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TIRE MOLD CORE.

APPLICATION FILED MAR. 23, 1915.

1,154,843. Patented Sept. 28, 1915.

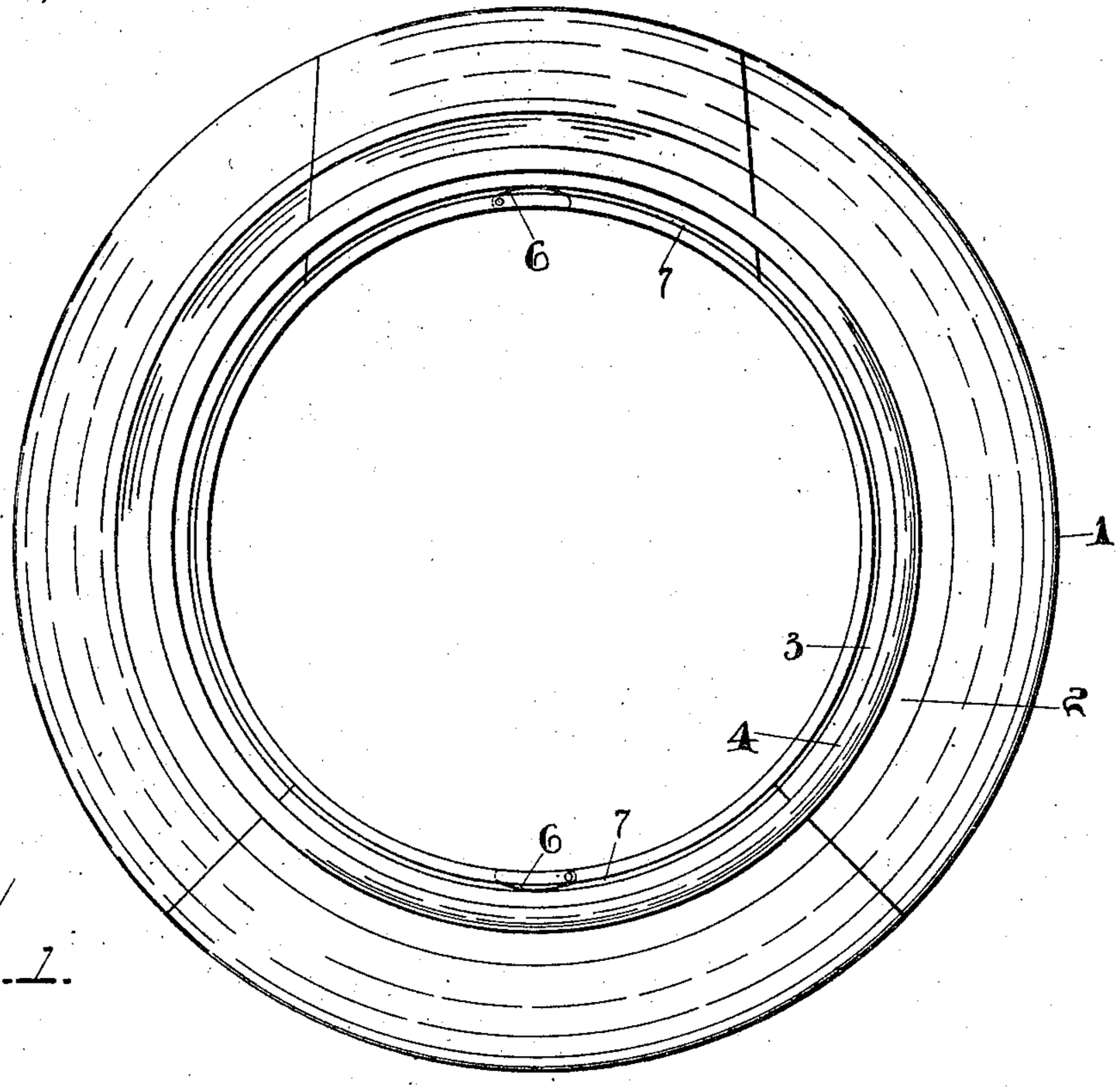

Fig. 1.

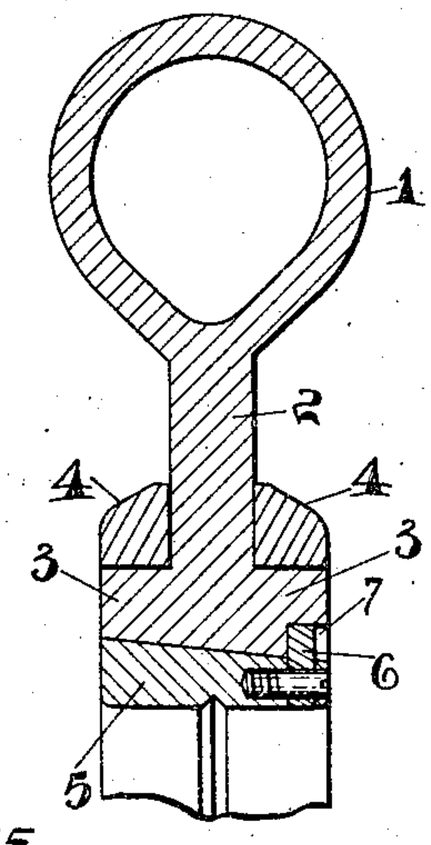

Fig. 2.

