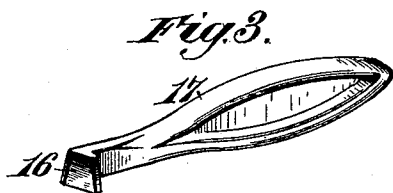
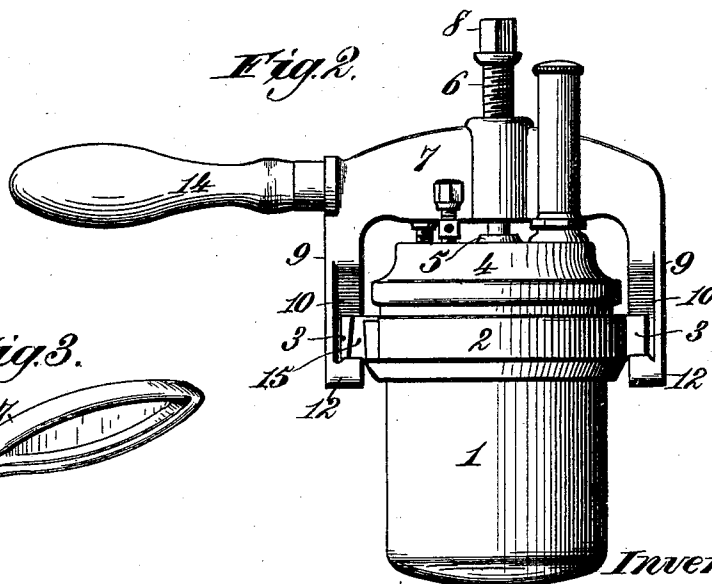
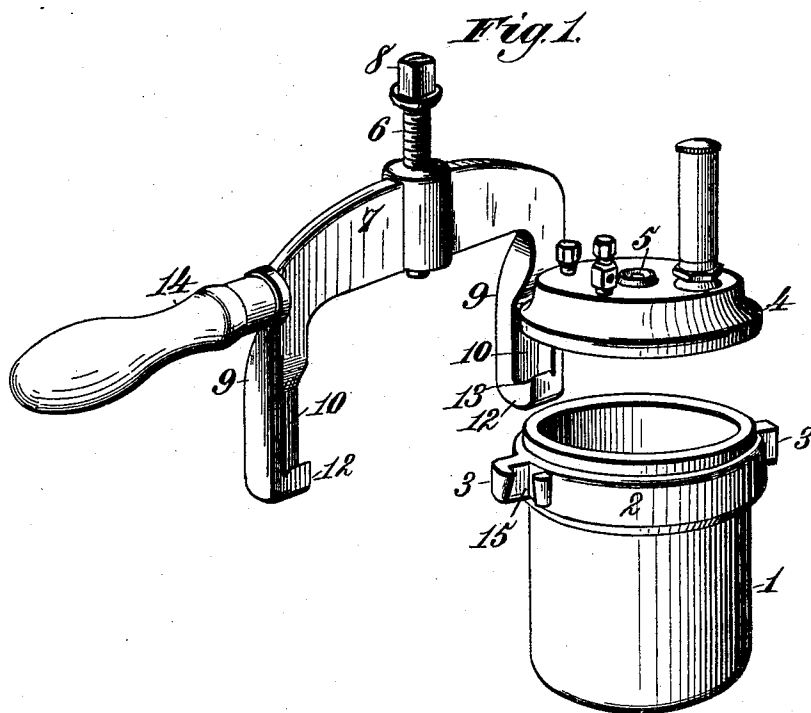


(No Model.)

G. B. SNOW
DENTAL VULCANIZER.

No. 487,647.

Patented Dec. 6, 1892.



Witnesses,
Robert Everett,
William Gaster

Inventor:
George B. Snow.
By *Samuel L. Norris.*
Atty.

UNITED STATES PATENT OFFICE.

GEORGE B. SNOW, OF BUFFALO, NEW YORK.

DENTAL VULCANIZER.

SPECIFICATION forming part of Letters Patent No. 487,647, dated December 6, 1892.

Application filed August 13, 1892. Serial No. 443,028. (No model.)

To all whom it may concern:

Be it known that I, GEORGE B. SNOW, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented new and useful Improvements in Dental Vulcanizers, of which the following is a specification.

This invention relates to that type of vulcanizers employed in the manufacture of vulcanized dental plates, wherein a yoke connected with the vulcanizing-pot is provided with a handle and a central pressure-screw for pressing the cover tightly on the pot. Various constructions have heretofore been proposed for this purpose; but all are in some respects objectionable, due principally to the attachment or pivoting of the clamping lever or bolts used to secure the same upon the vulcanizer-pot, they being in the way when it becomes necessary to empty the pot of its contents.

The objects of my invention are to simplify and improve the prior vulcanizers of the character alluded to, to avoid the employment of pivoted or swing bolts and nuts for attaching the screw-carrying yoke to the vulcanizing-pot, to render the yoke stronger and more durable in use, to enable the yoke to be more rapidly connected with and disconnected from the vulcanizing-pot, and to provide novel, simple, and efficient means for tightly closing the cover and rendering the vulcanizer susceptible of being conveniently lifted, carried, and otherwise manipulated.

