(Model.)

G. WOLLET.

Jack.

No. 231,135. Patented Aug. 10, 1880.

Fig. 1.

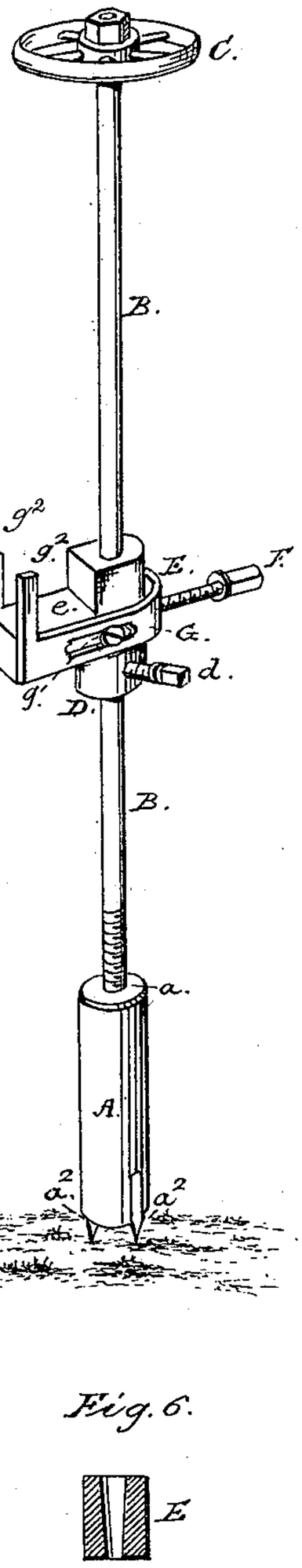

Fig. 4.

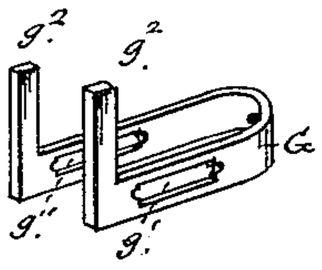

Fig. 5.

Fig. 2.

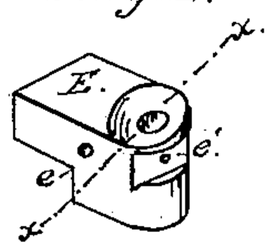

Fig. 3.

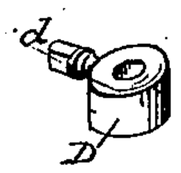

Fig. 6.

Attest:

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UNITED STATES PATENT OFFICE.

GEORGE WOLLET, OF WILLIAMSPORT, PENNSYLVANIA.

JACK.

SPECIFICATION forming part of Letters Patent No. 231,135, dated August 10, 1880.

Application filed May 4, 1880. (Model.)

To all whom it may concern:

Be it known that I, GEORGE WOLLET, of Williamsport, in the county of Lycoming and State of Pennsylvania, have invented a new and useful Improvement in Jacks; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention has for its object the construction of a jack or device for raising and supporting the main rods, side rods, or cross-rods of stationary and locomotive engines while the straps are removed for filing and lining of the brasses thereon; and the invention therein consists in a vertically-adjustable collar having an upper convex face; in a laterally-adjustable clamp formed upon a collar having a downwardly-tapering hole and under concave face; and, further, in their arrangement with one another and their combination with other parts of my device, all as more fully hereinafter described.

In order that persons skilled in the art may know how to make and use my device, I will now proceed to fully describe the same, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my jack ready for operation. Figs. 2 and 3 are views of the two collars detached, showing the concave and convex face, respectively, of each. Fig. 4 is a view of the clamping device detached. Fig. 5 is a view of the beveled metal plate, showing screw swivelingly connected therein. Fig. 6 is a vertical sectional view of collar E on line *x x* in Fig. 2, showing the downwardly-tapering hole.

Like letters refer to similar parts throughout the specification and drawings.

A represents the base or support of my jack. This support is of cylindrical shape, and has at its center a circular longitudinal perforation, *a*, screw-threaded and adapted to receive the stem of the jack, presently to be described. On the opposite sides of the lower face of the support are secured in any convenient way the projections or spurs a^2, to keep the jack from slipping when being used.