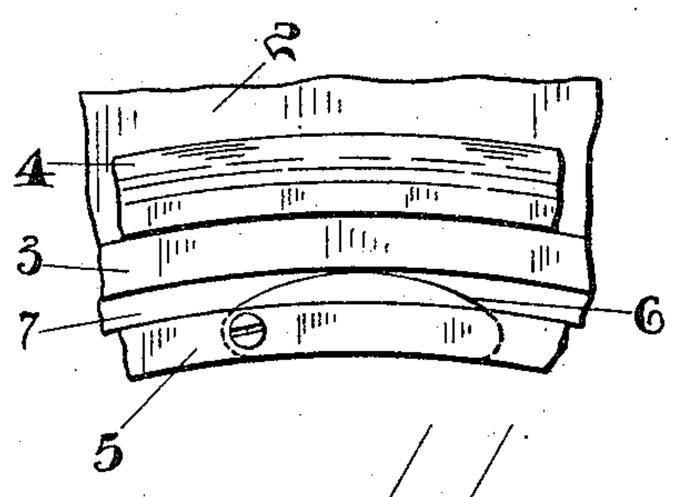

Fig. 3.

WITNESSES.

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UNITED STATES PATENT OFFICE.

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TIRE-MOLD CORE.

1,154,843. Specification of Letters Patent. Patented Sept. 28, 1915.

Application filed March 23, 1915. Serial No. 16,370.

To all whom it may concern:

Be it known that we, JOSEPH HERBERT COFFEY and JOSEPH HERBERT COFFEY, Jr., of the city of Toronto, in the county of York, Province of Ontario, Canada, subjects of the King of Great Britain, have invented certain new and useful Improvements in Tire-Mold Cores, of which the following is a specification.

This invention relates to the sectional cores employed with tire molds which, when in use, are required to be perfectly rigid and in which the sections must be readily disconnectible when the core is to be removed from a tire, and our object is to devise a core which will be as rigid when in use as the common bolted cores and which may be very quickly set up or disconnected.

We attain our object by forming the annular web of the core of T-section to form an outwardly facing annular shoulder at each side. When the core is set up a ring is fitted on each shoulder. The inner surface of the web is coned, and a correspondingly coned ring is adapted to be formed within the annular web to press the aforesaid shoulders out against said rings. Latches may be provided to hold said coned ring in place when the core is set up.

The invention is hereinafter more specifically described and illustrated in the accompanying drawings in which—

Figure 1 is a side elevation of our improved core; Fig. 2 a cross section of the same on an enlarged scale; and Fig. 3 a detail in front elevation of one of the latches holding the locking ring in place.

In the drawings like numerals of reference indicate corresponding parts in the different figures.

The core as shown in Fig. 1 is divided into segments in the usual manner, the divisions between one of the segments and those on each side being so arranged that said segment may be withdrawn by a radial movement inwardly to permit of the core being collapsed.

Each segment of the core comprises the body portion 1 and an inwardly extending web 2. This web is so shaped as to form one or more outwardly facing shoulders 3. Preferably the web is of T-section, so that one of the annular shoulders 3 is formed at each side, these shoulders facing outwardly.

The inner surface of the web is coned as shown in Fig. 2. A ring 4 is adapted to be fitted over each of the shoulders 3. An inner locking ring 5 is adapted to be fitted within the web as shown, its outer surface being coned similarly to the inner surface of the web, so that when the ring is forced entirely into place as shown in Fig. 2, the shoulders 3 will be forced into close engagement with the rings 4. The segments are then securely held in rigid relationship to one another. At the same time if the ring 5 be knocked out, the segments of the core are readily collapsed in the ordinary manner. The coning is at quite a small angle so that the ring 5 has little or no tendency to loosen, but as a precautionary measure I may provide the latches 6, which are pivoted in slots in the ring 5 and may be turned up to engage the shoulders 7 formed on the web 2. These latches are readily disengaged by forcing the end of a chisel bar or other tool along the ring 5 over the outer curved surfaces of the latches.

From the above description it will be seen that we have devised a sectional core which will satisfactorily attain the objects of our invention set out in the preamble to this specification.

What we claim as our invention is:—

1. A sectional tire core having an annular web formed with lateral annular outwardly facing shoulders and a coned inner surface; rings adapted to fit over said shoulders; and an inner coned ring adapted to engage the coned inner surface of the web to press the aforesaid shoulders against their rings.

2. A sectional tire core having an annular web T-section forming lateral annular outwardly facing shoulders and having its inner surface coned; rings adapted to fit over said shoulders; and an inner coned ring adapted to engage the coned inner surface of the web to press the aforesaid shoulders against their rings.

3. A sectional tire core having an annular web formed with lateral annular outwardly facing shoulders and a coned inner surface; rings adapted to fit over said shoulders; an inner coned ring adapted to engage the coned inner surface of the web to press the aforesaid shoulders against their rings; and pivoted latches adapted to releasably hold said inner ring in place when the core is set up.

4. A sectional tire core having an annular web formed with a lateral annular outwardly facing shoulder and a coned inner surface; a ring adapted to fit over said shoulder; and an inner coned ring adapted to engage the coned inner surface of the web to press the aforesaid shoulder out against its ring.

Signed at Toronto, Canada, this 26th day of Feb., 1915, in the presence of the two undersigned witnesses.

JOSEPH HERBERT COFFEY.
JOSEPH HERBERT COFFEY, JUNIOR.

Witnesses:
J. EWD. MAYHEE,
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."