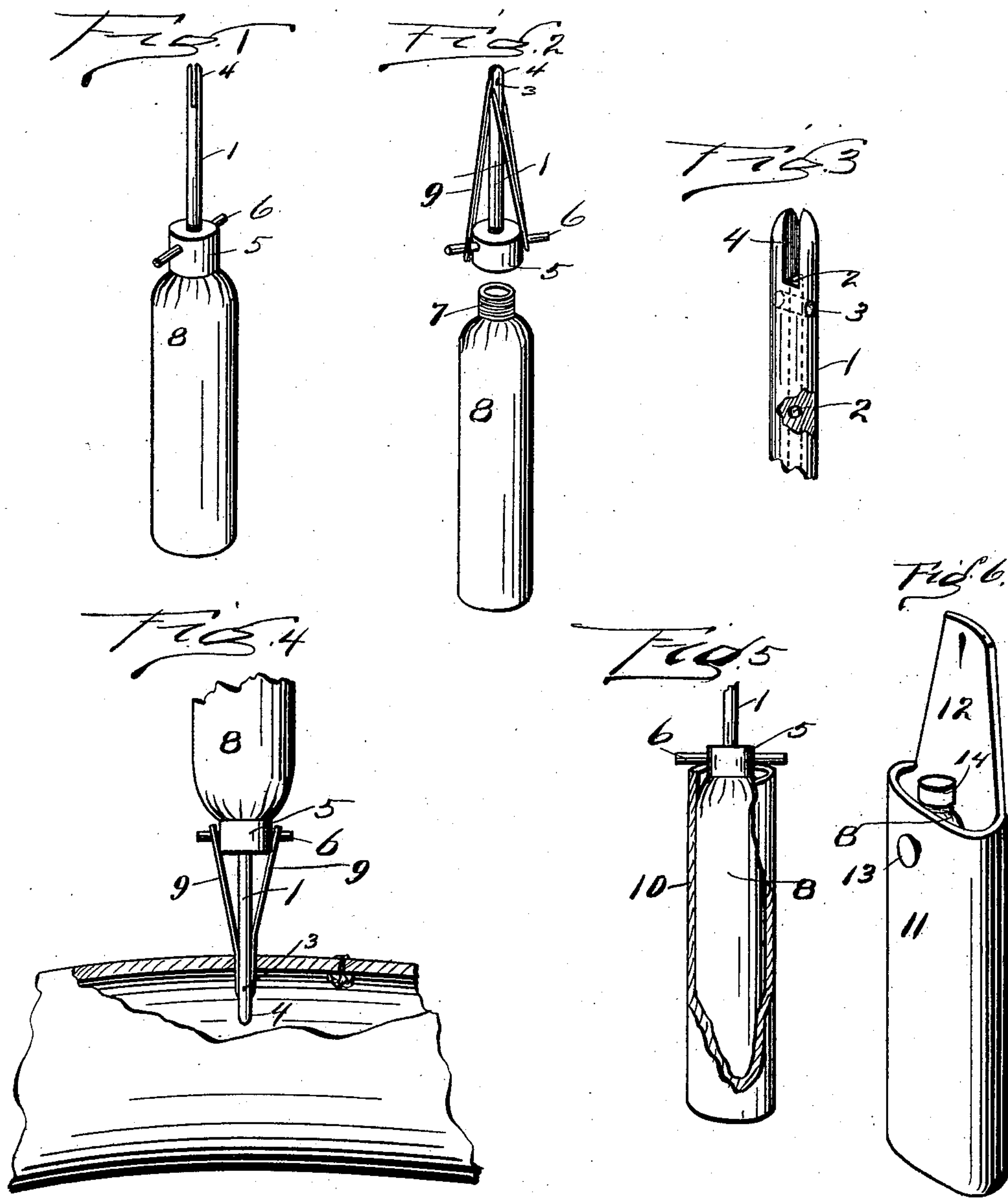


(No Model.)

C. A. BRAUCHLER.
TIRE PATCHER.

No. 602,052.

Patented Apr. 12, 1898.



