

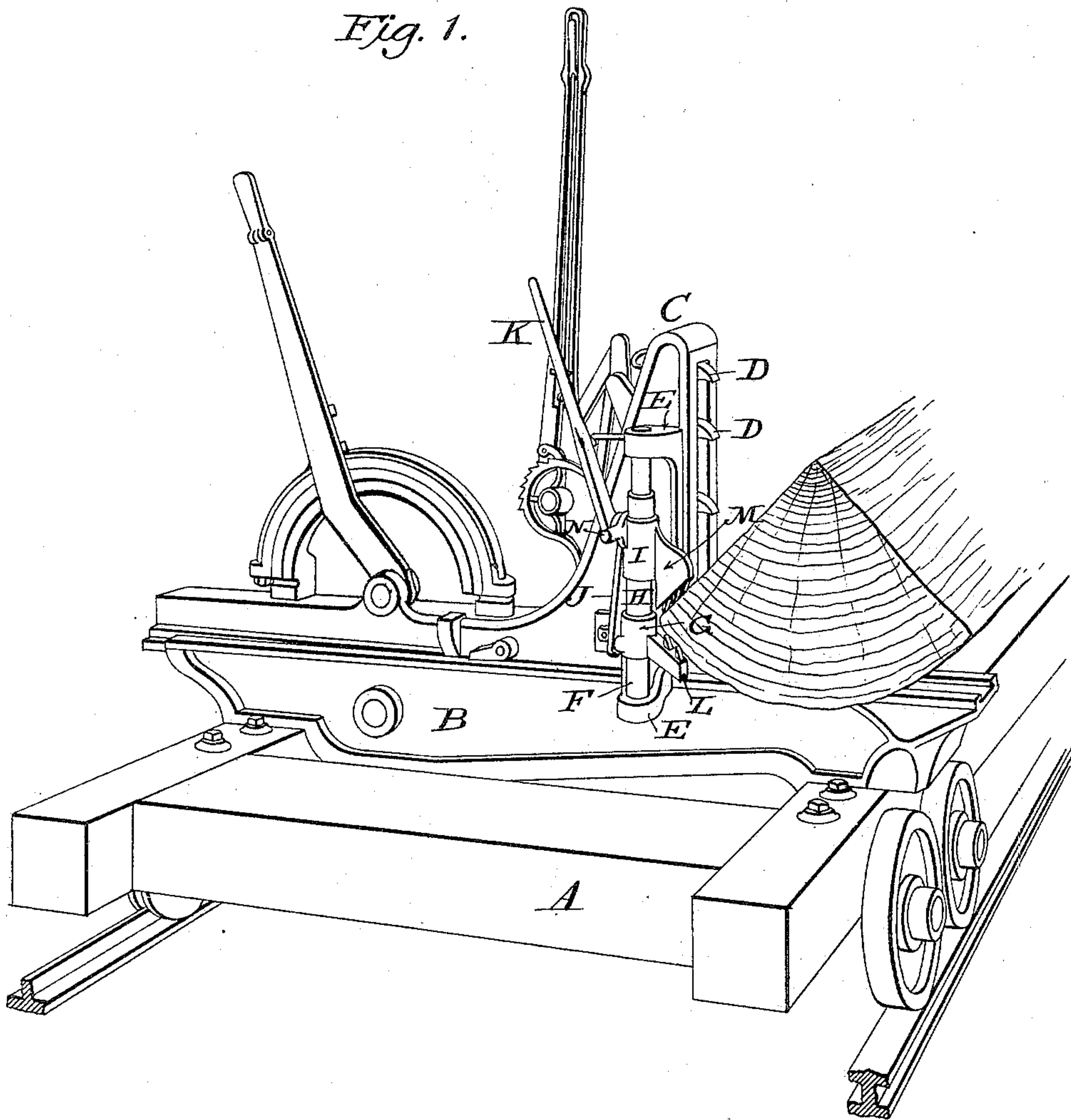
(No Model.)

2 Sheets—Sheet 1.

G. M. HINKLEY.
SAW MILL DOG.

No. 411,195.

Patented Sept. 17, 1889.



Witnesses:

James F. Duhamel
Horace A. Dodge.

