(No Model.)

L. G. BALLINGER.

CARPET STRETCHER.

No. 402,220. Patented Apr. 30, 1889.

Fig. 1.

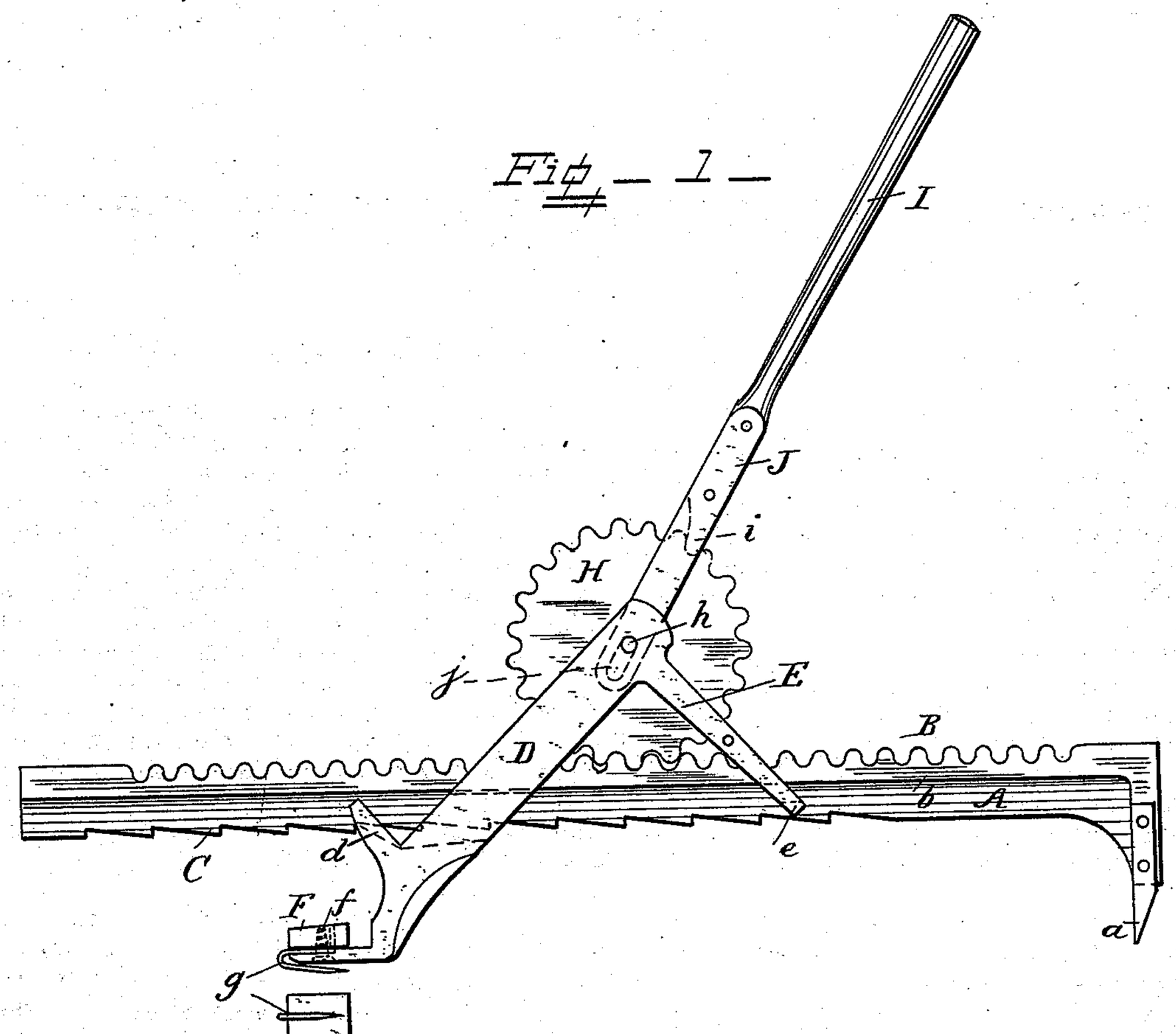


Fig. 2.

