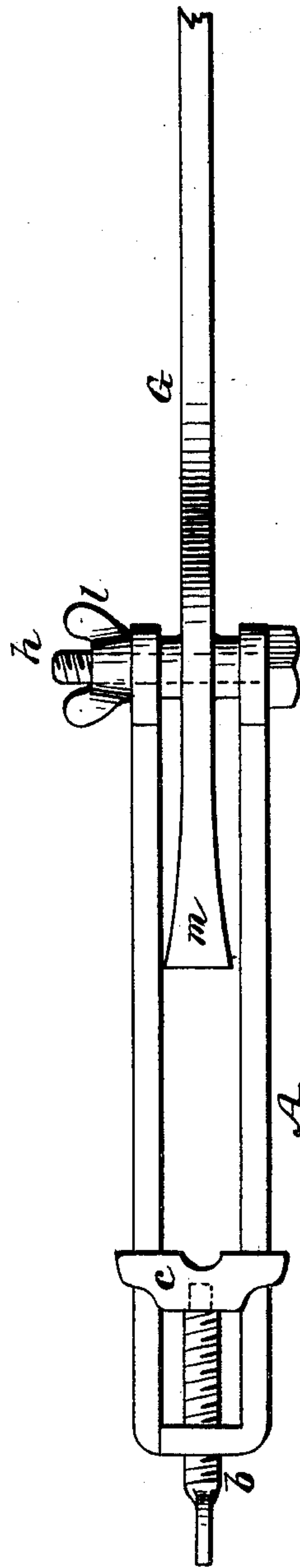
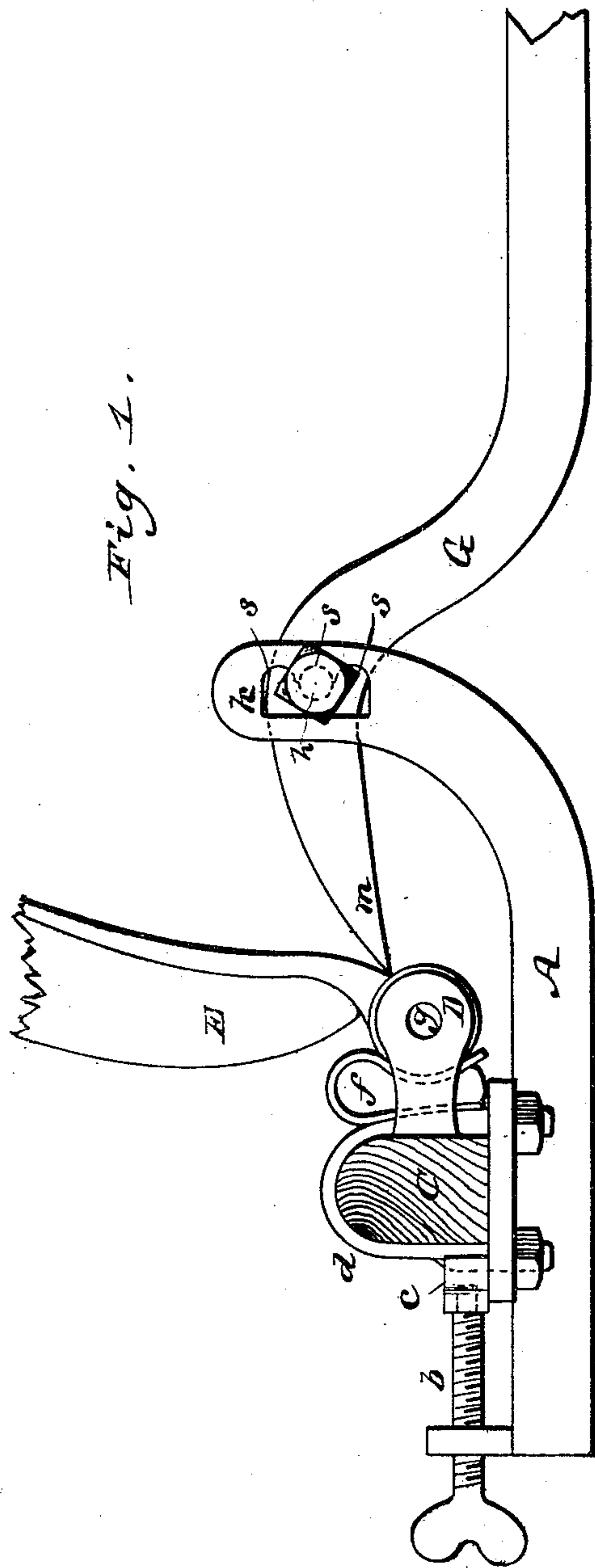


(No Model.)