Inventor:

George M. Hinkley,
by Dodge & Sons,
Attys.

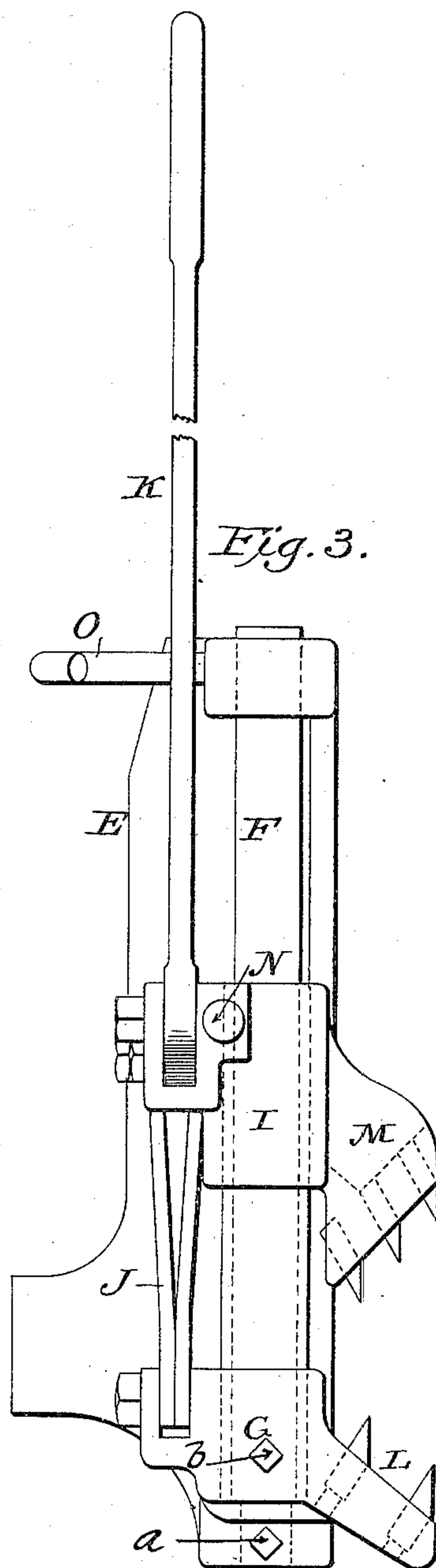
