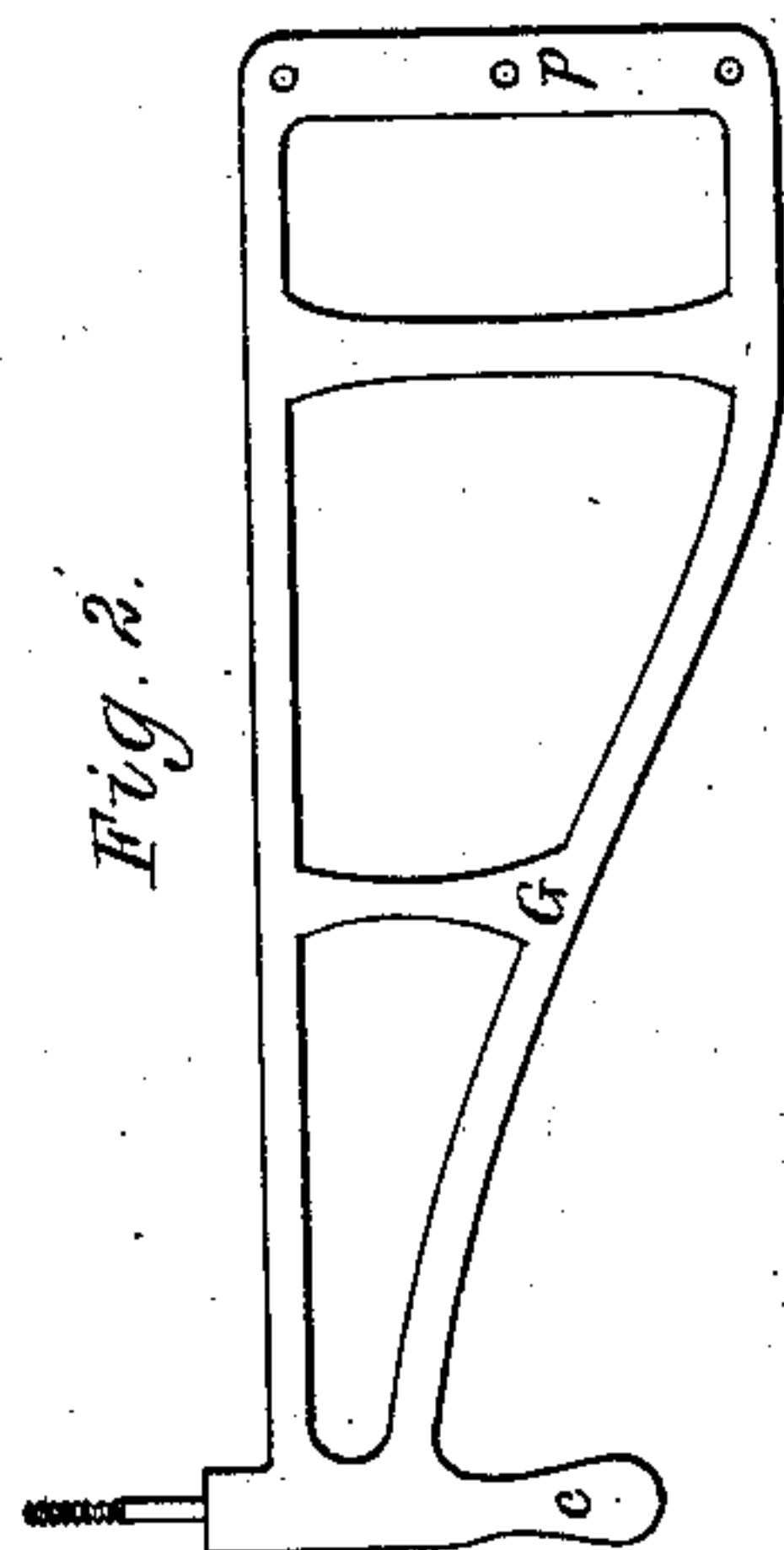
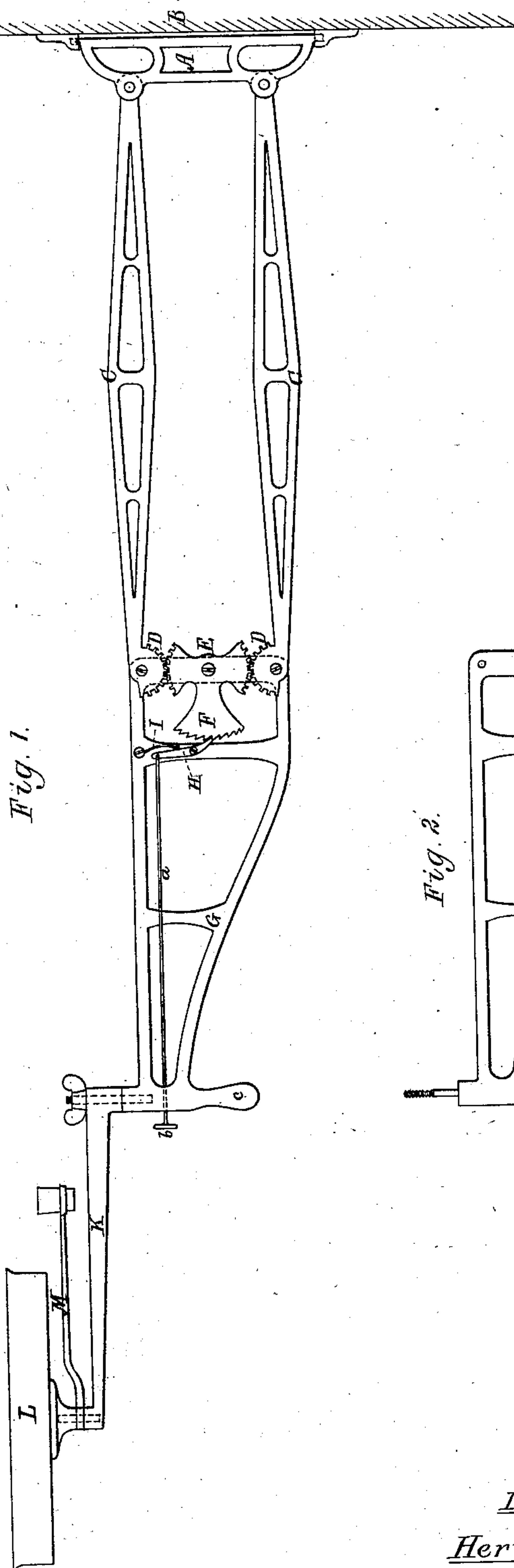


