G. P. DAVIS.

ADJUSTABLE BRACKET.

No. 187,361. Patented Feb. 13, 1877.

Fig. 1.

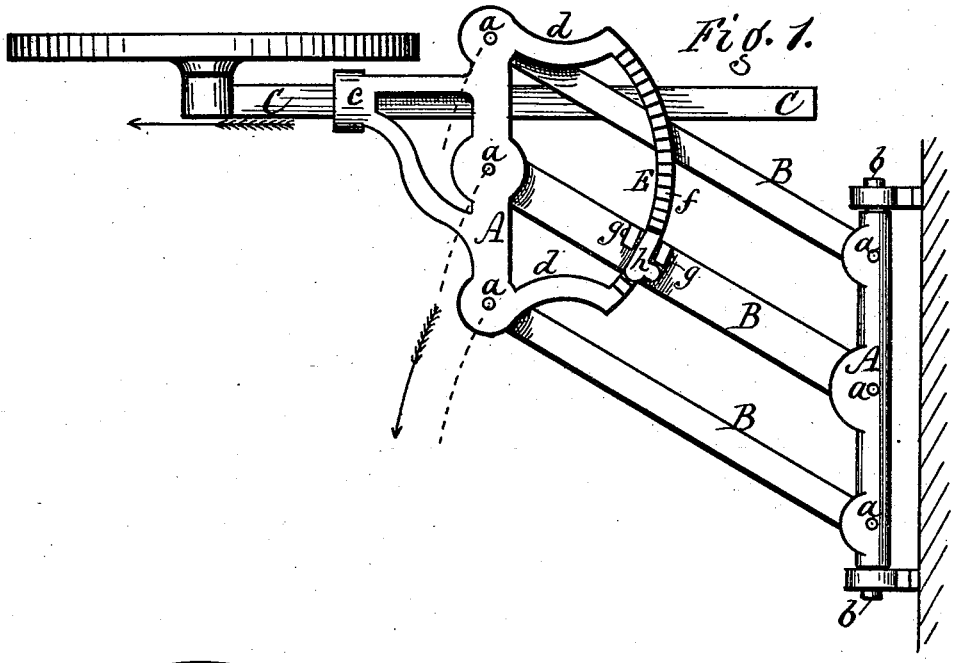


Fig. 2.

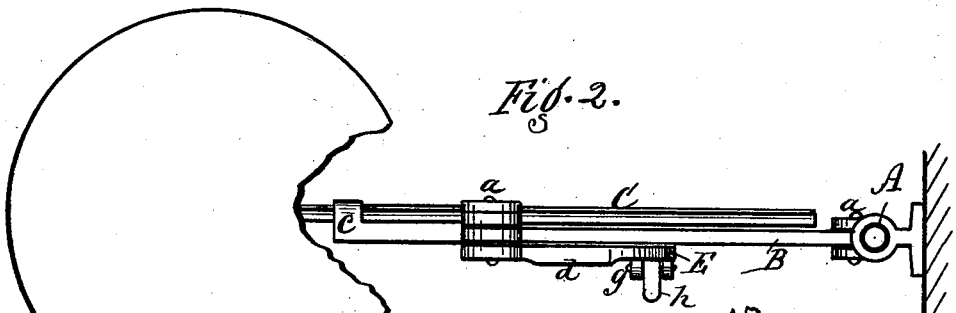
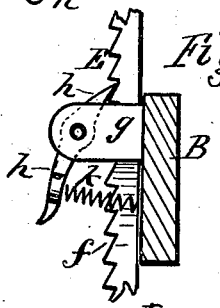


Fig. 3.

Fig. 4.



Attest.

Jacob Spahn

Louis D'Spahn.

Inventor.

Geo. P. Davis,

per R. F. Osgood,

Atty.

UNITED STATES PATENT OFFICE.

GEORGE P. DAVIS, OF ROCHESTER, NEW YORK.

IMPROVEMENT IN ADJUSTABLE BRACKETS.

