E. T. STARR.

ADJUSTABLE BRACKET.

No. 169,382. Patented Nov. 2, 1875.

Fig: 1.

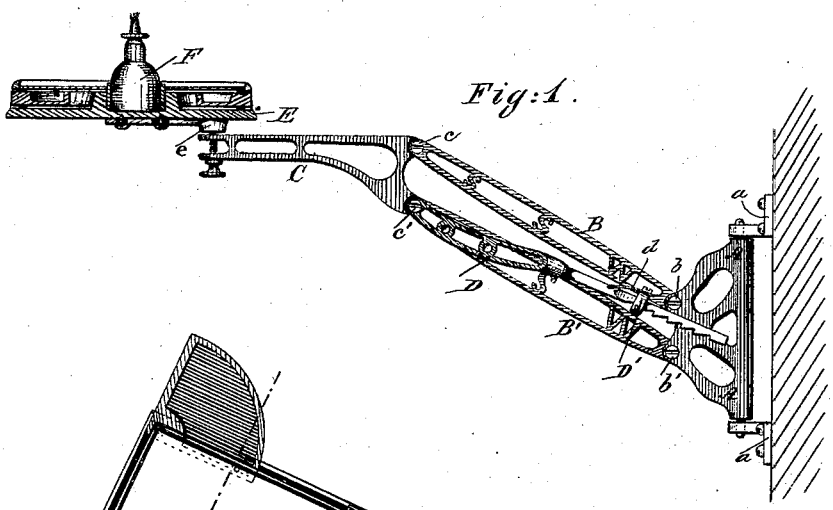


Fig: 2.

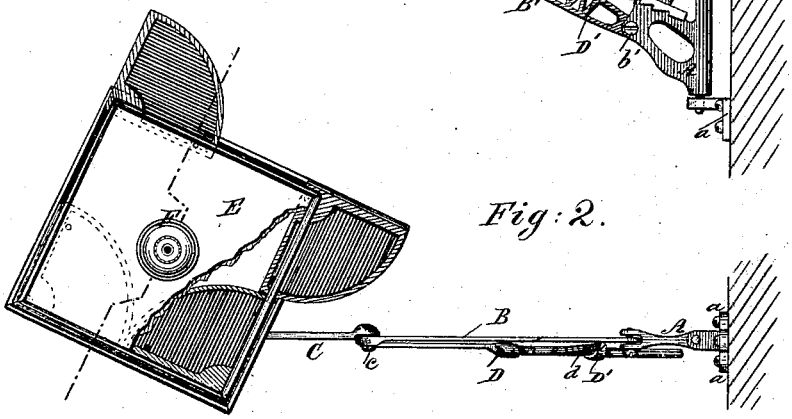
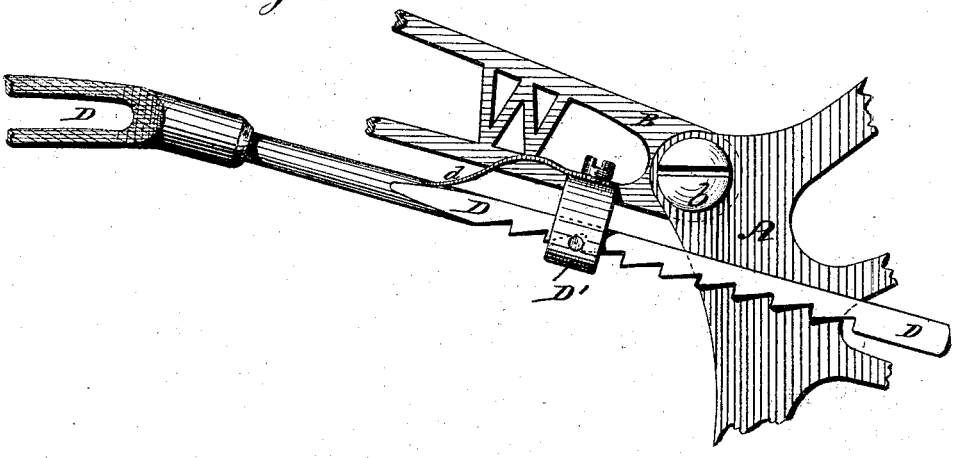


Fig: 3.



