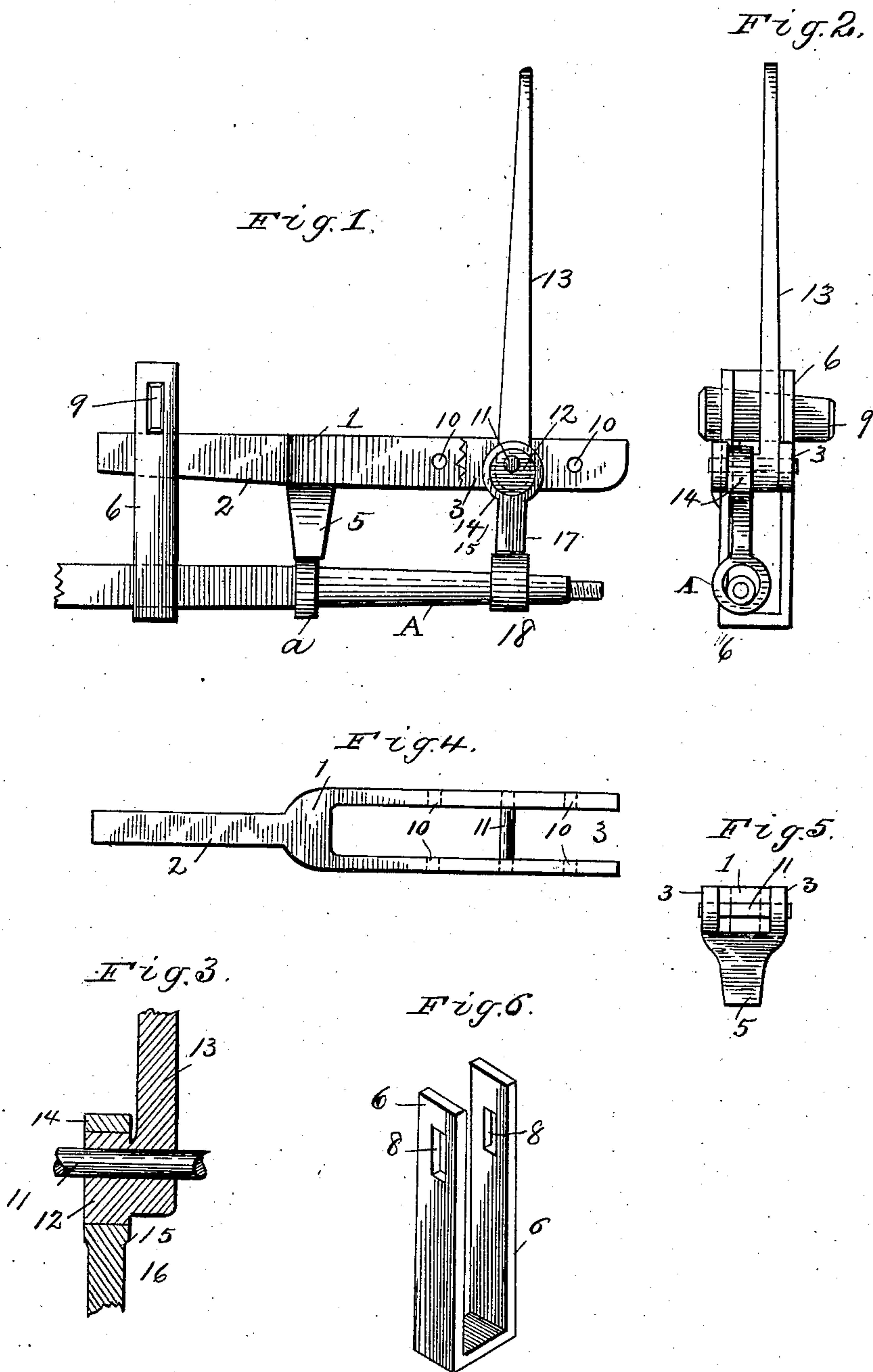


No. 844,551.

PATENTED FEB. 19, 1907.

F. E. TURNER.
DEVICE FOR STRAIGHTENING AXLES.
APPLICATION FILED MAY 24, 1906.



Witnesses

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FRANK E. TURNER, OF HARVARD, NEBRASKA.

DEVICE FOR STRAIGHTENING AXLES.

No. 844,551.

Specification of Letters Patent.

Patented Feb. 19, 1907.

