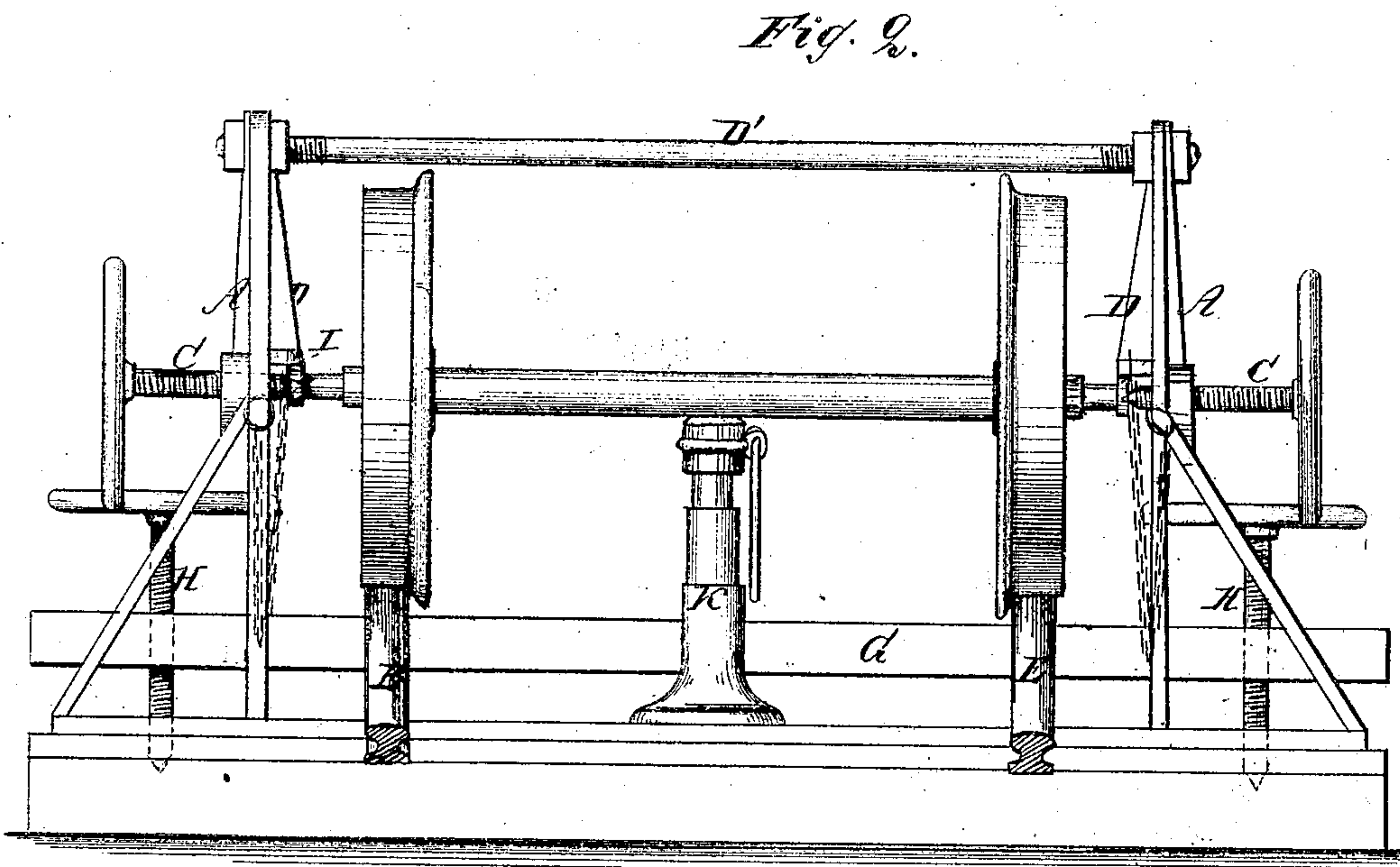
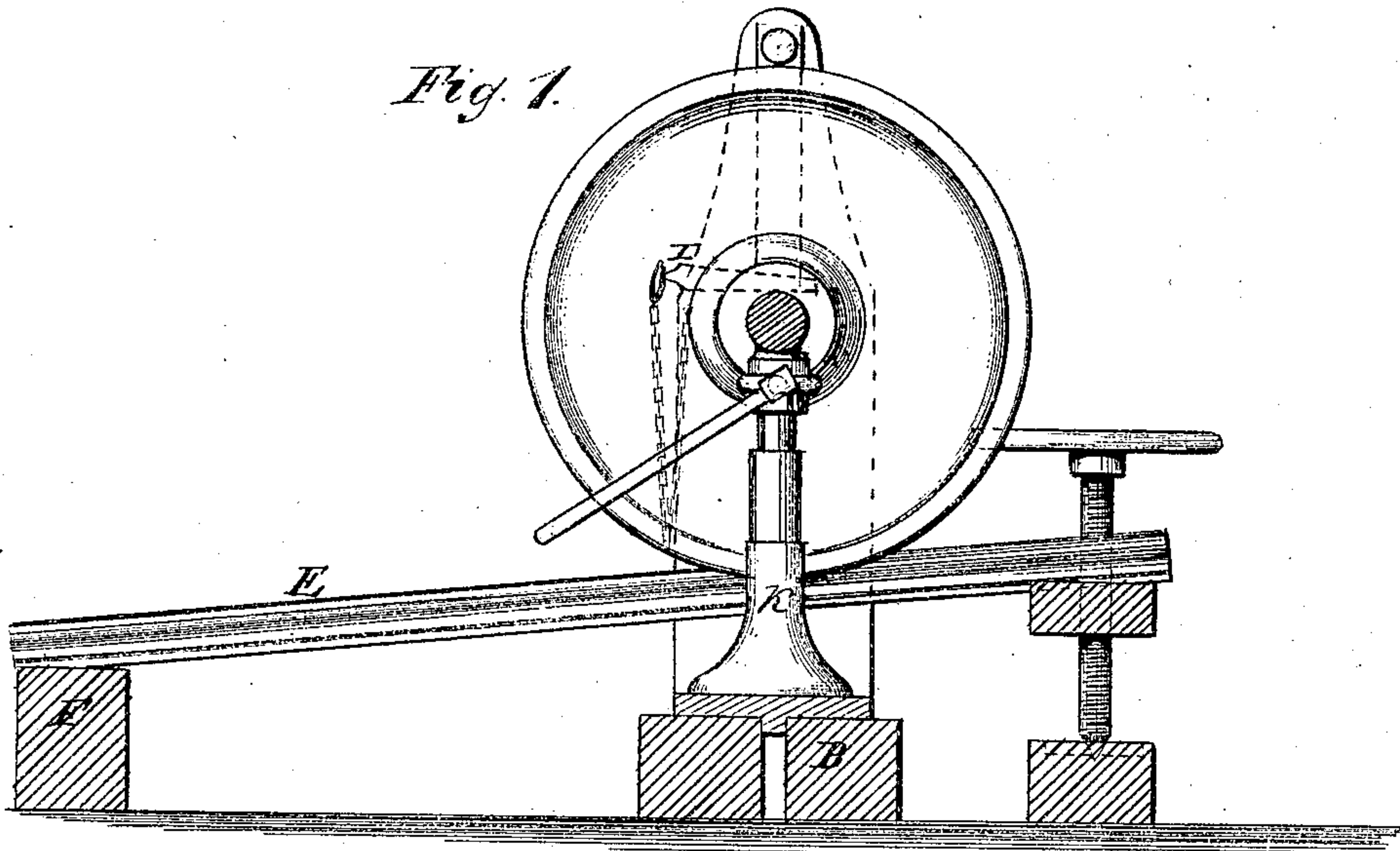