WITNESSES

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ELI T. STARR, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO SAMUEL S. WHITE, OF SAME PLACE.

IMPROVEMENT IN ADJUSTABLE BRACKETS.

Specification forming part of Letters Patent No. **169,382**, dated November 2, 1875; application filed March 8, 1875.

To all whom it may concern:

Be it known that I, ELI T. STARR, of the city and county of Philadelphia, in the State of Pennsylvania, have invented certain new and useful Improvements in Adjustable Brackets, of which the following is a specification:

My invention relates to that class of brackets capable of both vertical and lateral adjustment; and its objects are to maintain the tray or table supported by the bracket always in a horizontal position, to render the tray adjustable on the bracket, and to render the bracket self-locking in any position to which it may be adjusted vertically.

In the accompanying drawings, Figure 1 represents a view of my improved bracket and table, partly in elevation and partly in section on the line *x x* of Fig. 2. Fig. 2 represents a plan or top view of the same, with a portion of the top of the table broken away, and some of the drawers of the table drawn out, to show their construction; and Fig. 3 a view, on an enlarged scale, of the locking device of the bracket.

To a back-plate or crane, A, pivoted to swing horizontally in suitable bearings *a a*, affixed to the wall or some permanent structure, two parallel arms or radius-bars, B B′, are pin-jointed at *b b′*, while their opposite ends are, in like manner, pin-jointed at *c c′* to a horizontal arm or frame, C, thus forming a parallel-rule joint, which keeps the bar or frame C always level while capable of moving freely vertically. The bracket is held at any desired elevation by means of a locking-bar, D, hinged on the lower pivot *c′* of the horizontal bar, and extending across to the rear joint of the upper bar B. The free end of the locking-bar is provided with ratchet-teeth, and is capable of sliding endwise through a loop, D′, secured upon the upper radius-bar B. A spring, *d*, serves to keep the ratchet-teeth engaged with the loop.

The ratchet-teeth of the locking-bar, it will be observed, are shown as arranged in a direction the reverse of the obvious one, or the one that would most naturally suggest itself. This is done, however, for the purpose of sustaining the bracket at any desired elevation by a pulling-strain on the locking-bar, instead of a thrusting one, as the pulling-strain in practice has been found to hold the bracket more steadily and securely. A tray or table, E, is pivoted to the outer end of the horizontal frame C by a pivot, *e*, secured to one of its corners. The table is thus free to swing around a pivot with a wide range of motion. It may be held in any desired position by a suitable catch or locking-cam. Quadrant-shaped draws are pivoted to each corner of the table, so as to swing out with a circular movement, instead of being made square and pulling out straight, as usual.

By this mode of construction, in addition to the ease in which the drawers may be opened and shut, I am enabled to secure a central space in the table, in which a lamp, F, or other object, may be inserted without interfering with the drawers, and yet be securely held without the necessity of employing clamps or fastenings.

The operation of my improved apparatus will readily be understood from the foregoing description. As the table is lifted the locking-bar slides endwise through the loop, and its teeth hold the bracket at any height to which it may be adjusted. The bracket can be lowered simply by lifting the teeth of the locking-bar out of contact with the loop when it draws out endwise. This can readily be done by the operator applying his hand to that portion of the locking-bar nearest the table, and obviates the necessity of the operator moving his position while adjusting the bracket.

I claim—

1. The hereinbefore-described adjustable bracket, consisting of the combination of the horizontally-swinging crane, the parallel radius-bars pivoted thereto, the horizontal frame, to which the radius-bars are also pivoted, the ratcheted locking-bar pivoted to the horizontal frame, the loop secured on the upper

radius-bar, and through which the locking-bar slides, and the holding-spring, these members being constructed and operating in combination substantially as hereinbefore set forth.

2. The combination of the crane, the radius-bars, the horizontal frame, the locking-bar, and the swinging table, pivoted by one corner to said frame, these members being constructed and operating substantially as hereinbefore set forth.

In testimony whereof I have hereunto subscribed my name.

ELI T. STARR.

Witnesses:
J. A. B. WILLIAMS,
S. T. JONES.