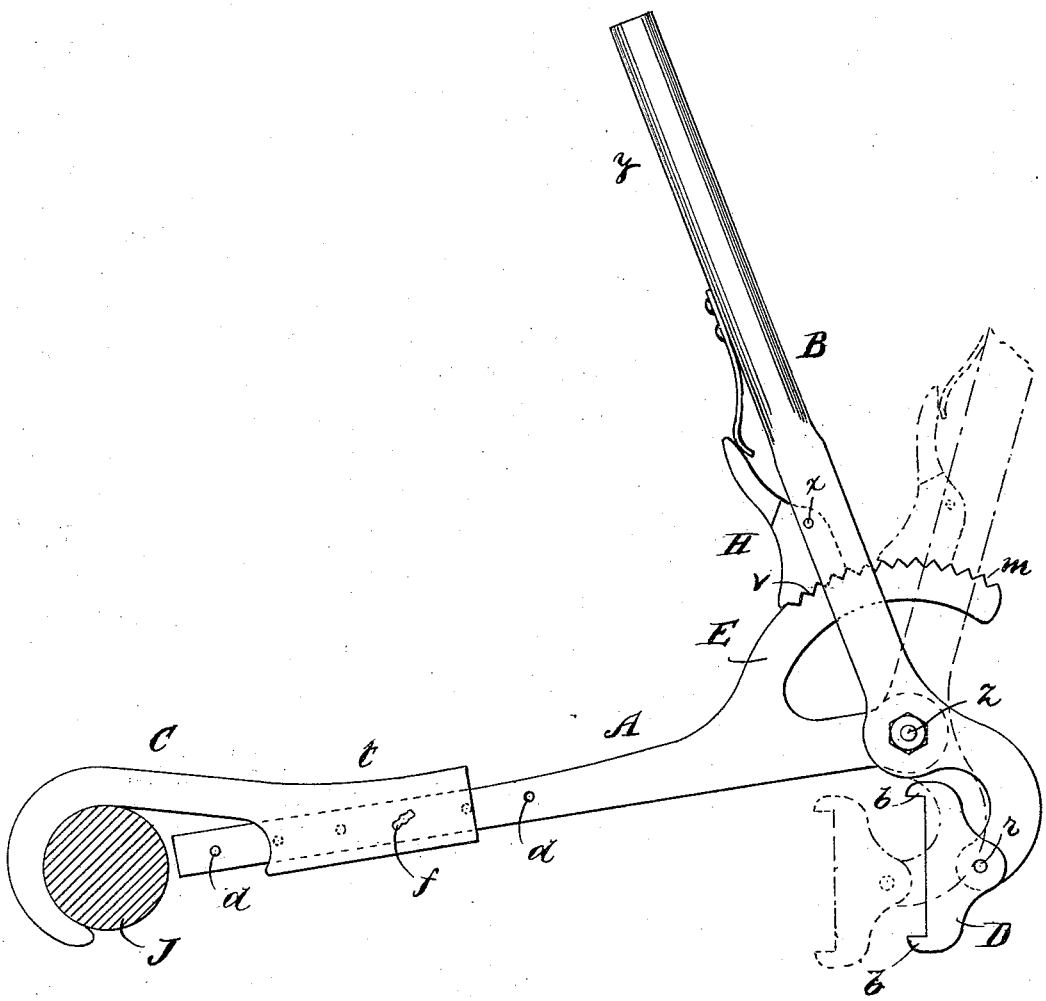
(No Model.)

W. J. ROBERTSON.

HAND JACK.

No. 343,341. Patented June 8, 1886.



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UNITED STATES PATENT OFFICE.

WILLIAM J. ROBERTSON, OF ST. ALBANS, VERMONT.

HAND-JACK.

SPECIFICATION forming part of Letters Patent No. 343,341, dated June 8, 1886.

Application filed January 13, 1886. Serial No. 188,471. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. ROBERTSON, of St. Albans, in the county of Franklin, State of Vermont, have invented a certain new and useful Improvement in Hand-Jacks, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which the figure is a side elevation of my improved hand-jack, represented as in position for use.

My invention relates to that class of hand-jacks which are employed in taking up or adjusting the brake-rods of railway-cars to compensate for the wear of the brake-shoes; and it consists in a novel construction and arrangement of the parts, as hereinafter more fully set forth and claimed, the object being to produce a simpler, cheaper, and more effective device of this character than is now in ordinary use.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation.

In the drawing, A represents the body of the jack, B the handle, C the hook, and D the head-piece. The body consists of an iron bar, preferably rectangular in cross-section, and of any suitable length, said body being provided with the upwardly-curved serrated arm or toothed segment E. The handle B is pivoted at *z* to the outer end of the body A, and provided with a spring-actuated pawl, H, which is pivoted thereto at *x*, and adapted to engage the teeth *m* on the segment E, the pawl being preferably constructed with a multiplicity of teeth, as shown at *v*, to render its operations more certain, and enable it to hold the handle with greater firmness. The head-piece D is centrally pivoted at *r* to the lower end of the handle B, and provided with a flange or projection, *b*, at the top and bottom, to keep it in proper position on the car-beam when in use. The hook C is provided with a hollow shank, *t*, in which the inner end of the body A is fitted to slide or work, the hook being rendered adjustable on the body by means of the pin *f* and a series of holes, *d*.

In the use of my improvement the hook C, being first properly adjusted on the body A, is passed over the axle J, and the head-piece D placed against the outer side of the brake-beam. The handle B is then pulled outwardly until the brake-shoes are forced against the wheels or trucks, or until the beam is moved a sufficient distance in the direction of the axle, after which the brake rod or rods may be readily shortened, taken up, or adjusted, as required, and in a manner which will be readily obvious to all conversant with such matters, without a more explicit description.

In the drawing, the hand-piece *y* of the handle B and the segment E are represented as above the body A; but, if preferred, the jack may be reversed to bring the hand-piece and segment E below the plane of the body when used. The hook C may also be passed under the axle, instead of over it, if desired.

I do not confine myself to making the hook C adjustable on the body A, or to adjusting it in the manner described; neither do I confine myself to the use of a ratchet mechanism constructed precisely as shown, nor to the use of a ratchet for retaining the handle when withdrawn, as any suitable means for that purpose may be employed.

Having thus explained my invention, what I claim is—

1. In a hand-jack, a body provided with a fixed toothed segment at one end and a hook connected to the other end, said hook being adjustable longitudinally of the body, in combination with a lever pivoted near one of its ends to said body, and provided with a spring-actuated pawl adapted to engage the teeth on said segment, and a head-piece pivoted to the short arm of said lever, substantially as described.

2. In a hand-jack for taking up or adjusting the brake-rods of railway-cars, the body A, provided with the holes *d* near one end, and with the toothed segment E at the other end, the hook C, having a hollow shank, *t*, fitting over said body, and the pin *f*, for locking said

parts together, in combination with the handle B, pivoted near one of its ends to the body at *z*, a spring-actuated pawl, H, pivoted to the long arm of said handle, and provided with a multiplicity of teeth engaging the teeth on said segment E, and the head-piece D, pivoted to the short arm of the handle, and provided with the flanges *b* along the upper and lower edges of its face, substantially as described.

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Witnesses:
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