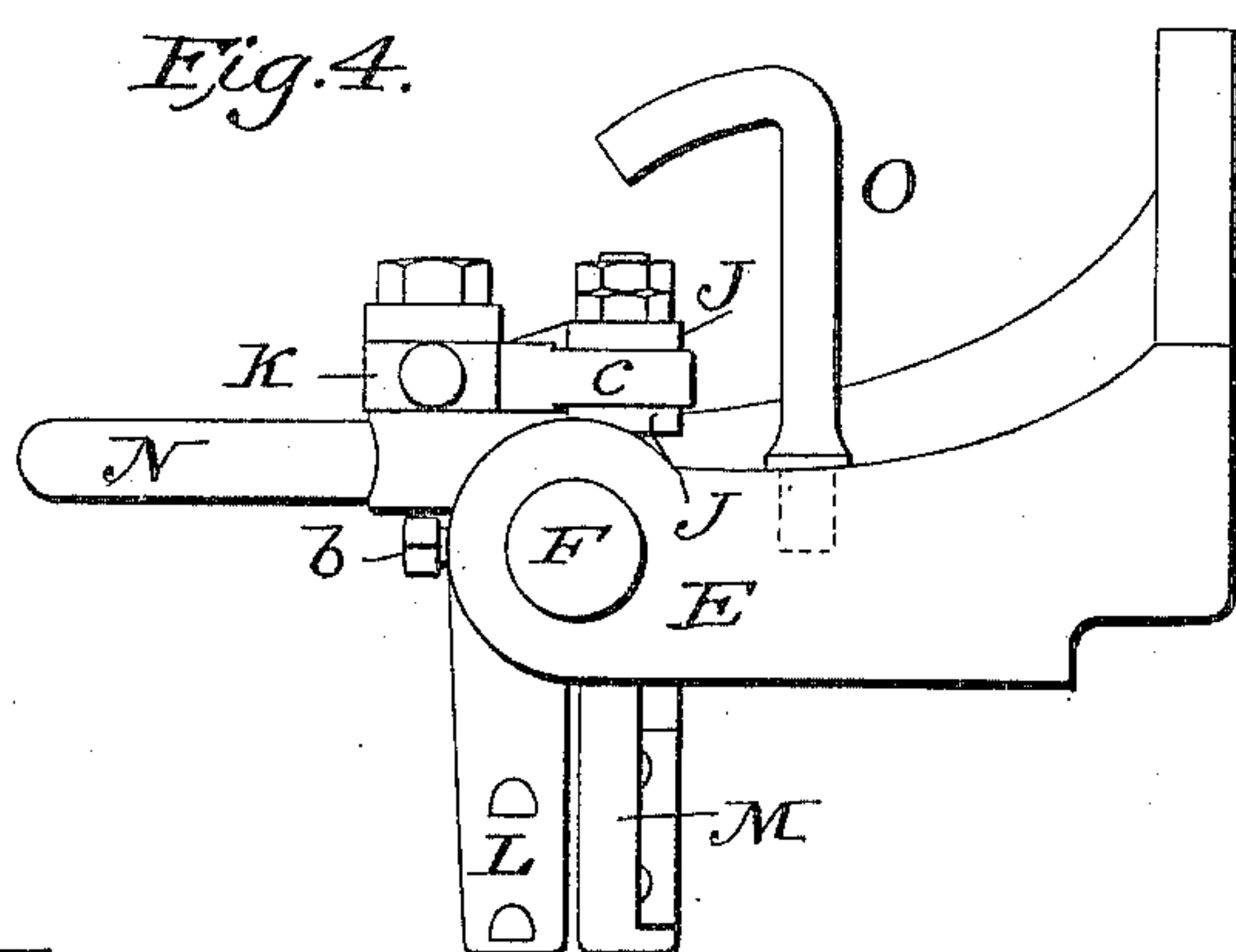
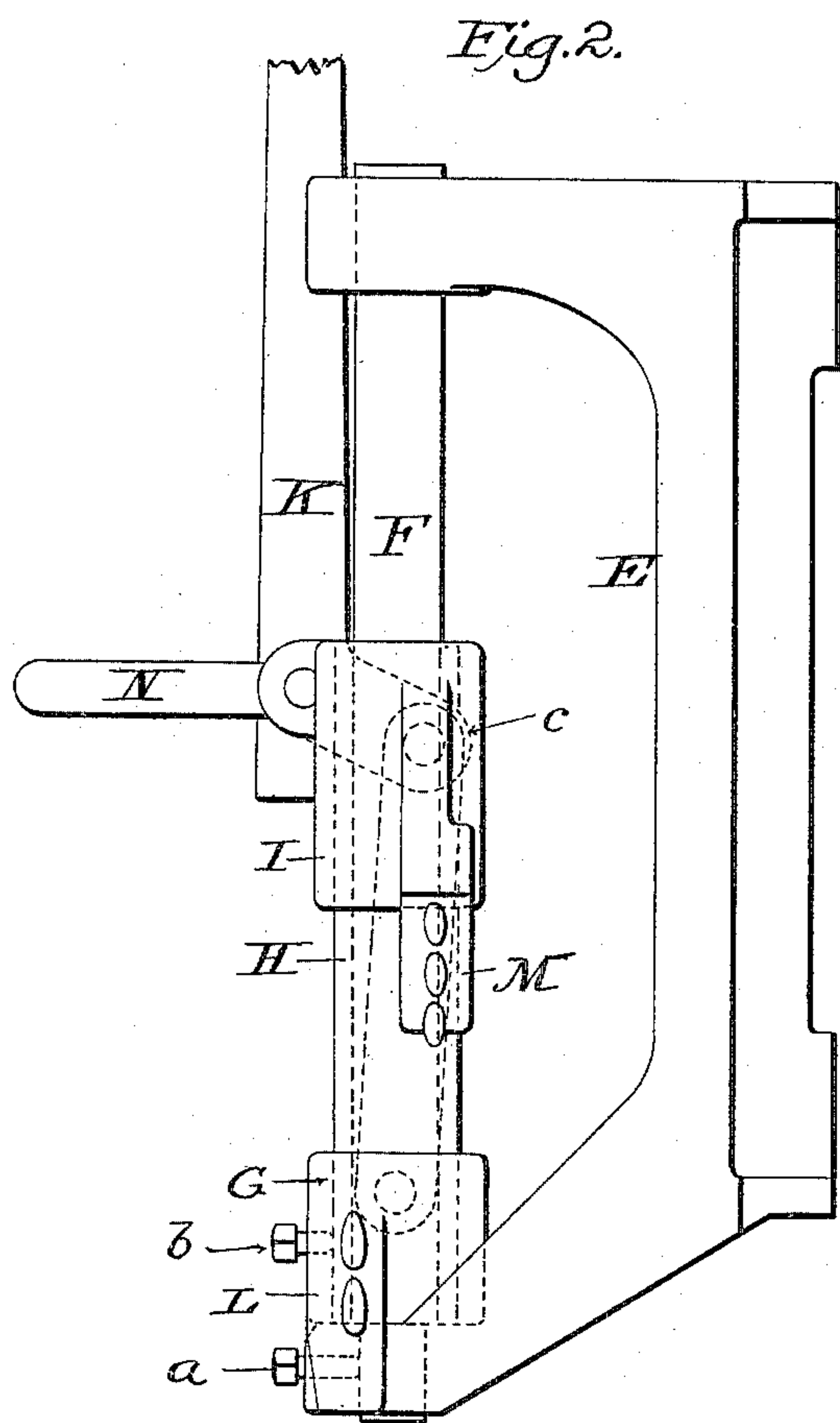
(No Model.)

