

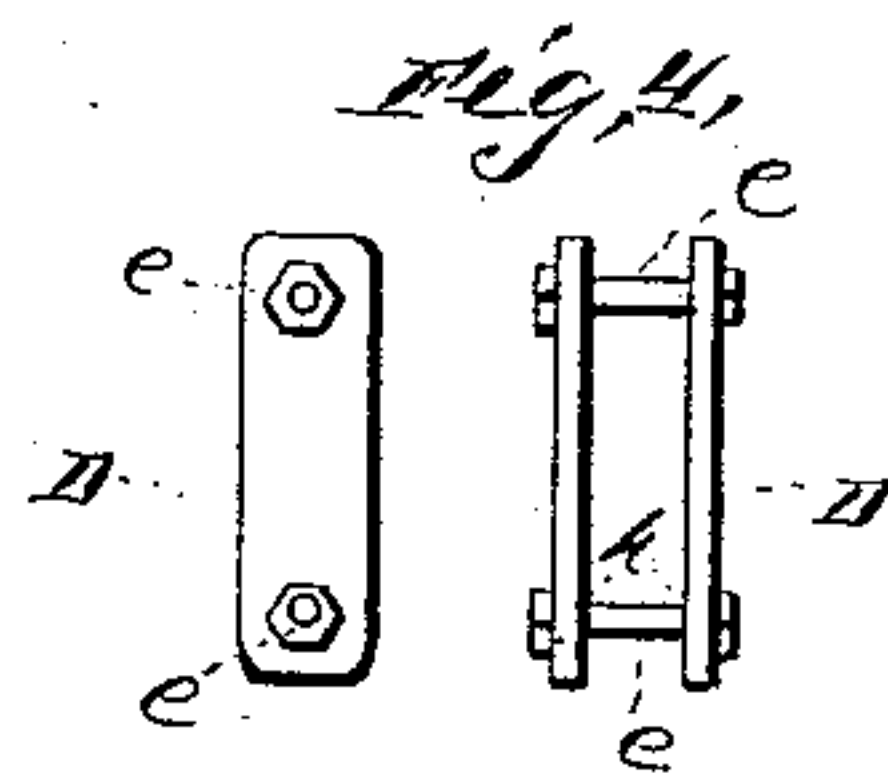
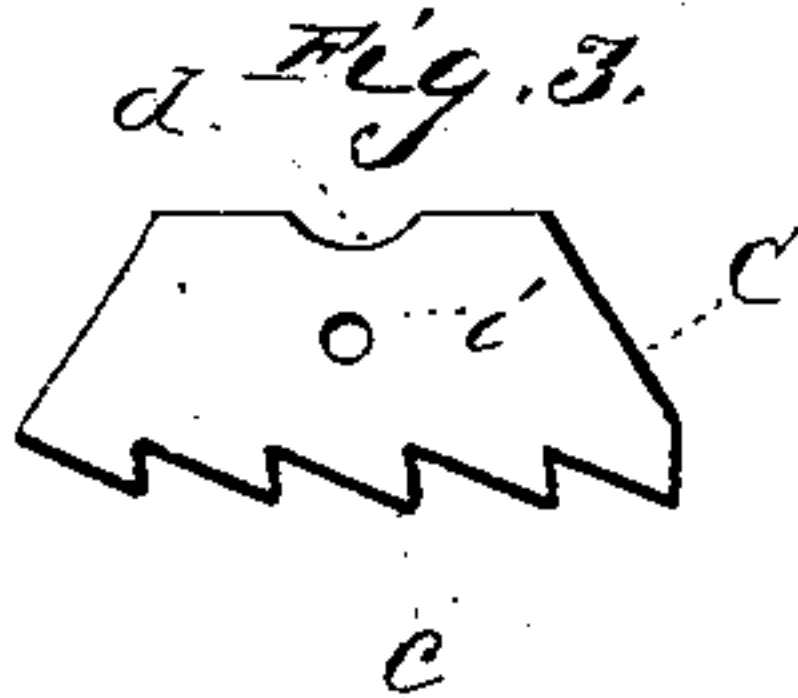
