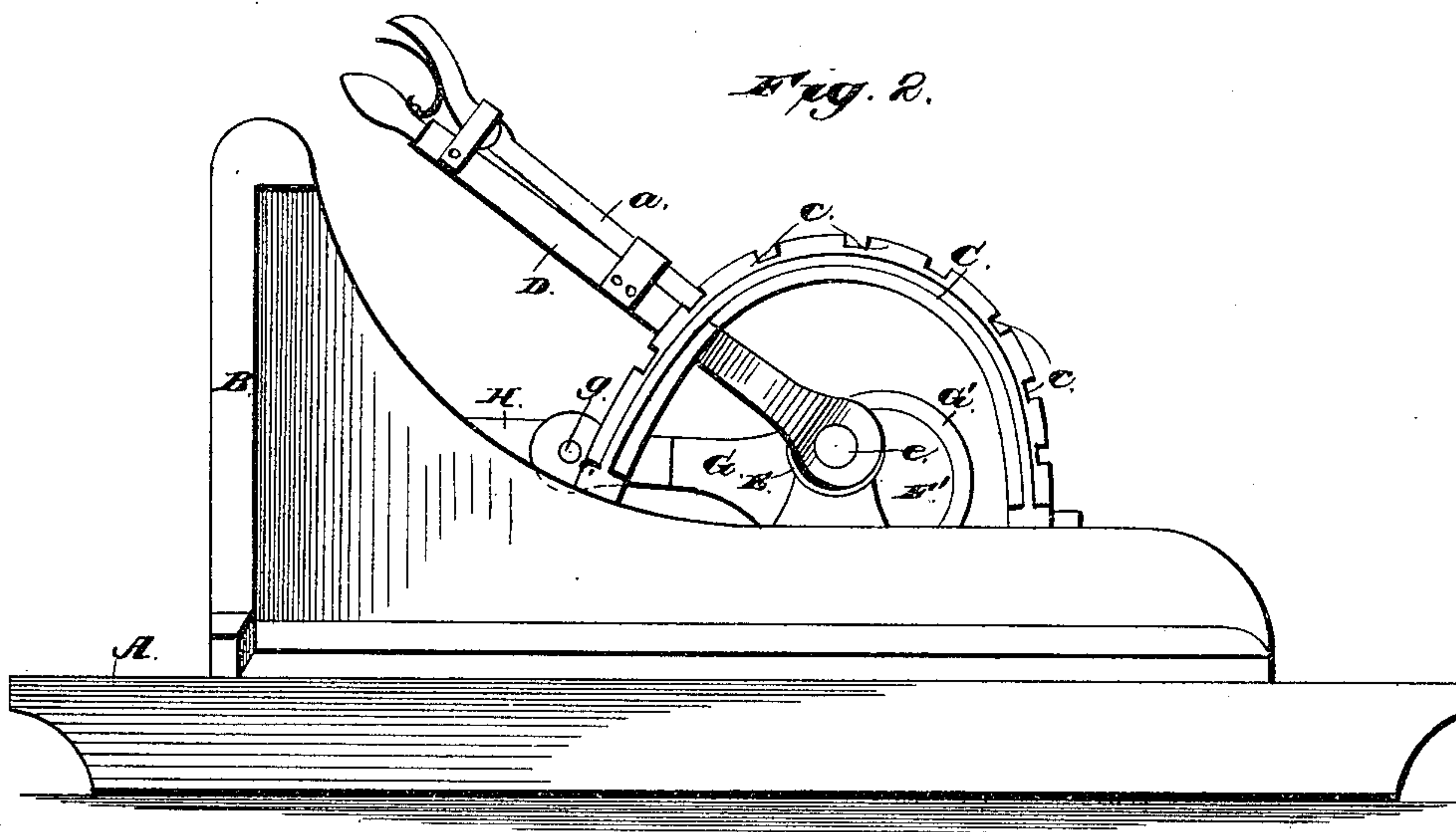