B represents the stem of the jack. This stem is round, and of the proper length, made of brass or any other suitable metal. Its lower end is screw-threaded, as shown, and its upper end is firmly fastened to the center of the small hand-wheel C.

D represents a collar, circular in form, and moving freely upon the stem, and vertically adjustable thereon by turning a screw, *d*, entering its side and bearing against the surface of the stem. When the jack is not in use this collar may rest against the support A, described above.

E represents another collar, also moving freely upon the stem A above, and resting upon the collar just described. It will be observed that this collar has a downwardly-tapering hole for the stem of the jack to pass through, and the object of this construction is to allow the collar to accommodate itself to the angle of the rod when it is being raised without binding or springing the stem of the jack. The under face of this collar is concaved to fit the upper convex face of collar D when resting upon the same, as shown, and the object of this construction of the meeting faces is to lessen the friction between the faces and permit the stem of the jack to be more easily turned when the occasion requires it.

On one side of the collar E a right-angled seat, *e*, is constructed by cutting out half of the projecting side of the collar, as shown. Upon this seat the cross-rod of the engine rests when being operated by the jack. The opposite side of this collar is circular, and has a small rectangular recess, *e'*, cut in its lower part, with upper and lower sides beveled, to hold the bevel-sided metal strip e^2, as shown. Into this metal strip is swivelingly connected a screw, F, which passes through and operates the metal clamping device G, moving on the screws *g*, which pass through slots *g'*, cut in opposite sides of the clamp, into the collar, as shown. This clamp is made preferably of brass and in one piece, bent in conformity to the curved end and adjoining sides of the collar below the seat *e*, and terminating in the upwardly-extending projections g^2, the object of these projections, as is readily seen, being to keep the cross-bar, &c., of the engine operated upon from lateral movement in the seat *e*, the screw F operating to draw them closely against the cross-bar.

Having described the construction of the various operative parts of my device, I will now explain how the same should be set for use and operated.

The jack is placed on the floor or ground by the side of the engine, with the stem of the jack to the side of the rod to be operated on, and within twelve or fifteen inches of the end of the rod. The adjustable collar and the collar with the lateral clamp are then raised or moved along the stem till the rod is met, and then the under collar is tightened, as described, and also the clamping device. After removing the bolts and straps from the rod, then, with the small hand-wheel, turn the stem so as to raise the rod to a position where the brass may be filed or replaced. After filing the brass or performing the necessary operation in order to adjust the brass to its proper place the hand-wheel is turned in a reversed direction, thus lowering the rod to its seat, when, after replacing the straps and bolts, and thus completing the work, the clamp may be loosened, the screw in lower collar relaxed, and the jack removed.

The principal advantages of my device are its simplicity of construction and arrangement, the readiness and ease with which its operative parts can be adjusted, and the thorough and effective way in which it accomplishes its work.

Having thus fully described my invention, and set forth some of its advantages, what I claim as new, and desire to secure by Letters Patent, is—

1. A lifting-jack wherein are combined a base provided with spurs and having a longitudinal screw-threaded perforation, as described, and a stem having its lower end screw-threaded, as described, and its upper end provided with a hand-wheel, substantially as set forth and shown.

2. In the jack described, the collar D, constructed as described, and vertically adjustable upon the stem B, as and for the purpose set forth.

3. In the jack described, the collar E, constructed as described, in combination with the clamping device G, with slots g' to guide its movements on the screws g when operated by screw F, substantially as described, and for the purpose set forth.

4. In the jack described, collar E, with clamping device formed thereon, as described, and having its lower face concave, collar D, with its upper face convex, and vertically adjustable, stem B, base A, and hand-wheel C, all constructed and arranged substantially as described, and for the purposes set forth.

5. In the jack described, the collar E, having at its center a downwardly-tapering hole, as shown, and for the purpose set forth.

This specification signed and witnessed this 30th day of April, 1880.

GEORGE WOLLET.

Witnesses:
EDWARD JOHNSON,
JNO. B. EMERY.