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(71) Anmelder: **ROBEL BAHNBAUMASCHINEN GMBH** [DE/DE]; Industriestrasse 31, 83395 Freilassing (DE).

(72) Erfinder: **WIDLROITHER, Otto**; Petersweg 22, 83395 Freilassing (DE).

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[Fortsetzung auf der nächsten Seite]

(54) **Title**: MANUAL PACKER FOR PACKING THE BALLAST OF A TRACK

(54) **Bezeichnung** : HANDSTOPFER ZUM UNTERSTOPFEN VON SCHOTTER EINES GLEISES

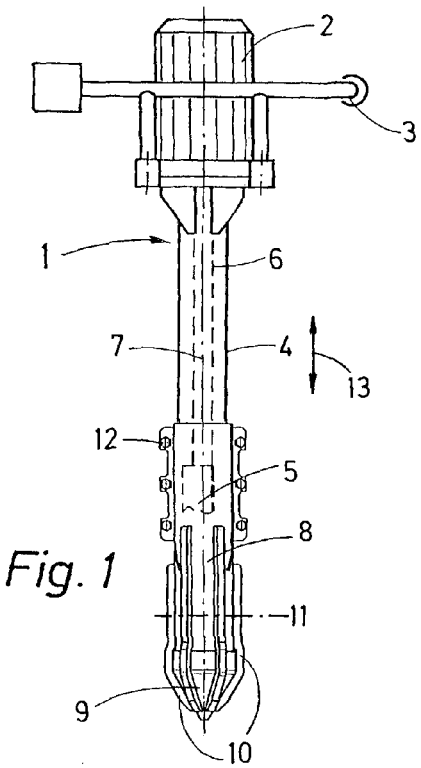

Fig. 1

(57) **Abstract**: A manual packer (1) for packing the ballast of a track comprises a driving motor (2) for rotating an imbalance (5) and a shaft (4) linked to the driving motor and having a tip (8) with an approximately V-shaped longitudinal section attached to a lower end of the shaft. A plurality of ribs (10) that extend in the longitudinal direction (13) of the shaft, that are spaced apart in relation to a cross-section of the shaft and that protrude radially from a surface of the shaft are arranged in a lower shaft section (9) adjacent to the tip of the shaft and extend into the tip (8) of the shaft.

(57) **Zusammenfassung**: Ein Handstopfer (1) zum Unterstopfen von Schotter eines Gleises weist einen Antriebsmotor (2) zur Rotation einer Unwucht (5) sowie eine an einem unteren Ende eines mit dem Antriebsmotor verbundenen Schaftes (4) befestigte, im Längsschnitt etwa V-förmige Schaftspitze (8) auf. An einem unteren, an die Schaftspitze anschließenden Schaftabschnitt (9) ist eine Anzahl von in einer Schaftlängsrichtung (13) verlaufende, bezüglich eines Schaftquerschnittes zueinander distanzierte, radial von einer Schaftoberfläche abstehende Schaftrippen (10) angeordnet, die bis in die Schaftspitze (8) hinein verlängert sind.

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— *mit internationalem Recherchenbericht (Artikel 21 Absatz 3)*

[01] The invention relates to a hand tamper for tamping ballast of a track, including a drive motor for rotation of an imbalance and, fastened to a lower end of a barrel which is connected to the drive motor and has a longitudinal axis, a barrel tip which is approximately V-shaped in longitudinal section.

[02] A hand tamper of this type is already known according to DE 20 2014 003 655.1 U and has a sleeve which is pushed onto a barrel in the longitudinal direction thereof. At the end spaced from the drive motor, the sleeve has a tamping blade consisting of two diametrically opposed blade elements projecting from the sleeve.

[03] It is the object of the present invention to provide a hand tamper of the kind mentioned at the beginning with which an improved work result becomes possible.

[04] According to the invention, this object is achieved with a hand tamper of the specified type by means of the features cited in the characterizing part of the main claim.