2 Sheets—Sheet 2.

G. M. HINKLEY.
SAW MILL DOG.

No. 411,195.

Patented Sept. 17, 1889.



Witnesses:

James S. Duhamel
Horace A. Dodge,

Inventor:

George M. Hinkley,
by Dodge & Sons,
Attys.

UNITED STATES PATENT OFFICE.

GEORGE M. HINKLEY, OF MILWAUKEE, WISCONSIN, ASSIGNOR OF ONE-HALF
TO E. P. ALLIS & COMPANY, OF SAME PLACE.

SAW-MILL DOG.

SPECIFICATION forming part of Letters Patent No. 411,195, dated September 17, 1889.

Application filed May 16, 1889. Serial No. 311,059. (No model.)

To all whom it may concern:

Be it known that I, GEORGE M. HINKLEY, a citizen of the United States, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Saw-Mill Dogs, of which the following is a specification.

In sawing "quartered" logs difficulty is experienced in dogging the log, as the faces upon which the teeth of the dogs act are inclined, and for the further reason that when the log is sawed to the point in its curved surface, which rests upon the head-block, provision must be made for the lowering of the log as a whole and a corresponding movement of the dogs, and this without any appreciable change in position of the vertical face of the log.

This idea of the dogs lowering with the timber is the principal feature of the present invention, which latter, however, consists of various other features, hereinafter set forth and claimed.

In the drawings, Figure 1 is a perspective view of a portion of a saw-mill carriage provided with my improved dog; Fig. 2, a side view of the dog and attendant parts disconnected from the knee; Fig. 3, a front face view, and Fig. 4 a top plan view.

A indicates the carriage, B the head-block, and C the knee mounted and movable upon the head-block, all of which parts may be of the ordinary construction. The knee will be provided with dogs D, projecting from its front face, as usual. Bolted or otherwise secured to the side face of the knee is a plate or bracket E, to which is secured an upright cylindrical rod or stem F, said stem being held in place by means of a set-screw *a* or in any equivalent manner. Mounted upon the rod F is a hub G, provided with a tubular extension or sleeve H, which may be made integral with the hub or secured thereto by means of a set-screw *b* or in any other equivalent manner. Mounted and sliding freely upon the sleeve H is a hub I, which is connected with the hub G by means of a link or links J and a hand-lever K, the said hand-lever being journaled or pivoted to hub I, and having a short arm *c*, which is connected with the links J, pivotally secured to hub G.