J. M. SMITH.
THILL COUPLING JACK.

No. 407,131.

Patented July 16, 1889.



WITNESSES:
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UNITED STATES PATENT OFFICE.

JAMES MERRITT SMITH, OF GREENWICH, CONNECTICUT.

THILL-COUPLING JACK.

SPECIFICATION forming part of Letters Patent No. 407,131, dated July 16, 1889.

Application filed November 24, 1888. Serial No. 291,762. (No model.)

To all whom it may concern:

Be it known that I, JAMES MERRITT SMITH, of Greenwich, in the county of Fairfield and State of Connecticut, have invented a new and
5 useful Improvement in Thill-Coupling Jacks, of which the following is a full, clear, and exact description.

This invention relates to thill-jacks in which a strap-like clamp has combined with it a lever, preferably having a changeable fulcrum
10 arranged for operation upon the opposite side of the axle to that on which the clamp bears; and the invention consists in certain novel constructions and combinations of parts, whereby a single movement of the lever serves
15 to keep the jack to its hold without having resort to a continued strain on or pull of the lever, thus making the jack automatic in its action, and whereby increased facilities are
20 afforded for adjustment, substantially as hereinafter described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification,
25 in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 represents a side elevation of my improved jack as applied to the axle of a vehicle and its thill-coupling, with the thill
30 represented in part as attached. Fig. 2 is a top or plan view of the jack.

A is the strap-like clamping-frame, provided with an adjustable clamping-screw *b* in its rear end, which screw is constructed and
35 fitted with a loosely-attached bearing-block *c* on its forward end, made of or faced with any suitable material, so as not to mar the paint on the surface against which it bears, and so that it is prevented from slipping out of
40 place. This screw serves to adjust the jack to different sizes of work, and when in position its block *c* bears against the rear side of the axle or its clip *d*.

C indicates the axle; D, the thill-coupling; E, a thill, and *f* the rubber and spring interposed between the joint end of the thill and the front side of the axle, to hold the thill
45 firmly to its place when the usual coupling-pin is inserted, as provided for by the aper-

ture *g* through the joint end of the coupling 50 and the thill.

G is the operating-lever of the jack. This lever, which is suitably bent to provide for its easy manipulation, is fitted to work with-
in upturned arms or jaws on the front end of 55 the clamping-frame A, and is connected therewith by a fulcrum-bolt *h*, capable of adjustment up or down within a slot *k* in each of said clamp-arms, and resting for a bearing
60 within any one of a series of notches *s*, arranged one above the other in the side wall of said slot for the purpose of adjusting the lever higher or lower, as the work may require. A thumb-nut *l* is applied to the ful-
65 crum-bolt *h* to hold it in position. The inner end portion of this lever G is made chisel-shaped, as shown at *m*, where it bears against the thill when the jack is being applied, to compress the rubber and spring *f* by pressing
70 upward on the outer end of the lever to bring the joint-hole of the thill in line with the joint-hole *g* to insert or remove the coupling-pin, as required. The chisel end portion *m*
75 of this lever *g* serves to keep the lever from slipping when brought down at said end to its work. Prior to bringing said end down it occupies a position some distance above the
80 bottom of the axle; but when the outer end of the lever is raised its chisel end *m* comes down on the thill-joint above its center and automatically locks itself and holds the thill
in position to admit of the insertion or removal of the coupling-bolt without continuing or renewing the pull on the lever, thus leaving the operator free to manipulate the coup-
85 ling-bolt as required.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a thill-coupling jack, the combina- 90 tion, with a strap-like clamping-frame, of an adjustable clamping-screw at the rear end thereof and an operating-lever arranged at the forward end of the same, and having its fulcrum adjustable up or down, whereby 95 a double adjustment in different directions is secured for the jack, substantially as specified.

2. The within-described thill-jack, composed of a clamping-frame A, having an adjustable clamping-screw *b* at its rear end, with attached loose bearing-block *c*, in combination with the lever G at the opposite end of the clamping-frame, having a chisel-pointed inner end portion *m*, and having its ful-

crum adjustable up and down within the clamping-frame, substantially as shown and described.

JAMES MERRITT SMITH.

Witnesses:

R. JAY WALSH,
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