WITNESSES:
E. J. Jones,
B. M. Finch.

INVENTOR:
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By Fred W. Bond

A111.

UNITED STATES PATENT OFFICE.

CHARLES A. BRAUCHLER, OF CANTON, OHIO.

TIRE-PATCHER.

SPECIFICATION forming part of Letters Patent No. 602,052, dated April 12, 1898.

Application filed November 23, 1897. Serial No. 659,598. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. BRAUCHLER, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Tire-Patchers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the figures of reference marked thereon, in which—

Figure 1 is a view of the patcher proper. Fig. 2 is a view showing the needle and its cap detached from the compressible sack, also showing bands connected to the needle. Fig. 3 is an enlarged view showing the entering end of the needle. Fig. 4 is a view showing the needle inserted into a tire, also showing bands properly connected to the needle. Fig. 5 is a view showing the needle and its cap connected to the compressible sack, also showing its compressible cover. Fig. 6 is a view of the casing, showing the same open.

The present invention has relation to tire-patchers; and it consists in the different parts and combination of parts hereinafter described, and particularly pointed out in the claims.

Similar numbers of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, 1 represents the needle, which is formed of a length so that it can be properly inserted through a puncture for the purpose hereinafter described. The needle is provided with the longitudinal bore 2, which bore extends to and communicates with the transverse opening 3 and the inserted end 4. The attaching end of the needle 1 is provided with the screw-threaded cap 5, which screw-threaded cap is provided with the short bars 6, which short bars are for the purpose of providing a means for rotating the cap to seat it onto the screw-threaded portion 7 of the compressible receptacle 8 and also to provide a means for attaching the elastic bands 9, substantially as illustrated in Figs. 2 and 4.

For the purpose of better protecting the compressible case or receptacle 8 and at the

same time providing a case that will retain its original shape and form regardless of the shape of the compressible case 8 said case is surrounded by the yielding covering 10, which yielding covering is formed of any suitable elastic or pliable material, such as heavy paper of fine texture, so that it will not become destroyed when compressed to compress the cement-retaining case 8.

In use the different parts are connected as illustrated in Fig. 1, and when it is desired to insert the strips of rubber or like material into the puncture the rubber bands, such as 9, are placed in the slot 4 and connected to the short bars 6, after which the needle 1 is inserted through a puncture, as illustrated in Fig. 4, by which arrangements a portion of the bands 9 are carried into the inner portion of the tire, after which the case 8 is compressed, by which arrangement the liquid cement is forced through the longitudinal bore of the needle and out through the transverse opening or bore 3, by which arrangement the cement is allowed to find its way upon the inner periphery of the tire, thereby securely cementing the inserted bands 9 into the puncture, after which the bands are removed from the short bars 6 and the needle, together with its different parts, removed or withdrawn and the exposed ends of the bands cut away.

For the purpose of providing a means for conveniently carrying the patcher proper, together with all the different parts belonging thereto, the case or cover 11 is provided, which may be formed of leather or like material and is provided with the flap 12, which flap is turned over to close the end of the case 11 and may be held by the button 13 or its equivalent.

For the purpose of closing the compressible case 8 after the cap 5 has been removed the cover 14 is provided, which is an ordinary screw-threaded cover and takes the place of the screw-threaded cap 5.

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

1. The compressible case having removably attached thereto a needle provided at its piercing end with an open slot, a cross-bore or opening located below the bottom of the

open slot, and a bore communicating with the slot and the cross-bore, substantially as and for the purpose specified.

2. The combination of a compressible case,
5 a screw-threaded cap provided with short bars removably attached to the compressible case, a yielding cover surrounding the compressible case, and a hollow needle provided with an open slot at its piercing end, substantially
10 as and for the purpose specified.

3. The combination of a compressible case, having removably attached thereto a cap and

hollow needle, a yielding case surrounding the compressible case, and a casing to receive and hold the compressible and yielding cases, 15 substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

CHARLES A. BRAUCHLER.

Witnesses:

J. A. JEFFERS,
F. W. BOND.