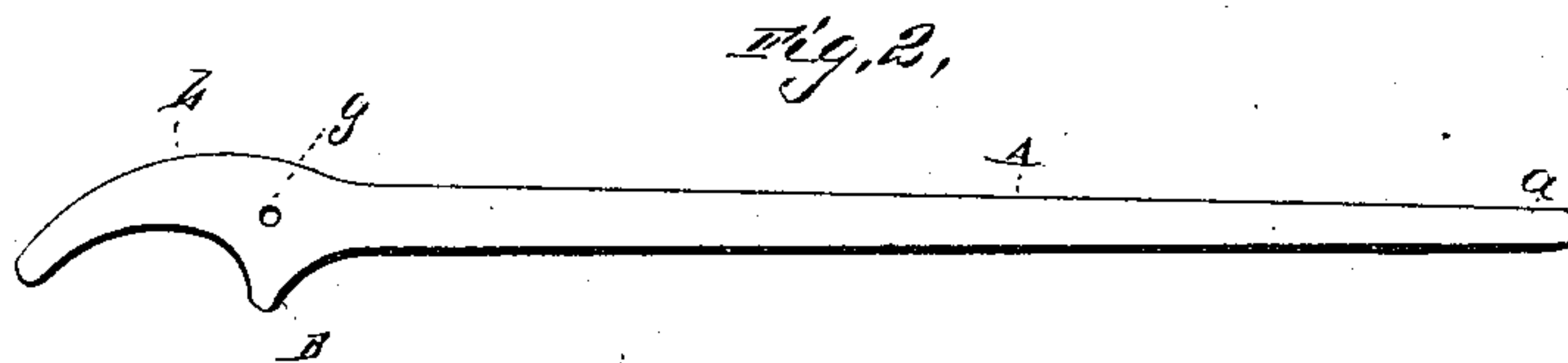
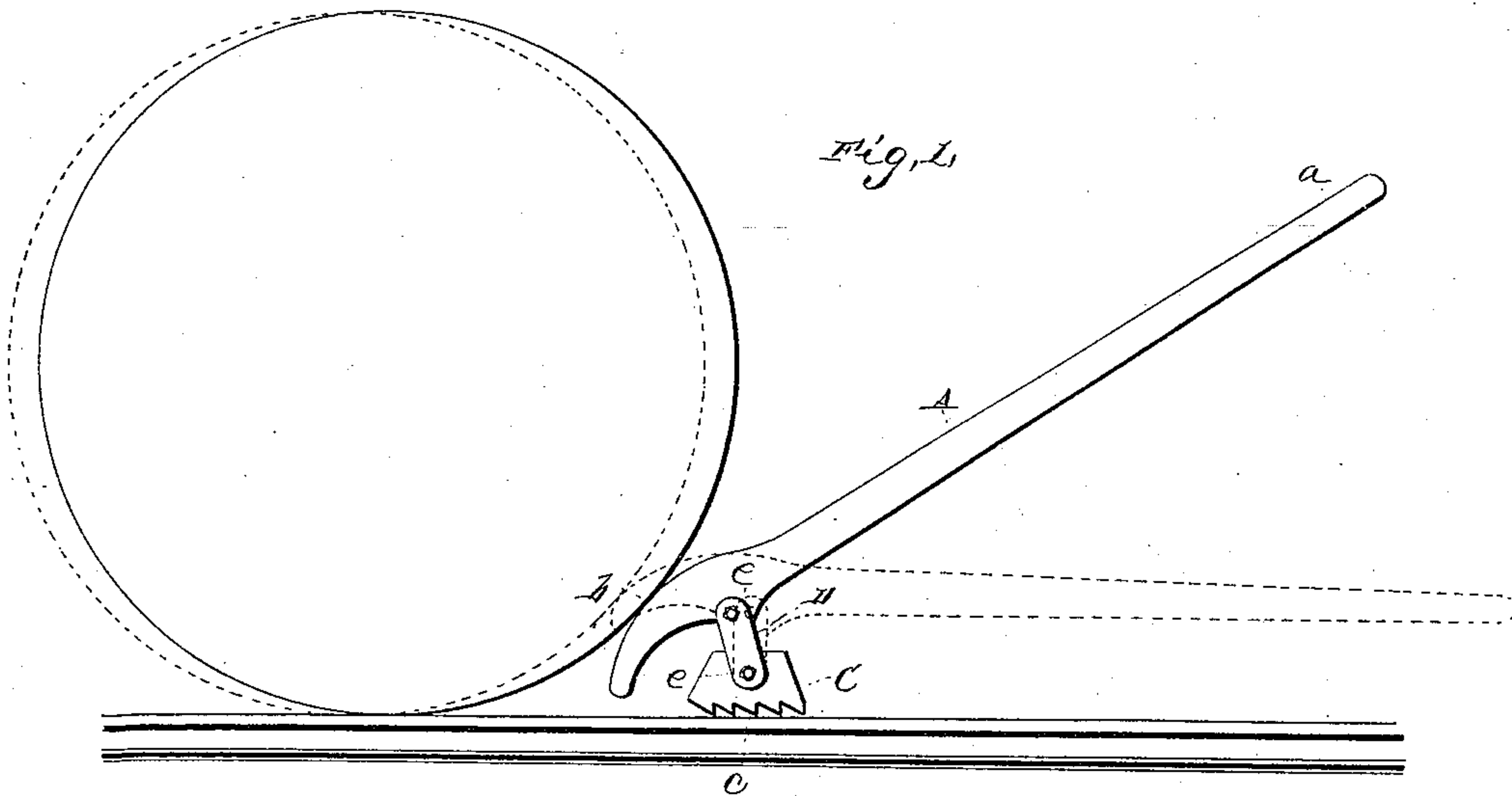
(No Model.)

