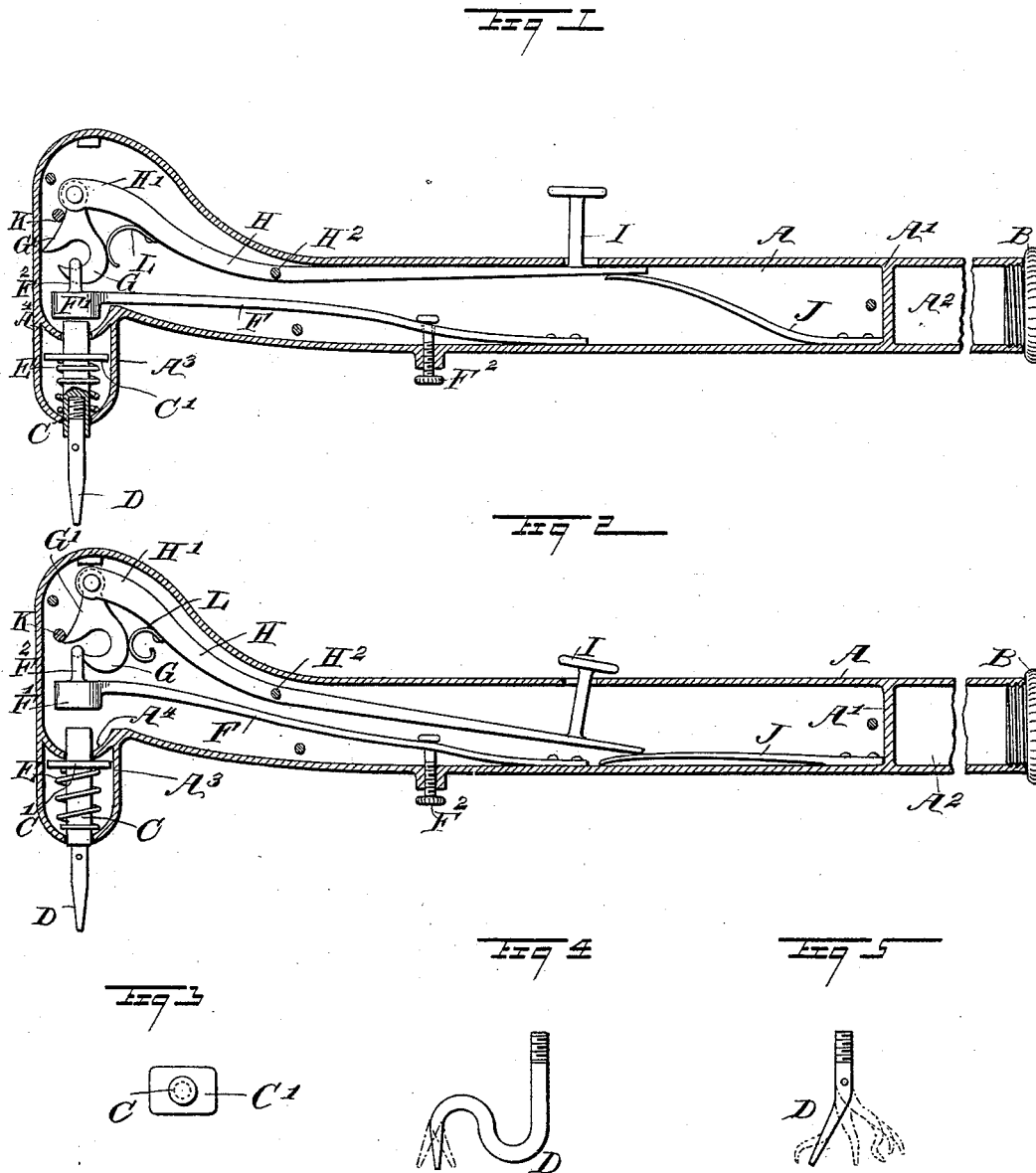


(No Model.)

A. A. NOUEL, Jr.
DENTAL PLUGGER.

No. 525,920.

Patented Sept. 11, 1894.



WITNESSES:
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AUGUSTO ADOLFO NOUEL, JR., OF PUERTO CABELLO, VENEZUELA.

DENTAL PLUGGER.

SPECIFICATION forming part of Letters Patent No. 525,920, dated September 11, 1894.

Application filed November 11, 1893. Serial No. 490,628. (No model.)

To all whom it may concern:

Be it known that I, AUGUSTO ADOLFO NOUEL, Jr., of Puerto Cabello, Venezuela, South America, have invented a new and Improved Dental Plugger, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved dental plugger, which is simple and durable in construction, very effective and automatic in operation.

The invention consists of a head or stock fitted to slide and having a socket to receive the point or tool, a spring actuated hammer adapted to engage the said head, and a hand lever for lifting the hammer and then releasing the same to permit it to suddenly exert its force upon the head.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional side elevation of the improvement. Fig. 2 is a similar view of the same with the parts in a different position. Fig. 3 is a plan view of the head or stock; and Figs. 4 and 5 are side elevations of different forms of points or tools.

