

(No Model.)

M. C. MEEKER.

LIFTING JACK.

No. 350,597.

Patented Oct. 12, 1886.

Fig. 1.

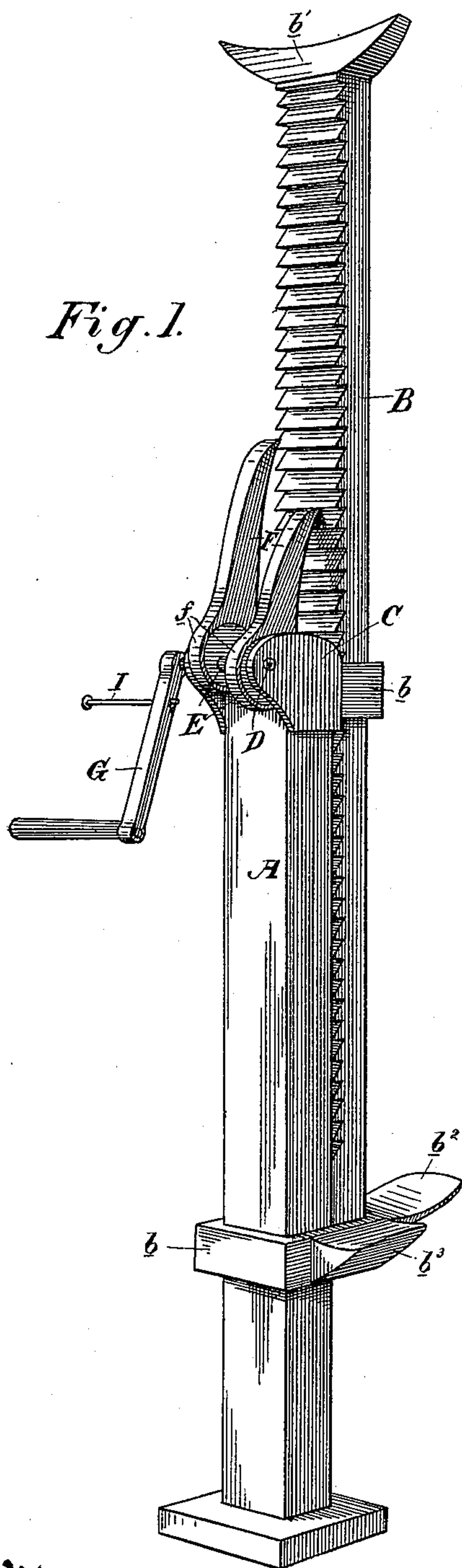
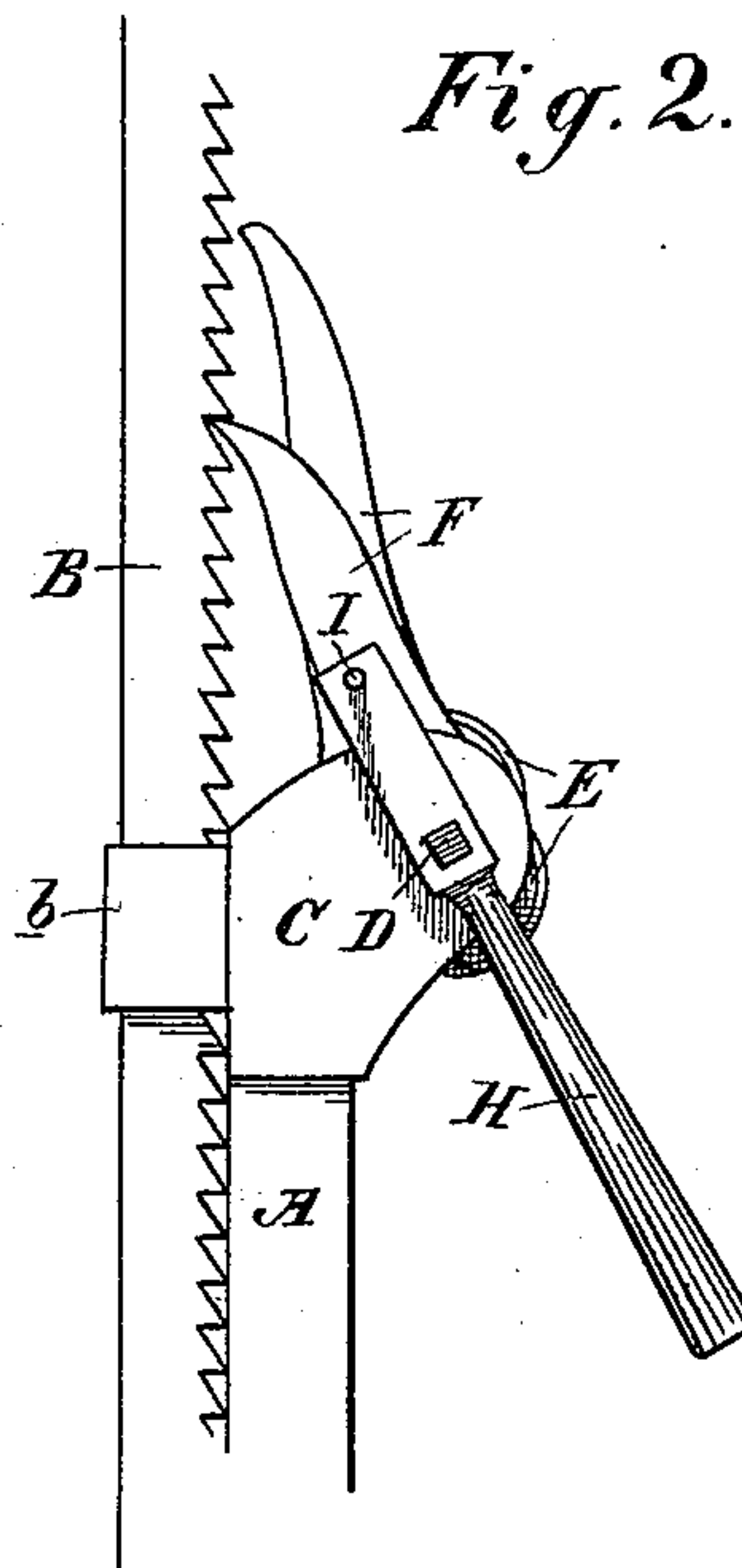