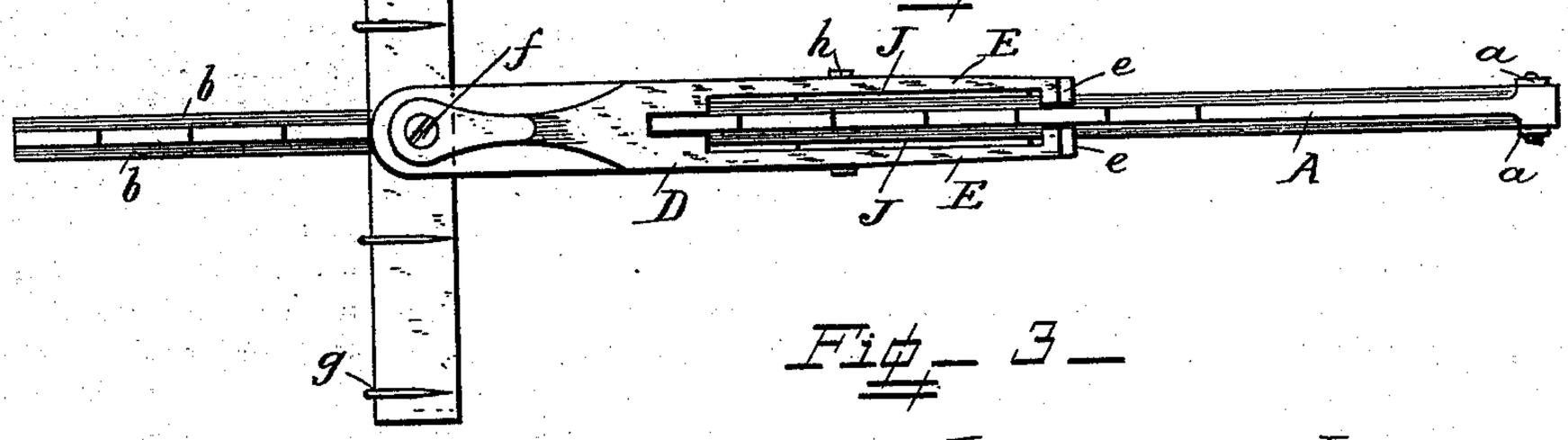
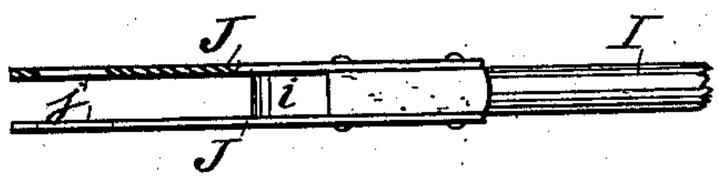


Fig. 3.



Witnesses.

S. C. Kramer.

Walter Allen

Inventor.

L. G. Ballinger.

By his Attorney

Herbert W. J. Jenner.

UNITED STATES PATENT OFFICE.

LEVI G. BALLINGER, OF EAST LIBERTY, OHIO.

CARPET-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 402,220, dated April 30, 1889.

Application filed August 10, 1888. Serial No. 282,405. (No model.)

To all whom it may concern:

Be it known that I, LEVI G. BALLINGER, a citizen of the United States, residing at East Liberty, in the county of Logan and State of Ohio, have invented certain new and useful Improvements in Carpet-Stretchers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to carpet-stretchers; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed.

In the drawings, Figure 1 is a side view of the carpet-stretcher. Fig. 2 is a plan view of the same from below, and Fig. 3 is a detail sectional view of the lower part of the hand-lever.

A is a long bar provided with the sharp points *a* at one end, which are driven into the floor close to the wall.

B is a toothed rack formed upon the upper side of the flange *b* at the top edge of said bar, and C is a ratchet on the bottom edge of said bar A.

D is a forked bracket which slides over bar A, and is provided with a tooth, *d*, which engages with the ratchet C. The bracket D is arranged at an angle of about forty-five degrees, and has the bar A and the tooth *d* at its lower end.

E are arms which extend downwardly at about a right angle on each side of bracket D, and are provided with projections *e*, which hook under the flange *b* and prevent the upper end of the forked bracket from rising too far.

F is a cross-piece, which is pivoted to the lower part of bracket D by the pin *f*, and *g* are hooks which project from the cross-piece and engage with the carpet.

H is a toothed pinion, which is journaled upon the pin *h* in the upper part of the forked bracket, so as to gear with the rack B.

I is the hand-lever, which is provided with the tooth *i*, which engages with the teeth of the pinion H, and J are plates secured to the sides of and forming a continuation of the hand-lever. The plates J have slots *j*, for pivoting the hand-lever to the pin *h* and allowing it to be slid in the direction of its length, so that the tooth *i* may be moved around and placed between any of the teeth of the pinion.

The device is operated as follows: The points *a* at one end of bar A are driven into the floor close to the wall, the bracket D is slid to the other end of the bar, and the hooks are caused to engage with the carpet. The sliding bracket is then advanced by turning the hand-lever and pinion as far as the hand-lever can be moved. The tooth *d* then engages with the teeth of the ratchet C, so that the bracket cannot slide back. The said hand-lever is then moved back around the pinion, so that the bracket may be advanced for another portion of its travel by means of the rack and pinion, and this operation is repeated until the carpet is tightly stretched.

What I claim is—

1. In a carpet-stretcher, the combination, with a bar provided with a toothed rack, a ratchet, and points for securing the bar to the floor, of an inclined bracket sliding on the bar and having a tooth at its lower end below said bar for engaging with the said ratchet, carpet-hooks connected to the lower part of the bracket, a toothed pinion journaled in the sliding bracket and engaging with the said rack, and a hand-lever for turning the pinion, substantially as set forth.

2. In a carpet-stretcher, the combination, with the bar provided with points for securing it to the floor, a flange upon its upper edge, a toothed rack, and a ratchet, of the inclined sliding bracket provided with a tooth for the ratchet underneath the said bar, and arms projecting downwardly from the bracket and inclined in the opposite direction, said arms having projections engaging with the flange on the said bar, a cross-bar pivoted to the sliding bracket and provided with carpet-hooks, a toothed pinion journaled in the said bracket and engaging with the rack, and a hand-lever for operating the toothed pinion, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

LEVI G. BALLINGER.

Witnesses:
SAMUEL BALLINGER,
CARMAN C. STOKES.