W. H. GARLOCK.

LEVER FOR MOVING LOCOMOTIVES OR CARS.

No. 441,061.

Patented Nov. 18, 1890.



Witnesses
Charles L. Taylor
Phillips

Inventor
William Henry Garlock,
by *E. W. Anderson,*
his Attorney.

UNITED STATES PATENT OFFICE.

WILLIAM HENRY GARLOCK, OF SEATTLE, WASHINGTON.

LEVER FOR MOVING LOCOMOTIVES OR CARS.

SPECIFICATION forming part of Letters Patent No. 441,061, dated November 18, 1890.

Application filed August 2, 1890. Serial No. 360,822. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HENRY GARLOCK, a citizen of the United States, and a resident of Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Levers for Moving Locomotives or Cars; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of my invention in position as operated. Fig. 2 is a side view of the lever. Fig. 3 is a side view of the seat or rest. Fig. 4 is an end and side view of the clamps or plates and the bolts.

This invention relates to certain improvements in levers; and the object is to provide a device of this character especially adapted to moving locomotives, cars, &c.

With this object in view the invention consists in the novel construction and combination of parts hereinafter set forth.

In the accompanying drawings, A represents a lever arm or bar, gradually tapering toward one end and forming a handle portion *a*. The opposite end of the said bar is of greater diameter and thickness, and is bent or curved, as shown at *b*, forming a convex upper or bearing surface, its under surface having a corresponding concave outline. Near this lower or working end the bar A is provided with an enlargement, forming a tapering or pointed downwardly-extending projection B, said projection serving as the fulcrum of said lever, as hereinafter described.

C represents the foot-block or support, and is provided on its under surface with a series of teeth or spurs *c*, said teeth or spurs being inclined to present their points in the direction opposite to that in which the power is applied, in order that they may firmly engage the surface upon which the foot-block rests and prevent its displacement or slipping while the lever is being used. On its upper surface this block or support C is provided with

a concavity or depression *d*, adapted to receive and form a seat for the projection B of the lever, and allowing the movement of the projection therein during the operation of the lever-handle. The lever bar or arm A is connected to or supported upon said block by means of the plates or clamps D, one of said plates or clamps engaging, respectively, each side of said lever and block, and pivotally connected to each by means of the bolts or pivots *e*, one of which passes through the hole near the upper ends of said plates or clamps and a hole *g*, formed in the lever-bar and located directly over and in a vertical line with the point of projection B, the other bolt *e* passing through the hole formed near the lower ends of the plates or clamps and through the hole *i* of the block, said hole being located directly below and its center in a vertical line with that of the seat or depression *d*, thus bringing the projection or fulcrum B in engagement with said seat or depression.

By supporting the fulcrum of the lever-bar in the manner described it will be seen that a minimum amount of power applied to the handle or operating end of the lever will exert a maximum force at the opposite or working end, inasmuch as the point of bearing is free to accommodate itself to the different positions of the lever-bar, thus at all times applying the force to the object being operated upon in the most direct and effectual manner.

The convex bearing or lifting surface of the lever will, with a minimum amount of power, readily impart a rolling or rotary movement to the locomotive, car, or other object being operated upon. It is obvious that this manner of fulcruming or supporting the lever-bar, together with the block or support described, may be applied to lever devices adapted for other purposes.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

In a lever device, the combination, with a bar or arm provided at its lower or working end with a convex bearing-surface and near said end with a downwardly-extended tapering projection serving as the fulcrum, of a

foot-block or support having in its upper surface a concavity or depression forming a seat or bearing for said fulcrum projection, and having on its under surface a series of teeth
5 or spurs, and plates or clamps pivoted at their opposite ends to said block and lever, respectively, substantially as described.

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

WILLIAM HENRY GARLOCK.

Witnesses :

JOHN A. MILROY,
G. W. SAMSON.