[05] A barrel tip configured in this way offers the advantage that the vibrations produced by the imbalance can be transmitted in a significantly better manner via the barrel fins to the ballast to be tamped. The embodiment

according to the invention proves particularly efficient and suitable to deliver an optimal work result especially when used in a soiled ballast bed.

[06] Additional advantages of the invention become apparent from the dependent claims and the drawing description.

[07] The invention will be described in more detail below with reference to embodiments represented in the drawing in which Fig. 1 shows a side view of a hand tamper having a barrel with a barrel tip, Fig. 2 shows a barrel cross-section, Fig. 3 shows a perspective view of the barrel tip, and Fig. 4 shows an alternative version of a barrel tip.

[08] A hand tamper 1, shown in Fig. 1, for tamping a track has a drive motor 2 which is equipped with handles 3 and connected to a barrel 4. Mounted in the latter is a shaft 6, including an imbalance 5, which can be set into rotation by the drive motor 2. At a lower end, spaced from the drive motor 2, of the barrel 4 having a longitudinal axis 7, a barrel tip 8 is fastened by means of a screw connection 12, the barrel tip being pushed onto the barrel and approximately V-shaped in longitudinal section and provided for immersion into a ballast bed of the track.

[09] As can now be seen in detail also in Figs. 2 and 3, a plurality of barrel fins 10 are arranged on a lower barrel section 9 adjoining the barrel tip 8. The barrel fins 10 – which number a total of six in the illustrated preferred example of embodiment – are arranged spaced at equal distance from one another with respect to a barrel cross-section 11 (Fig. 2) and extend in a

longitudinal direction 13 of the barrel which is parallel to the longitudinal axis 7.

[10] As clearly visible in Fig. 2, the barrel fins 10 extending radially from a barrel surface 14 have a rectangular fin cross-section 15. At their lower end, the barrel fins 10 are designed elongated into the barrel tip 8 and chamfered. In an alternative version according to Fig. 4, the barrel fins 10 can be brought together to merge into a common fin tip 16, as a result of which the penetration resistance when immersing the hand tamper 1 into the ballast bed is reduced in a favourable manner.

Claims

1. A hand tamper for tamping ballast of a track, including a drive motor (2) for rotation of an imbalance (5) and, fastened to a lower end of a barrel (4) which is connected to the drive motor (2) and has a longitudinal axis (7), a barrel tip (8) which is approximately V-shaped in longitudinal section, **characterized in that,** on a lower barrel section (9) adjoining the barrel tip (8), a plurality of barrel fins (10) extending in a longitudinal direction (13) of the barrel are arranged which are spaced from one another with respect to a barrel cross-section (11) and extend radially from a barrel surface (14) and are elongated into the barrel tip (8).

2. A hand tamper according to claim 1, characterized in that the barrel fins (10) are spaced from one another at equal distance with respect to the barrel cross-section (11).

3. A hand tamper according to claim 1 or 2, characterized in that all of the barrel fins (10) are merged together into a common fin tip (16) in the barrel tip (8).

4. A hand tamper according to one of claims 1 to 3, characterized in that a total of six barrel fins (10) are provided on the barrel section (9).

5. A hand tamper according to one of claims 1 to 4, characterized in that the barrel fins (10) have a rectangular fin cross-section (15).

