

C. S. S. GRIFFING.

Lifting-Jacks.

No. 152,482.

Patented June 30, 1874.

Fig. 1.

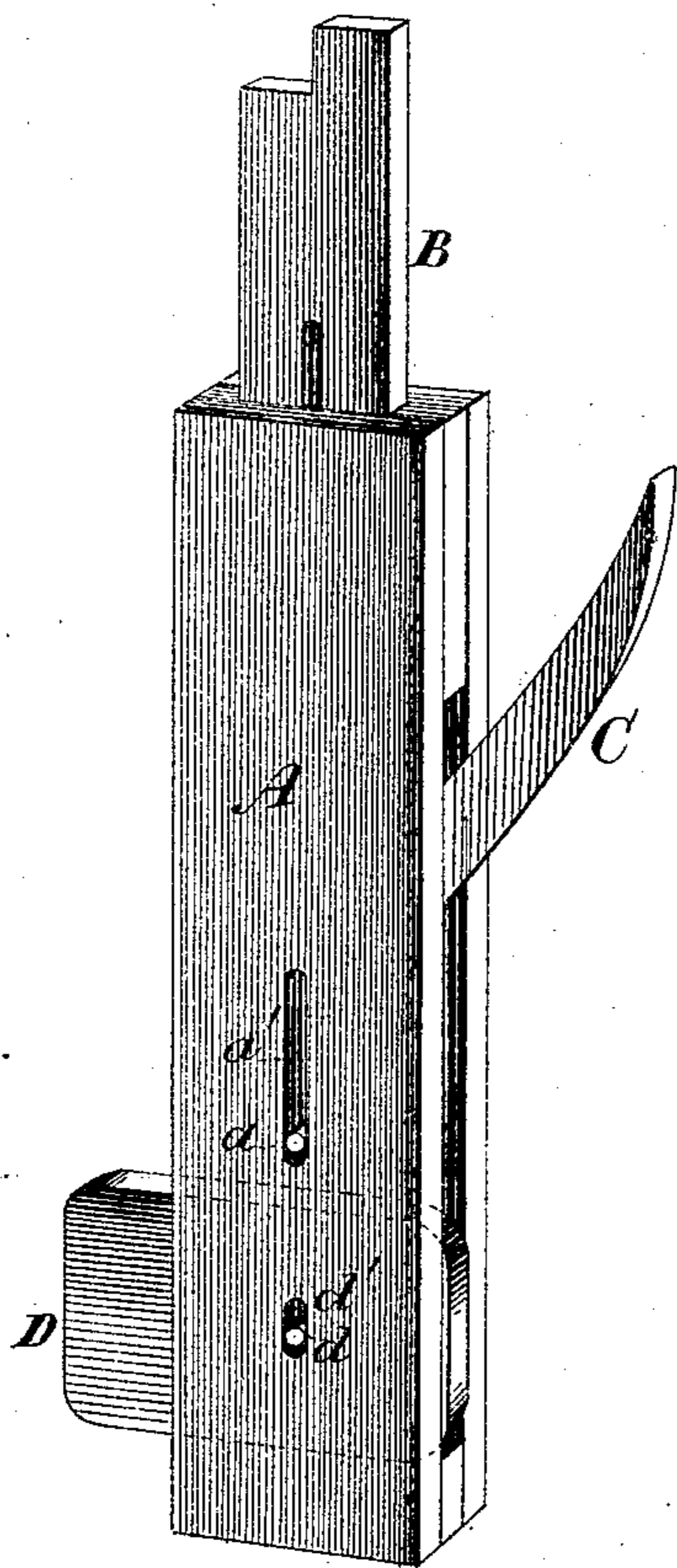
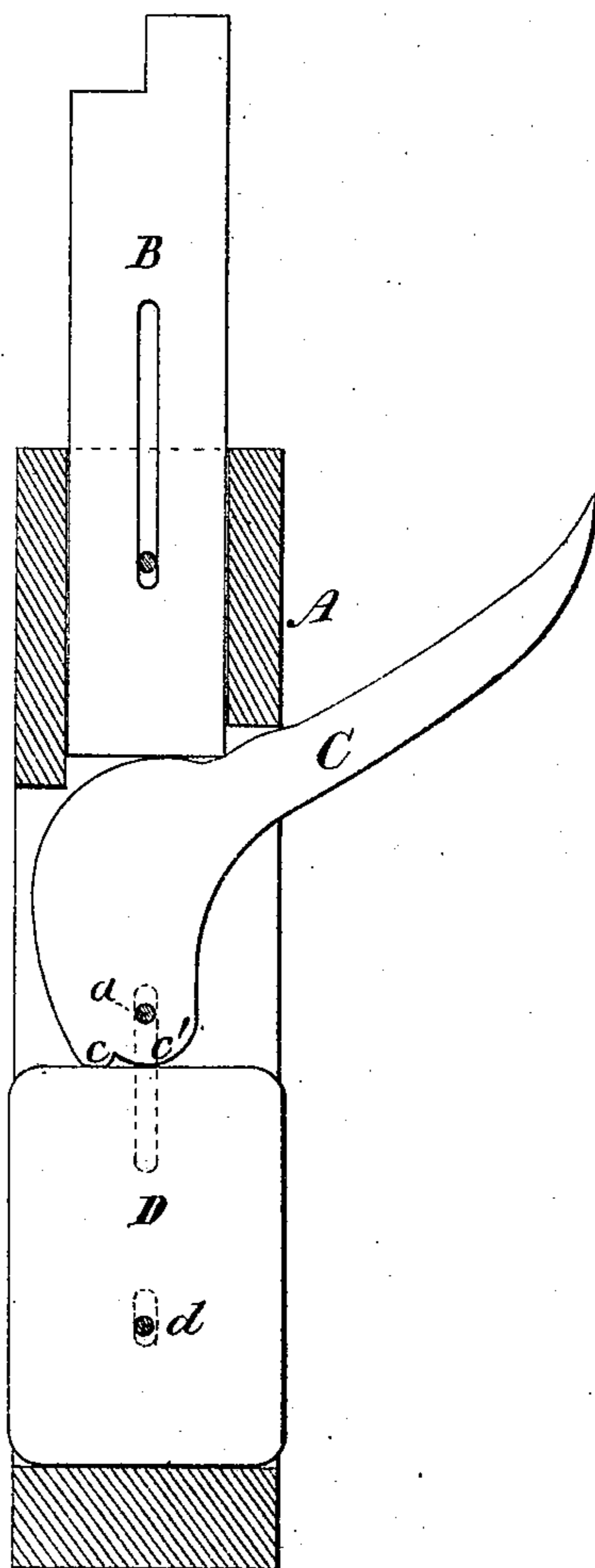