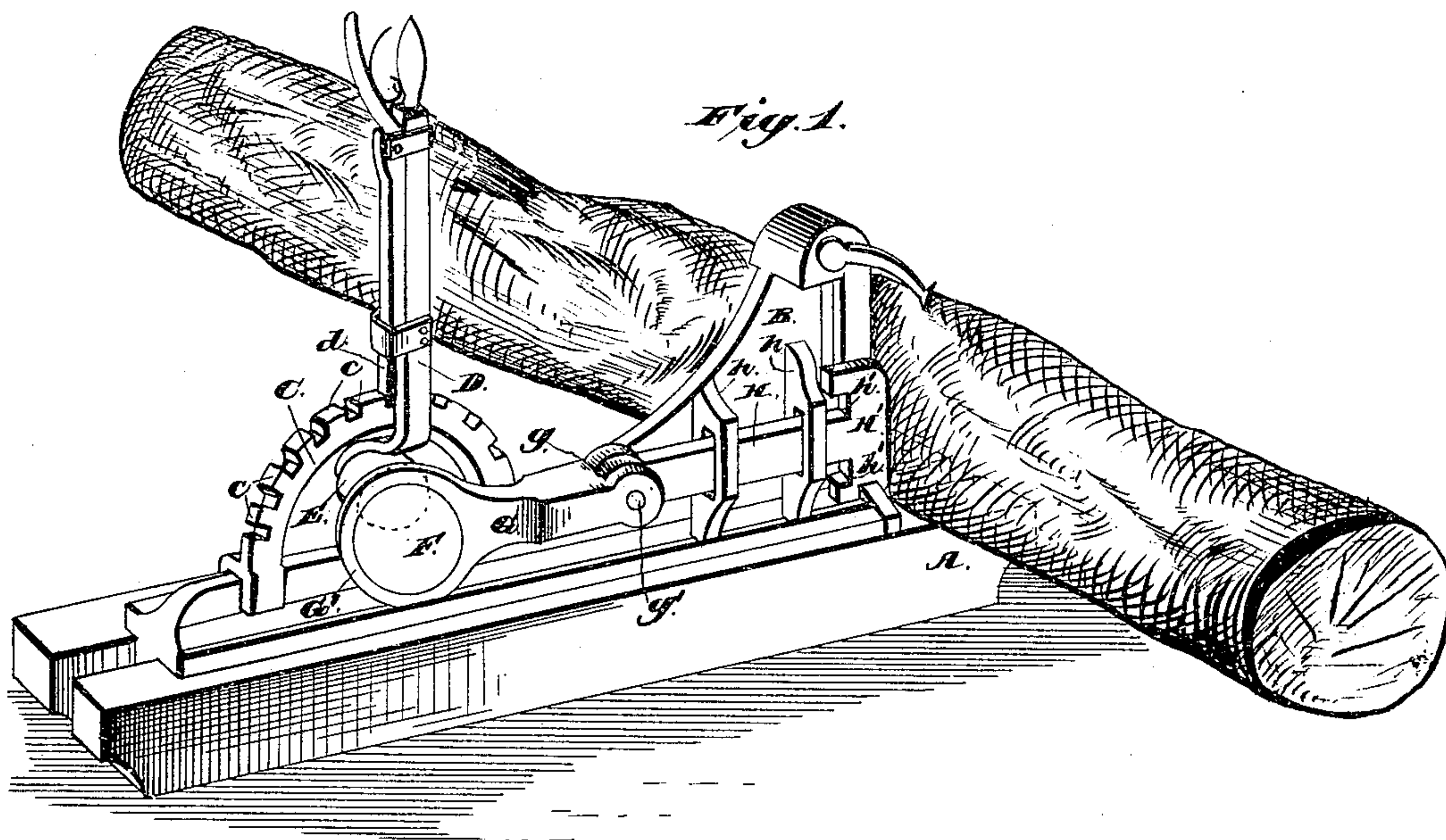