Specification forming part of Letters Patent No. **187,361**, dated February 13, 1877; application filed January 13, 1877.

To all whom it may concern:

Be it known that I, GEORGE P. DAVIS, of the city of Rochester, in the county of Monroe and State of New York, have invented a certain new and useful Improvement in Adjustable Brackets; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of my improvement. Fig. 2 is a plan. Figs. 3 and 4 are detail views.

My improvement relates to those brackets which are constructed on the principle of the parallel rule, by which they may be adjusted higher or lower at the outer end without affecting the horizontal position of the shelf upon which the articles are placed. Such brackets are well known; hence I do not claim such broadly.

My invention consists in the combination, with the standards and bars, of a segment attached to the outer standard, and a detent attached to the middle bar, as hereinafter more fully described, and definitely claimed.

A A represent two vertical standards, to which are pivoted at *a a a* three parallel bars, B B B. The inner standard has journals *b b*, which rest in suitable eyes attached to the wall, so that the bracket may be swung horizontally in a circle. The outer standard is free to be moved up and down vertically; hence the device works upon the well-known principle of the parallel rule—the standard maintaining its vertical position at all adjustments. C is a half-round slide, which rests in a socket, *c*, projecting from and forming part of the outer standard. This slide moves out and in freely, and has, at its outer end, a spindle, on which turns the shelf that supports the articles. By this arrangement the shelf may be adjusted any desired distance horizontally from the wall. Thus far the construction is similar to that in other brackets in use.

Heretofore, so far as I am aware, a complicated device has been used for producing the vertical adjustment of the bracket. I employ the following: *d d* are two arms, attached, respectively, to the top and bottom of the outer standard, and forming a part of it. The ends of these arms are connected by a curved segment, E, concentric with the central pivot *a*. The arms and segment thus form a bow, which is solid with the standard and moves up and down with it. The outer face of the segment is formed with a series of ratchet-teeth, *f*. *g g* are two bearings or lugs projecting from the face of the middle bar B. The segment runs closely but freely between these bearings. *h* is a detent pivoted in the bearings *g g*, and engaging with the ratchet-teeth of the segment above the bar. It is held in engagement by a reacting-spring, *k*. By pressing the finger on the detent it is released from the ratchet, and the bracket can then fall to a lower adjustment. The bracket is raised to a higher adjustment by simply lifting it up, the detent slipping over the ratchet-teeth.

By the means above described I locate the retaining devices at the outer end of the bracket instead of the inner end, which has usually been done, and thereby render them more convenient and effective in use. Greater strength is thereby attained. The ratchet-teeth might be located on the inner edge instead of the face of the ratchet, and a cam might be employed instead of a detent.

In addition to serving as an adjuster and retainer, the segment acts as a stiffener and guide to the bars, and to prevent them from warping or twisting. It extends backward midway between the two standards, and bears against all three of the pivoted bars B B B. At least two of the bars always remain in contact with it, and in most positions three. It therefore forms a guide to the bars in moving up and down, keeping them in line at all times, and obviating the looseness and twisting of the bars that would occur were there no stay. The detent being attached to the bars, and embracing the segment, the effect is to bind the two parts firmly together when weight is applied on top of the bracket, the detent thus serving as a clamp.

The bracket above described is applicable to various uses, but especially to dentists' use, for holding instruments over the operating-chair.

Having thus described my invention, I do not claim, broadly, an adjustable bracket, operating on the principle of the parallel rule, nor do I claim a horizontal slide carrying a rotating shelf; but

What I claim as new is—

In an adjustable bracket, the combination, with the standards A A and pivoted bars B B B, of the curved segment E, attached to and forming a part of the outer standard, extending back and forming a bearing to the said bars, and one of the bars provided with the detent *h*, engaging with ratchet-teeth on the segment, as shown and described, and for the purpose specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

GEO. P. DAVIS.

Witnesses:
R. F. OSGOOD,
JACOB SPAHN.