Application filed May 24, 1906. Serial No. 318,583.

To all whom it may concern:

Be it known that I, FRANK E. TURNER, a citizen of the United States, residing at Harvard, in the county of Clay and State of Nebraska, have invented certain new and useful Improvements in Devices for Straightening Axles, of which the following is a specification.

This invention relates to new and useful improvements in devices for straightening vehicle-axles.

The invention particularly contemplates a portable device which can be quickly attached to and detached from the axle to be straightened without removing the same from the vehicle.

In this connection the invention aims to provide a device which shall be simple in construction, inexpensive to manufacture, strong and practical, and one which is not liable to become broken or to get out of order.

The detailed construction will appear in the course of the following description, in which reference is had to the accompanying drawings, forming a part of this specification, like numerals designating like parts throughout the several views, wherein—

Figure 1 is a side elevation illustrating a device constructed in accordance with my invention. Fig. 2 is a front elevation thereof. Fig. 3 is a detailed vertical transverse section illustrating the construction of the operating-lever. Fig. 4 is a top plan view illustrating a supporting yoke or frame for the movable elements of the structure. Fig. 5 is a front elevation thereof, and Fig. 6 is a detailed perspective view of a clevis or yoke employed to secure the structure upon the axle to be straightened.

In the practical embodiment of my invention I employ a frame 1, comprising a rearwardly-extending shank 2 and a forwardly-extending yoke 3, between the spaced side walls of which the operating elements are disposed. For the purpose of maintaining the frame 1 in the proper spaced relation to the axle to be straightened said frame is formed at the junction of the shank 2 and the yoke 3 with a depending integral shoe 5, designed to engage the collar or bead *a*, adjacent the spindle A of the axle. In this function the shoe 5 coöperates with a substantially U-shaped clevis or yoke 6, between the vertical sides of which the shank 2 is received. The sides of the yoke 6 are each formed with elongated slots 8, one of said

slots being of less depth and in axial alignment with the other slot. A key or wedge 9 is inserted through the slots 8 and engages the upper face of the shank 2 and coacts with the shoe 5 in supporting the frame 1 upon the axle A.

The sides of the yoke 3 are formed with a series of alined openings 10 for the reception of a pin 11, which is inserted through a registering pair of openings 10 with respect to the adjustment desired. Loosely mounted upon the pin 11 is an eccentrically-disposed annular casting 12, which is provided with an offset lever 13, designed to normally assume a substantially vertical position. An eccentric suspension-strap 14 loosely surrounds the casting 12 in concentric relation and is provided with a depending member 17, preferably integral therewith. The member 17 terminates in an enlarged annulus 18 for the reception of the spindle A of the axle to be straightened.

In practical use the apparatus is assembled in the desired position upon the axle in the manner shown in Fig. 1, in which the shoe 5 rests upon the collar *a* of the axle. The frame 1 is also supported upon the axle by the yoke 6 and key 9, passing through the slots 8 in the vertical sides of said yoke. The spindle to be straightened is passed through the annulus 18, and the lever 13 is pushed downwardly. In this operation the casting 12 is raised upon its eccentric axis and through the medium of the connecting-strap 14 draws the member 17 and the annulus 18 in the proper direction to bend the axle 18 from its distorted contour to a substantially straight contour.

While the elements herein shown and described are well adapted to serve the functions set forth, it is obvious that various minor changes may be made in the proportions, shape, and arrangement of the several parts without departing from the spirit and scope of my invention as defined in the appended claim.

Having fully described my invention, I claim—

A device of the type set forth embodying a stationary frame formed with an integral shank and a forwardly-extending yoke formed with spaced parallel legs, a depending shoe carried by said frame between said shank and said legs and perpendicular thereto, a clevis engaging said shank and coacting with said shoe to support said frame upon an

object, said legs being each formed with a
horizontal series of apertures arranged in
corresponding or registering pairs, a pin
mounted between said legs in a selected pair
5 of said apertures, a handle provided at its
base with an offset disk-shaped casting, a pin
passing eccentrically through said casting
and a member formed at its upper end with
an integral sleeve loosely encircling said cast-
10 ing and at its lower end with an integral

sleeve arranged at a substantial right angle
to said first-named sleeve and designed to
surround an object.

In testimony whereof I affix my signature
in presence of two witnesses.

FRANK E. TURNER.

Witnesses:

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F. KUEUNETHY.