The improved plugger is provided with a hollow handle A, formed near its rear end with a transverse partition A', to provide a compartment A² for supporting and retaining various forms of points or tools used in connection with the hammer, the said compartments being ordinarily closed by a screw cap B, as is plainly shown in Figs. 1 and 2. The forward end of the handle A is enlarged and is provided at its under side with a hollow extension A³, in which is fitted to slide vertically the head or stock C, formed at its lower end with a socket adapted to receive one of the points or tools D made in various forms, as is shown in Figs. 1, 4, and 5, according to the intended use of the device.

The head or stock C is held normally in an uppermost position by a spring E coiled on the head or stock C secured at its upper end to the top A of the extension A³ and engag-

ing, with its lower end, a guide plate C', preferably made rectangular and fitted to slide in the extension A³, to prevent the hammer from turning. The lower end of the spring E rests on the bottom of the extension A³. The upper end of the head or stock projects through the top A⁴, whenever the upper end of the said head or stock is free of the hammer F' on the free end of a spring F, secured within the handle A, as is plainly shown in Fig. 2. This spring F extends longitudinally in the handle A, and its tension can be regulated by a tension screw F², screwing in the under side of the handle A, as is shown in Figs. 1 and 2.

The hammer F' is formed on top with an eye F² adapted to be engaged by a hook G, pivotally connected at its upper end to the forward end H' of the hand lever H fulcrumed at H² in the handle A, the rear end of the said lever being provided with a button I having its shank extending through an aperture in the top of the handle A. The extreme rear end of the lever H is pressed on by the free end of a spring J secured within the handle A, so as to hold the said lever with its forward end downward and its rearward end raised to hold the button I in an elevated position, as illustrated in Fig. 1.

The hook G is provided with a curved extension G' adapted to be engaged by a pin K extending transversely, and secured in the sides of the handle A. A light spring L is secured to the forward part of the lever H, to press against the back of the hook G, to move the latter in engagement with the eye F² of the hammer F'.

The operation is as follows: When the several parts are in the position illustrated in Fig. 1 and the operator desires to strike a blow with the point or tool D, he presses on the button I so as to cause the lever H to swing downward at its rear end against the pressure of the spring J, and to swing upward at its forward end to lift the hook G, so that the latter, on account of being engaged with the eye F², draws the hammer F' upward. The spring F is thus put under tension, and at the time the forward end of the lever H moves upward, the curved extension G' of the hook G moves against the pin K, so that the hook

G is moved out of engagement with the eye F² at the time the forward end of the said lever H moves into an uppermost position. As soon as the hook G moves out of engagement with the eye F², the spring F is suddenly released and flies downward and the hammer strikes the head or stock C raised by its spring E, so that a blow is given to the head or stock, and the point or tool D is driven forward against the part to be struck. As soon as the operator releases the button I, the spring J forces the lever H back into its normal position, so that the forward end H' of the said lever swings downward, and the hook G again engages the eye F², aided by the action of the light spring L. The operator, by again pressing the button I, causes the repetition of the above described movement of the several parts to strike a second blow with the point or tool D. It will be seen that by this arrangement the operator can conveniently hold the handle A in any desired position to bring the point D in proper position for striking the blow at any desired angle.

While the device is more especially designed for use in filling teeth, yet it can be readily applied for other purposes.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A dental plugger, comprising a sliding tool carrying head, a spring actuated hammer adapted to engage the said head, a pivoted and spring pressed hand lever, and a link like connecting piece on one end of the said lever and adapted to engage the hammer to raise it and to be disengaged therefrom after it has been raised, substantially as described.

2. A dental plugger comprising a spring-pressed head fitted to slide and having a socket adapted to receive points or tools, a spring actuated hammer adapted to engage the said head and provided with an eye, a hook adapted to engage the said eye, a spring-pressed lever under the control of the operator and carrying the said hook and means for releasing the hook from the eye of the

hammer, substantially as shown and described.

3. A dental plugger, comprising a sliding and spring pressed head, having a socket adapted to receive points or tools, a spring provided at its free end with a hammer adapted to engage the said head, the hammer being provided with an eye on its upper side, a spring pressed hand lever, a pivoted and spring pressed hook carried by the hand lever and adapted to engage the eye of the hammer, and means for disengaging the hook from the eye of the hammer, substantially as described.

4. A dental plugger comprising a spring-pressed head fitted to slide and having a socket adapted to receive points or tools, a spring provided at its free end with a hammer adapted to engage the said head, the said hammer being provided with an eye, a hook adapted to engage the said eye, and a spring-pressed lever under the control of the operator and carrying the said hook, a curved extension on the said hook, and a fixed pin engaged by the said curved extension to move the hook out of engagement with the said eye when the said lever is pressed, substantially as shown and described.

5. A dental plugger comprising a spring-pressed head fitted to slide and having a socket adapted to receive points or tools, a spring provided at its free end with a hammer adapted to engage the said head, the said hammer being provided with an eye, a hook adapted to engage the said eye, and a spring-pressed lever under the control of the operator and carrying the said hook, a curved extension on the said hook, a fixed pin engaged by the said curved extension to move the hook out of engagement with the said eye when the said lever is pressed, and a spring pressing the said hook, substantially as shown and described.

AUGUSTO ADOLFO NOUEL, JR.

Witnesses:

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EDGAR TATE.