(No Model.)

H. C. MERRILL.
DENTAL BRACKET.

No. 256,583.

Patented Apr. 18, 1882.



Witnesses

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Inventor.

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UNITED STATES PATENT OFFICE.

HERVEY C. MERRILL, OF WOLLASTON, MASSACHUSETTS.

DENTAL BRACKET.

SPECIFICATION forming part of Letters Patent No. 256,583, dated April 18, 1882.

Application filed February 6, 1882. (No model.)

To all whom it may concern:

Be it known that I, HERVEY C. MERRILL, of Wollaston, of the county of Norfolk and State of Massachusetts, have invented a new and useful Improvement in Dental Brackets; and I do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a side elevation of a bracket of my improved kind. Fig. 2 is a side view of its median arm.

This bracket is specially intended for the use of dentists, although it may be often advantageously employed by others. It is to be secured to a wall or other proper support near the chair in which a person may sit while undergoing a dental operation, and is to be used to support and bring to a suitable position the operator's tools or materials, or what may be for the convenience of the patient.

The nature of my invention is defined in the claims hereinafter presented.

In Fig. 1, A denotes the bracket-swivel, which stands vertically when in use, and is pivoted at its upper and lower ends to a wall, B, so as to swing or turn horizontally.

Jointed to the swivel and arranged one over and parallel with the other, as shown, are two arms, C C, each of which at its outer end has fixed to it or projecting from it, in manner as represented, a toothed sector, D.

Between the two sectors D D and to engage therewith is a gear, E, from which there projects a sectoral ratchet, F. The gear E at its center is pivoted to the middle of the rear portion, *p*, of the median arm G of the bracket, such arm being arranged with the arms C C in manner as shown.

To engage with the sectoral ratchet F is a lever-pawl, H, which, fulcrumed to the median arm, is pressed into contact with the teeth of the ratchet by a spring, I, fixed to the arm. A rod, *a*, jointed to the upper arm of the pawl, extends forward through the said median arm to its front end and terminates in a head or knob, *b*. At its front end the median arm is provided with a handle, *c*, projecting downward from it in manner as shown.

An auxiliary arm, K, is pivoted to the median arm, so as to be capable of being turned around thereon in a circle. The arm K, at its outer end, supports a platform or table, L, and such arm may also have one or more arms, M,

applied to it, each being suitably formed to sustain a tumbler or other article.

From the above it will be seen that by a person taking hold of the handle and applying his thumb to the knob *b* and pressing the latter inward the pawl will be forced out of engagement with the sectoral ratchet, so as to enable him to either raise the median arm to a higher or depress it to a lower position, as occasion may require, the arms C C moving upward or downward simultaneously with the median arm. The median arm having been brought to the required altitude and the knob relieved from pressure, the pawl will by its spring be forced into engagement with the sectoral ratchet, and with such the gear and toothed sectors will maintain the median arm and the arms C C in their respective positions.

I do not claim the combination of a toothed segment and a rod, spring, and handle with a swivel and three arms, all being arranged and applied as represented in the United States Patent No. 213,775.

By having the pivotal gear E and the two sectors D D adapted to and arranged with the three arms G and C C as set forth, and by having to the gear the toothed sector F, arranged with it as shown, and having a very much larger radius than either of the sectors D, I am able to attain more and finer variations of the altitude of the arm G than would be the case were the pawl to be adapted to engage directly with one of the sectors D.

I claim as my invention as follows, viz:

1. The pawl H, sectoral ratchet F, and the gears E, D, and D, arranged and combined as set forth, with the three arms G, C, and C and the swivel A, arranged with and applied to each other as explained.

2. The combination of the radial arm K, jointed to the arm G, with the three arms G, C, and C and the swivel A, and with the gears, sectoral ratchet, and its pawl, arranged with and applied to the arms G, C, and C as represented.

3. The combination of the arms M K G C C and toothed sectors D D, gear E, ratchet F, and pawl H, arranged and applied substantially as set forth.

HERVEY C. MERRILL.

Witnesses:

R. H. EDDY,
E. B. PRATT.