Fig. 2.



Witnesses,
Geo. H. Strong,
J. H. House

Inventor,
M. C. Meeker
By Dewey & Co.
attys

UNITED STATES PATENT OFFICE.

MELVIN C. MEEKER, OF OCCIDENTAL, CALIFORNIA.

LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 350,597, dated October 12, 1886.

Application filed May 17, 1886. Serial No. 202,472. (No model.)

To all whom it may concern:

Be it known that I, MELVIN C. MEEKER, of Occidental, county of Sonoma, State of California, have invented an Improvement in Lifting and Logging Jacks; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to that class of jacks which are used for lifting and logging purposes; and my invention consists in the combination of devices hereinafter described and claimed.

The object of my invention is to provide a simple and effective jack, in the operation of which but a small exercise of power is required.

Referring to the accompanying drawings, Figure 1 is a perspective view of my lifting and logging jack. Fig. 2 is a detail elevation showing the application of a lever instead of a crank.

A is a standard, and B is a ratchet-lifting bar, which is guided parallel with the standard and adapted to move in any suitable arrangement of guide-sockets, such as is represented by *b*. This ratchet-lifting bar is provided at its top with the usual bearing, *b'*, and at its bottom with the foot *b²* and a foot, *b³*, extending at right angles to the foot *b²*.

At the top of the standard A is secured a bracket, C, in which is journaled a shaft, D. This shaft has secured upon it between the arms of the brackets the cams or eccentrics E, which are arranged oppositely to one another.

F are the actuating-pawls. These are placed side by side in parallel planes, and they are mounted upon the cams or eccentrics in any suitable manner, as by the usual eccentric-strap, *f*. The pawls engage the ratchet-lifting bar B.

It will be seen from the construction, as far as described, that if the shaft D is oscillated through one hundred and eighty degrees, or if it is completely rotated, the effect upon the pawls is to cause them to rise and fall alternately, by reason of the opposite location of the eccentrics, and, therefore, as the upper ends of the pawls engage the ratchet-face of the lifting-bar said bar is raised continuously by each pawl alternately.

In order to operate the shaft D, I may have any suitable handle—such as the crank G upon the end of the shaft or the lever H—the former being adapted to completely rotate the shaft, while the latter merely oscillates it, though both, as will be seen, accomplish the same result.

In order to throw the pawls out of engagement for the purpose of allowing the ratchet-lifting bar to fall, I have the removable pin I. When the crank G is used, this pin passes through it and is adapted, when fully inserted, to pass behind the pawls, and by the continued movement of the crank to throw said pawls back from their engagement. When the lever H is used, the pin passes through it and operates in the same manner.

The operation of my jack is as follows: By the crank or lever the pawls are alternately elevated and withdrawn, and thus one of them is in continuous engagement with the ratchet-bar, so that said bar is lifted on both the up and the down stroke of the lever and throughout the rotation of the crank. When it is desired to throw the pawls from their engagement, the pin I is inserted far enough to pass through them at the proper moment.

The foot *b²* at right angles will be found useful in rolling logs.

The pawls may be weighted on their inner surfaces to hold to their engagement.

I am aware that it is not new to construct lifting-jacks with standards, actuating-pawls, and ratchet-bars; and I do not claim these elements, broadly, as my invention.

My pawls are side by side and of the same length, and are forced to their engagement positively by the cams or eccentrics with a great deal of power.

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

1. In a lifting-jack, the ratchet-lifting bar B, in combination with the actuating-pawls F, placed side by side in parallel planes, the oppositely-located eccentrics or cams E, on which the pawls are mounted, a handle for operating the shaft, and the removable pin I in the handle, adapted to be passed behind the pawls and disengage them, substantially as described.

2. In a lifting-jack, the standard A, having
bracket C on its top, and the ratchet-lifting
bar B, guided by said standard, in combina-
tion with the shaft D, mounted in the bracket,
5 the oppositely-located eccentrics or cams E on
the shaft, the actuating-pawls F, engaging the
ratchet-lifting bar, and mounted on the eccen-
trics or cams, and the removable pin I, by
which the pawls are thrown from their en-

gagement with the ratchet-bar, substantially as
described.

In witness whereof I have hereunto set my
hand.

MELVIN C. MEEKER.

Witnesses:

M. RUTLEDGE,

W. P. THOMPSON.