this investment has been made and allowed to set, the flask is opened and the wax of the trial denture removed, the teeth of the denture remain embedded in the investment in one half of the flask with their gingival ends exposed. A permanent base material in a plastic state is then packed in that half of the flask which contains the teeth and the two halves are brought together by pressure.

In forming of the denture from this material, it is essential that the two halves of the flask containing the plastic material be pressed together until they are in the same relation to each other as they were when the investment was completed.

Ordinarily, however, excess plastic material oozes out between the opposite faces of the two halves of the cast. This excess plastic material thereby often causes errors in determining when the flask is properly closed.

It is the primary object of the present invention to provide a press for forcing two halves of a flask together, which has a measuring means which may be used to determine, before the denture is processed, whether or not the two halves of the flask have been closed to the same relative position that they were in when the investment was completed.

A specific advantage of the present modification is that it provides measuring means in which the calibrations are fixed in one position and, therefore, eliminate the necessity of turning the press with the dental flask around in order to read these calibrations. These and other advantages of the present invention will be further understood when considered in connection with the accompanying drawing in which:

The figure shows a partially fragmentary elevation of the present invention.

The flask 1 containing the denture being processed is positioned on a base plate 2 having centering pins 3. This base plate is secured by screws or other suitable means to a frame generally designated 4. The frame 4 has upwardly extending legs 5 and 6 and a spanning member 7. A screw 8 passes through a threaded bearing hole which extends perpendicularly through the span 7. The screw 8 is provided with a freely movable press element generally designated 9 at its lower end which comprises an inner channel 10, an outer channel 11 with the outer channel 11 having an outwardly extending circular base 12. A hardened steel plate 20 may be secured to the lower portion of the base 12 by screw means or other suitable means.

The upper end of the screw has an enlarged head 21

2

with a transverse hole therein through which a lever 22 passes with a lock screw 23 securing the lever 22.

If desired, a concentric hardened steel bearing plate 13 may be provided at the upper end of the bearing hole through which the screw 8 passes.

A concentric sleeve member 14 having a smooth outer surface and an inner threaded opening continuous with the threaded hole through the transverse span 7 and having an outwardly extending flange 16 at its lower end is preferably secured to the top of the transverse span 7 by means of a plurality of screws 15, passing through the outwardly extending flange 16, the concentric bearing plate 13 and into the transverse span 7.

A nut 17 is threaded on the screw 8 above the sleeve 14 and is provided with a downwardly extending annular flange 18 from its lower end 19 having a depth somewhat longer than the depth of the sleeve member 14. This annular flange 18 has an inner diameter larger than the diameter of the sleeve member 14 so that as the nut 17 is screwed downwards, the flange 18 will extend over the sleeve 14. The upper threaded portion of the nut 17 should be sufficiently long and tight enough to hold the nut 17 in position on the screw 8 so that it will not readily change its position unless purposely moved. The lower edge 24 of the flange 18 may be beveled with a series of vertical calibrations 25 marked around its periphery.

The sleeve 14 is provided with a series of parallel calibrations along its length. A vertical centering line 26 may pass through these calibrations. These calibrations may be positioned on one or both sides of the sleeve to facilitate reading the calibrations.

In the operation of this device, when the flask 1 containing the trial denture is placed in the press and the screw 8 is turned down until the plate 29 forces the two halves of the flask 1 closed, a reading may be taken in the following manner: The nut 17 may be turned down until the lower edge of the flange 18 comes into alignment with any one of the desired transverse calibrations on the sleeve 14, such as a calibration marked 100.

The nut 17 is then left in the position relative to the screw 8 when the screw 8 is raised for removal of the flask 1. After replacement of the flask 1 when reproducing the trial denture is permanent form, the screw 8 is turned down until the same registration as that recorded by the trial plate is achieved; or to any desire of registration. For example if in this case allowance of .005" for shrinkage was indicated to the calibration 95.

Having now described my invention, I claim:

1. A press for closing a dental flask, said press comprising a base, a span member arching over and supported from said base, said span member having a threaded hole therethrough, means for determining proper closure of said press comprising a sleeve member joined to said span member and having a threaded hole continuous with the threaded hole in the span member, said sleeve having calibrations on its outer surface, a screw threaded through said holes in the span member and sleeve member for closing the press and a nut threaded on to said screw and extending above said sleeve with a depending cylindrical flange adapted to overlap said sleeve and indicate by its setting relative positions of said sleeve and nut to indicate the closure of said press.

2. A press for closing a dental flask having a base, a span member supported from the base and a sleeve with a continuous threaded opening through said span member and sleeve, said sleeve having calibrations on its outer surface, a screw threaded through said opening, a nut threaded onto said screw having a section adapted to overlap said sleeve and adapted to be set in a fixed position relative to said screw.

3. In a press closing device having a movable member for effecting the closure of the press, means for

3

measuring the relative amount of closure comprising a fixed sleeve member having an inner opening through which said movable member extends and having calibrations on its outer surface, and a nut threaded onto said movable member having calibrations adapted to be read in combination with the calibrations on the sleeve for indicating the closure of the press.

5

1,941,780  
2,320,826  
2,666,263

429,486

4

Angelj ----- Jan. 2, 1934  
Mandel ----- June 1, 1943  
Laserson ----- Jan. 19, 1954

FOREIGN PATENTS

Germany ----- May 29, 1926

References Cited in the file of this patent

UNITED STATES PATENTS

10

1,424,383 Schleicher ----- Aug. 1, 1922