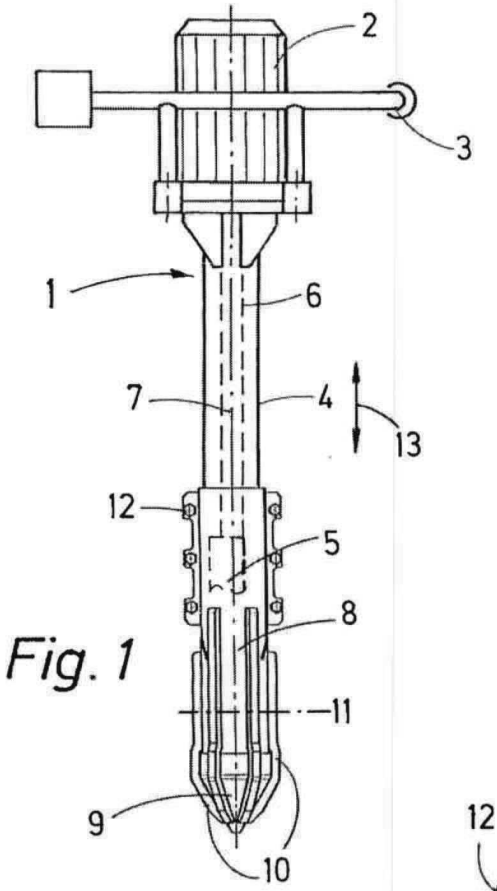

Fig. 1

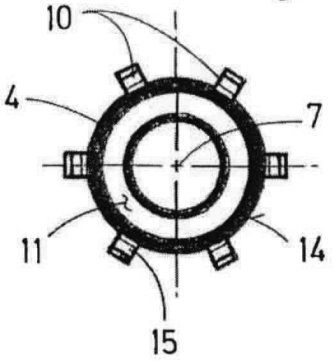

Fig. 2

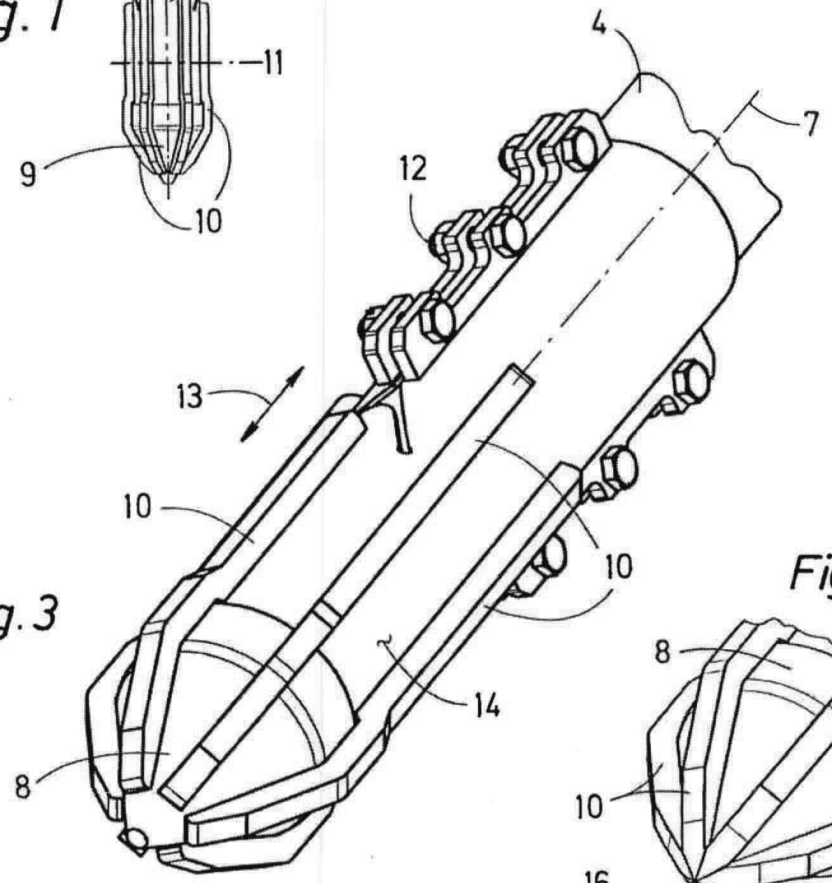

Fig. 3

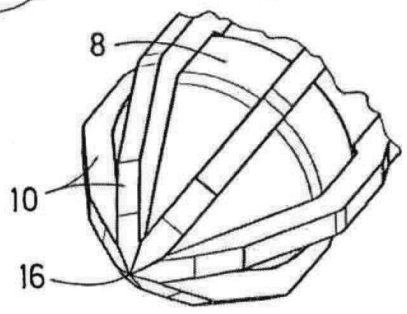

Fig. 4