B. S. SKATES.

Apparatus for Straightening Car Axles.

No. 99,014.

Patented Jan. 18, 1870.



Witnesses:
Wm E Brooke
Samuel H. Allen

Inventor:
B. S. Skates
PER *Wm M. C.*
Attorneys.

United States Patent Office.

B. S. SKATES, OF WHISTLER, ALABAMA.

Letters Patent No. 99,014, dated January 18, 1870.

IMPROVED APPARATUS FOR STRAIGHTENING CAR-AXLES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, B. S. SKATES, of Whistler, in the county of Mobile, and State of Alabama, have invented a new and improved Apparatus for Straightening Car-Axles; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The object of this invention is to provide new and useful apparatus for straightening bent railroad-car axles without removing the wheels from the axle.

The invention comprises a pair of housings, having adjustable screw-centres, for suspending the axle by the "centres," in the ends, an adjustable track, for rolling the wheels and axle between the housings at the right height to be taken by the centres, and a bending or straightening-jack, to be placed under the bends in the axles, to force them up to a straight line, the ends of the axles being secured by wedges under lugs on the housings, to resist the upward pressure of the jacks.

Figure 1 represents a longitudinal sectional elevation of my improved apparatus, and

Figure 2 represents a front elevation of the same.

Similar letters of reference indicate corresponding parts.

A represents the housings, which are strong metal posts, erected upon a timber or other base, B.

They are provided with centring-screws C, lugs D,

for wedging down upon the upper sides of the ends of the journals, and tie-rods D'.

E represents a section of a railroad-track, resting at one end on the permanent ties F, and at the other on ties G, having adjusting-screws H for raising or lowering them.

The axles and wheels are rolled up the track between the housings, and suspended on the centre-screws. The track is then lowered so as to admit of turning the axle freely, to present the bow downward. The wedges I are then driven in between the ends of the axle and the lugs D. Then the hydraulic or other jack K is set to work under the axles, to force them up to a straight line, which they accomplish very readily and exactly.

The axle may be turned on the centres from time to time, to ascertain when it is perfectly straightened, the jack being lowered away and the wedges removed.

Instead of the wedges, strong screws, screwing down through projections D, may be used.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

The combination of the housings, having centres C and lugs or shoulders D, the adjustable track E G, a hydraulic or other jack, and wedges I or set-screws, substantially as specified.

Witnesses:

JAS. H. WYLIE,
LEWIS H. KENNEL.

B. S. SKATES.