The invention consists, essentially, in the combination of a vulcanizing-pot having lateral side lugs rectangular in cross-section and formed with rounded lower edges, a pot-cover, and a cover-clamping cross-bar carrying a pressure-screw and having a carrying-handle and rigid depending arms provided with hooked extremities which detachably engage the side lugs on the pot, the construction being such that the hooks can be disengaged from the rectangular lugs by simply slackening off the screw a single turn.

The invention is illustrated by the accompanying drawings, in which—

Figure 1 is a perspective view showing the cover-clamping cross-bar, the pot-cover, and the pot separated from each other. Fig. 2 is a side elevation showing the several parts connected to clamp the cover on the pot, and

Fig. 3 is a detail perspective view of a bar or rod for carrying the pot when the cover and clamping cross-bar are removed.

In order to enable those skilled in the art to make and use my invention, I will now describe the same in detail, referring to the drawings, wherein—

The numeral 1 indicates a vulcanizing-pot provided at its mouth portion with a collar or ring 2, having at diametrically-opposite sides the laterally-projecting lugs 3, which are rectangular in cross-section and formed with rounded lower edges, the sides of the lugs being substantially parallel. The pot may be of any material suitable for the conditions required, and the ring may be applied and secured in any desired manner. The pot-cover 4 is adapted to hermetically close the mouth of the pot, and at the center of its top portion is provided with a seat 5 to receive the acting end of a pressure-screw 6, carried at the center of a clamping cross-bar 7. The pressure-screw is tapped through the cross-bar and is constructed with an angular head 8, by which to operate it for the purpose of securing the perfect closure of the cover. The cover-clamping cross-bar 7 is formed integral with depending arms 9, which are provided at one edge with recesses 10 to form hooks 12, the bottom walls of which are inclined, as at 13. The hooks 12 are adapted to engage the lateral side lugs 3 on the collar or ring 2 of the vulcanizing-pot, after which the pressure-screw 6 is operated for the purpose of tightly clamping the pot-cover 4 on the pot. The hooked extremities of the depending arms 9 are readily engaged with and disengaged from the lateral side lugs 3 by simply oscillating the clamping cross-bar while the lower extremity of the pressure-screw 6 rests in the seat 5 on the pot-cover. To accomplish this oscillation of the yoke, it is only essential that the pressure-screw be slackened a single turn to permit the necessary movement, because the shape of the lugs 3 admit of this operation. The cover-clamping cross-bar is extended longitudinally into a grasping-handle 14, preferably composed of wood or other non-conducting material, for the purpose of manipulating the cross-bar and also rendering the vulcanizer susceptible of being lifted, carried, and otherwise manipulated. The lower por-

tions of the lateral side lugs 3 are rounded or similarly constructed, so as to extend down and bear against the slightly-inclined bottom walls 13 of the recesses 10, so that when the clamping cross-bar is in position and the pressure-screw 6 is tightened the hooks 12 will interlock with the lateral lugs 3, and thus effectually prevent accidental disengagement of these parts, while the construction is such that the clamping-bar can be detached by simply slacking the pressure-screw a single turn, as before explained.

By constructing the cover-clamping cross-bar with rigid depending arms having hooked extremities to engage the lateral side lugs on the pot, I materially strengthen the structure and render it possible to disconnect the clamping cross-bar from the vulcanizing-pot without the necessity of operating screw-nuts on pivoted or swing bolts, while leaving the vulcanizer-pot free from all levers, bolts, or other attachments which would interfere with its being handled with facility. By the construction described and shown I also materially reduce the cost of manufacture and render the vulcanizer more efficient and desirable in use in that the screw-carrying cross-bar can be more rapidly applied and removed.

The collar or ring 2 is preferably constructed with a dovetailed socket 15 in juxtaposition to one of the lateral lugs 3, for the purpose

of receiving the head 16 of a bar or rod 17, by which to carry the pot when the pot-cover and cover-clamping cross-bar are removed.

Having thus described my invention, what I claim is—

1. The combination of a vulcanizing-pot having lateral side lugs rectangular in cross-section and formed with rounded lower edges, a pot-cover, and a cover-clamping cross-bar carrying a pressure-screw and having rigid depending arms provided with hooked extremities which detachably engage the rounded edges of the rectangular side lugs on the pot, substantially as described.

2. The combination, with a vulcanizing-pot having lateral side lugs and a pot-cover, of a cover-clamping cross-bar carrying a central pressure device and having a longitudinally-projecting carrying-handle and rigid depending arms provided at one edge with recesses having inclined bottom walls to form hooks for detachably engaging the side lugs on the pot, substantially as described.

In testimony whereof I have hereunto set my hand and affixed my seal in presence of two subscribing witnesses.

GEORGE B. SNOW. [L. S.]

Witnesses:

CHARLES E. CLARK,
THOS. A. RUSSELL.