Fig. 2.



Witnesses.
A. Ruppert.
H. E. Quinn

C. S. S. Griffing
Inventor.
by P. H. J. Cils
his Atty

UNITED STATES PATENT OFFICE.

CHARLES S. S. GRIFFING, OF COLUMBUS, OHIO.

IMPROVEMENT IN LIFTING-JACKS.

Specification forming part of Letters Patent No. **152,482**, dated June 30, 1874; application filed December 2, 1873.

To all whom it may concern:

Be it known that I, CHARLES S. S. GRIFFING, of Columbus, in the county of Franklin and State of Ohio, have invented an Improvement in Lifting-Jacks, of which the following is a specification:

This invention relates to that class of lifting-jacks in which the sliding bar or prop is lifted by the action of an eccentric head of a lever connected to the standard.

Heretofore it has been customary to permanently pivot the lever to the standard, so that the entire strain and weight of the object raised were sustained by the pivot-pin, which is objectionable for obvious reasons.

My improvement consists in so combining the lifting-lever with the sliding prop and standard that the pin connecting it to the latter shall be wholly relieved of the superincumbent weight, which will be borne by the eccentric head turning between the prop and a solid abutment of the standard. I also employ an adjustable abutment or base, so formed that the normal height of the sliding prop may be readily changed to suit different conditions.

In the annexed drawings, Figure 1 is a perspective view of my improved lifting-jack. Fig. 2 is a side elevation, one side of the standard having been removed to show the better the form and arrangement of the adjustable base and lever.

The same letters of reference are used in both figures in the designation of identical parts.

The sliding prop B is arranged in the standard A, as clearly shown, and is "stepped" at its upper end in the usual manner. The lifting-lever C has an eccentric or cam shaped head, provided with a toe, *e*, which will remain seated upon the base or abutment D, when the cam has completed its upward throw, and its summit stands perpendicularly

over its fulcrum, thus serving to steady the head while it carries the weight. The fulcrum of the lever is at *c'*, the point of contact between its head and the base D, but it turns upon and is guided in its movements by the pin *a* projecting from it at both sides into vertically-elongated slots *a'* in the sides of the standard. Thus the entire weight is taken from the pin *a*, which now only sustains the light lateral strain in operating the lever. The eccentric head of the lever may bear directly upon the supporting-base or any rigidly-fixed abutment on the standard; but I prefer to employ for its fulcrum an adjustable abutment or base, D, made of oblong form, and inserted between the sides of the standard, to which it is connected by a pin, *d*, extending into vertically-elongated slots *d'* therein. By shifting this abutment from lying on its side, as shown in Fig. 1, to standing on end, as exhibited in Fig. 2, the normal height of the lifting-prop can be conveniently changed, as occasion may require. The abutment will in either position rest upon a solid foundation of the standard, and the slots *a'* and *d'* are sufficiently long to admit of the described adjustment of the parts.

What I claim as my invention, and desire to secure by Letters Patent, is—

The standard A and sliding prop B, in combination with the lifting-lever C, which turns on the axis of a pin, *a*, but has its fulcrum upon a solid abutment either fixed or adjustable on the standard, substantially as and for the purpose specified.

In testimony whereof I have signed my name to the foregoing specification in the presence of two subscribing witnesses.

C. S. S. GRIFFING.

Witnesses:

EMANUEL B. CUMP,
W. D. PACKARD.