This hub G is provided with a laterally-projecting toothed arm or jaw L, while the upper hub I is provided with a corresponding jaw M, the opposing faces of the jaws being inclined relatively to each other, as shown in Figs. 1, 2, and 3. The hub of jaw M is provided with a fixed laterally-projecting handle N by means of which the dog is raised to bring the opening between the jaws into proper position to receive the edge of the stock.

When the quartered log is placed in position for sawing on the head-block, the dogs are raised by the handle N, as just stated, and the jaws are turned horizontally upon the rod F into such position that the upper jaw M will rest upon the log. The lever K is then forced downward, raising the lower jaw L until its teeth come in contact with the timber, and continuing the pressure upon the lever forces the teeth into the timber equally from both sides, thereby holding the log firmly in position for sawing. After the timber has been sawed to the point in its curved surface upon which its weight rests on the block, as each successive board is removed the jaws slide down upon the rod sufficiently to permit the remaining portion of the timber to rest upon the block, but firmly holding it in position for the next cut. When not in use, the jaws are swung or turned upon the rod or stem F a quarter of a circle, so as to stand parallel with the front face of the knee, and when thus swung out of the way the lower hub will rest on the lower arm of the bracket E.

In order to hold the hand-lever K up out of the way when the quartered-log dogs are not in use, I provide the plate or bracket E with a hook or catch O, as shown in Figs. 1, 3, and 4.

It is obvious that, instead of having the rod or stem F fixed in position and the hubs turning thereon, the said rod may turn with the hubs, and it is also apparent that the sleeve or extension H may be omitted and both of the hubs mounted directly upon the rod or stem; but the construction shown is preferred.

It will be noticed that the presence of the

quartered-log dogs does not in any way interfere with the use of the common dogs D when it is desired to do ordinary sawing.

The form of the bracket E may obviously be varied considerably without departing from the spirit of my invention, the construction shown in the drawings being the preferred means of securing the rod or stem to the knee.

For convenience I have referred to the hub and the jaw as being separate and independent parts; but in practice it will be found advisable to make them of a single piece of steel.

The handle N will advisably, though not necessarily, be cast integral with the upper hub, while the hook or catch O for the hand-lever will advisably be made separate from and screwed into the upper arm of the bracket.

I do not wish to be understood as limiting myself to any particular form of carriage, head-block, or knee, nor to a hand-lever for operating the dogs D, for it is obvious, so far as the latter feature is concerned, that the dogs may be operated in any other manner.

Having thus described my invention, what I claim is—

1. In combination with a head-block or log-support, a knee, dogs mounted upon the knee and free to slide vertically relatively thereto, and an operating-lever for the dogs adapted to move therewith as the said dogs rise and fall with the timber.

2. In combination with a head-block or log-support, a knee and dogs mounted upon the knee and free to slide vertically and also to

swing laterally with reference to their support, and a lever for operating the dogs, the lever and dogs being adapted to be swung out of the way, as shown.

3. In combination with a head-block or log-support, a knee and dogs mounted therein and free to slide vertically relatively thereto, whereby the dogs are permitted to adjust themselves to the lowering of the timber.

4. In combination with a head-block or log-support, a knee, a rod or stem secured thereto, a jaw L, provided with a tubular sleeve H, a jaw M, mounted upon the sleeve, a lever journaled in the jaw L, and a link connecting the lever with the jaw M.

5. In combination with a head-block or log-support, a knee, a rod or stem secured thereto, a jaw L, provided with a tubular sleeve H, a jaw M, mounted upon the sleeve, a lever journaled in the jaw L, a link connecting the lever with jaw M, and a stem or handle N, secured to jaw L.

6. The combination, with a saw-mill carriage, of a head-block or log-support, a knee mounted on the head-block, jaws or dogs applied to the knee in such manner as to rise and fall together, but capable of independent movement, substantially as described, and a lever connected with the jaws for causing this independent clamping movement.

In witness whereof I hereunto set my hand in the presence of two witnesses.

GEORGE M. HINKLEY.

Witnesses:

WM. W. ALLIS,
THEO. F. WAMBOLD.