(No Model.)

H. W. ROBERTS.
SAW MILL ATTACHMENT.

No. 350,842.

Patented Oct. 12, 1886.



Witnesses:

C. S. Hyer.
Edward L. Mills.

Inventor:
Henry W. Roberts.

By Drummond
Atty.

UNITED STATES PATENT OFFICE.

HENRY W. ROBERTS, OF CHEBOYGAN, MICHIGAN.

SAW-MILL ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 350,842, dated October 12, 1886.

Application filed April 28, 1886. Serial No. 200,474. (No model.)

To all whom it may concern:

Be it known that I, HENRY W. ROBERTS, a citizen of the United States, residing at Cheboygan, in the county of Cheboygan and State of Michigan, have invented certain new and useful Improvements in Saw-Mill Attachments; 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.

My invention relates to a log-adjusting device for saw-mills; and it consists in the construction and arrangement of the parts, which will be more fully hereinafter described, and pointed out in the claims.

The object of my invention is to provide a sliding adjustment in connection with the knee of a head-block which is operated by a lever, and which is adapted to place crooked logs in such a position that straight unblemished boards may be cut therefrom without any adjustment of the knees after they have once been adjusted. I attain this object by the mechanism illustrated in the accompanying drawings, wherein like letters of reference indicate similar parts in the several views, and in which—

Figure 1 is a perspective view of my improved saw attachment. Fig. 2 is a side elevation of the opposite side shown in Fig. 1.

A indicates the head-block, which is operated in feeding by the usual means.

B indicates the knee, which is adjusted by a suitable screw-rod and hand-wheel and by levers. (Not shown.)

On the rear portion of the knee B a sector, C, is mounted, having teeth *c* therein, which are engaged by the end of a spring-actuated short lever, *d*, pivoted to the long lever D. The lower end of the said long lever D is bent so as to pass under the sector C, and runs to one side of a bracket-bearing, E. Where it engages with the rear side of the bracket-bearing E it is enlarged and circular in form, and is provided with a recess which receives the end of the wrist-pin *e*. This wrist-pin *e* engages with an eccentric, F, around which a ring, G', is mounted, which is formed on one end of part G of a jointed bar. The opposite end of this bar G is bifurcated, as at *g*, with

suitable apertures drilled in the two parts, forming the bifurcation. The forward portion of the bar H is slightly enlarged, and also provided with an aperture at the end, which engages with the bifurcated portion *g* of the bar G. These two parts are fitted into each other and a pivot, *g'*, passed through the apertures formed therein, thus making a hinged joint. The portion H of the bar is supported by and has a sliding motion in brackets *h h*, formed integral with or secured to the knee B. On the forward part of the portion *h* of the bar a head-piece, H', is provided, which is a part of this portion of the bar. This head-piece extends above and below the main portion of the bar, and has two recesses, *h' h'*, cut therein, which fit over the forward supporting-bracket, *h*, allowing the said head-piece to be moved backward and out of the way when not in use. When this head-piece is moved back as far as the construction of the device will permit, its outer edge or face is flush with the face of the knee B, and forms no projection which would deteriorate in any way from the free use of the said knee. One end of a log which may be bent or irregular in its longitudinal contour is placed on the head-block A, and the lever D forced back upon the sector C, engaging therewith, thereby throwing the head-piece H' out through the medium of the jointed bar. The head-piece H' is slid outward against the log and presses against the same, throwing it out also until it is in the true line of the cut of the saw, or in such a position that the irregular portion of the said log is adjusted so as to turn it down sufficiently that a slab of predetermined and regular thickness may more readily be cut therefrom without any unnecessary waste. The lever D is operated to throw the head-piece H' outwardly, and consequently the log, so long as any irregularity may be left in the same. It will be understood that the logs are held by the usual form of dogs, and also that a like device can be as readily applied to the tail-block and operated in the same manner. Either end of the log may be adjusted to avoid large butts with hollows or rots on the ends, as well as for sawing irregular logs. By the use of my device no adjustment of the log is required by the insertion of pieces of wood between the log and the head-block. The teeth *c* of the

sector C can be so arranged that the thickness of the cut slab can be readily determined with certainty by the adjustment of the lever D therewith, which in turn operates the head-piece H'.

As illustrated, the parts of the device are shown as formed integral with the knee; but it is obvious that they may be constructed separate and apart therefrom and suitably secured thereto.

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

1. In an irregular log-adjusting device, the combination, with the knee, of an eccentric-ally-operated jointed bar having a head-piece formed therewith, said lever sliding in supporting-brackets, a hand-lever engaging with an adjusting sector and with the wrist-pin of the eccentric, operating said jointed bar, and

the bracket-bearing supporting the said wrist-pin, substantially as described.

2. In an irregular log-adjusting device, the combination, with the knee B, of a jointed bar consisting of the two parts G and H, the eccentric F, to which one end of the part G is secured, the head-piece H' on the forward end of the portion H of said lever, a lever, D, engaging with an adjusting toothed sector, C, and having its lower end secured to the wrist-pin of said eccentric F, and means of supporting the several parts, substantially as described.

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

HENRY W. ROBERTS.

Witnesses:

E. Z. PERKINS,
O. F. HEYDEN.