

(No Model.)

H. S. LEWIS.

DEVICE FOR DRAWING AIR TUBES INTO TIRE CASINGS.

No. 586,853.

Patented July 20, 1897.

Fig. 1.

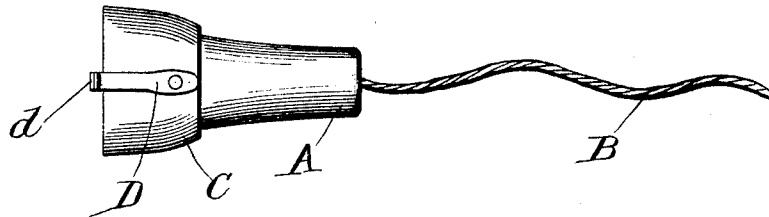


Fig. 2.

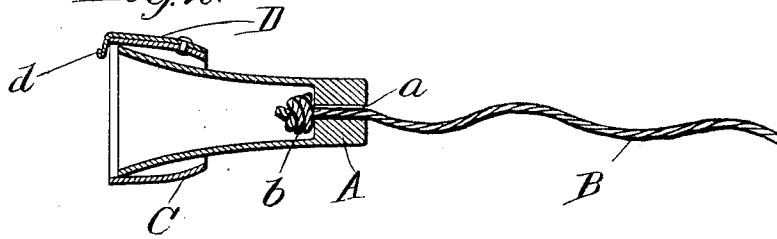


Fig. 3.

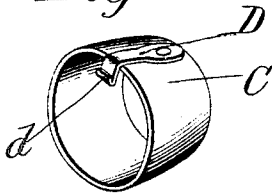
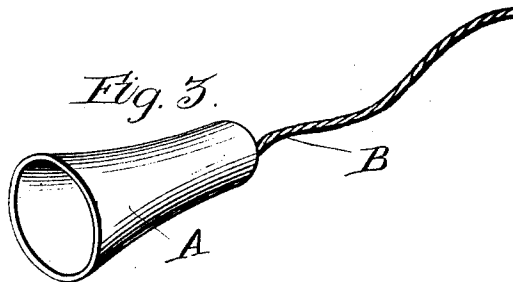


Fig. 5.



Witnesses:
A. F. Durand.
Margaret M. Wagner.

Inventor:
Harry S. Lewis,
by J. Page & Belfield,
attys

UNITED STATES PATENT OFFICE.

HARRY S. LEWIS, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE MORGAN & WRIGHT, OF SAME PLACE.

DEVICE FOR DRAWING AIR-TUBES INTO TIRE-CASINGS.

SPECIFICATION forming part of Letters Patent No. 586,853, dated July 20, 1897.

Application filed April 3, 1897. Serial No. 630,500. (No model.)

To all whom it may concern:

Be it known that I, HARRY S. LEWIS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Devices for Drawing Inner Tubes within Pneumatic-Tire Casings, of which the following is a specification.

My invention relates to devices or implements for drawing inner tubes within pneumatic-tire casings, an illustration of a device for such purpose being afforded by Letters Patent of the United States No. 570,142, dated October 27, 1896. In said patent the device for gripping the inner tube comprises a tapered plug and similarly-formed sleeve adapted to fit over the plug and clamp an end portion of the inner tube thereon. In connection with such device a cord is attached to the smaller end of the tapered plug and provided at its free end with a weight. With such arrangement the weight is first introduced into the tire-casing at an opening in the latter and caused to traverse the passage within the casing until it again reaches such opening, at which point the weight is withdrawn from the casing, and by then drawing upon the cord the plug and sleeve with the end of the inner tube gripped between them will be drawn into the tire-casing.

The object of my invention is to dispense with the aforesaid weight and to adapt the tapered plug and sleeve to be first used as a weight and to be then employed for gripping the inner tube, in which way the device will be reduced in bulk and be more easily carried in a "repair-kit."

In carrying out my invention I provide, in connection with the plug and sleeve, a spring-catch for temporarily locking them together, whereby while the two are being used as a weight in "threading" the passage within the tire-casing the plug and sleeve will not become detached the one from the other.

In the accompanying drawings, Figure 1 represents my improved device in side elevation. Fig. 2 is a section taken centrally and longitudinally through the same. Fig. 3 shows

the plug in perspective, and Fig. 4 is a like view of the sleeve.

The plug A may be solid or hollow, preferably the latter, whereby an opening *a* for the string can be formed through the smaller end of the plug, and after passing an end of the cord B through such opening the end of the cord within the plug can be knotted, as at *b*, so as to prevent the cord from pulling away from the plug.

The sleeve C is adapted to receive the plug, and either the plug or the sleeve, preferably the latter, is provided with a catch for temporarily locking the two together. By placing the spring-catch D upon the sleeve its free end *d* can be bent so as to engage the larger end of the plug when the sleeve is brought over the larger end portion of the plug, as in Figs. 1 and 2. When the plug and sleeve are thus connected, the device can be used as a weight for threading the cord within the casing. After such operation the sleeve can be moved toward the smaller end of the plug, so as to permit the end of an inner tube to be introduced between them, it being observed that when the sleeve is forcibly pushed toward the smaller end of the plug the spring-catch will yield and disengage itself from the end of the plug. After an end of the inner tube has been fitted between the sleeve and plug the device can be used for drawing the inner tube within a tire-casing, as in aforesaid patent.

What I claim as my invention is—

A device for threading the passage in pneumatic-tire casings and for drawing inner tubes within the same, comprising a plug and sleeve between which an end of the inner tube can be gripped; a cord attached to the plug; and a catch for temporarily locking together the plug and sleeve whereby the device can be used as a weight for threading the passage within the tire-casing, preliminary to drawing in the inner tube, substantially as set forth.

HARRY S. LEWIS.

Witnesses:

A. F. DURAND,
MARGARET M. WAGNER.