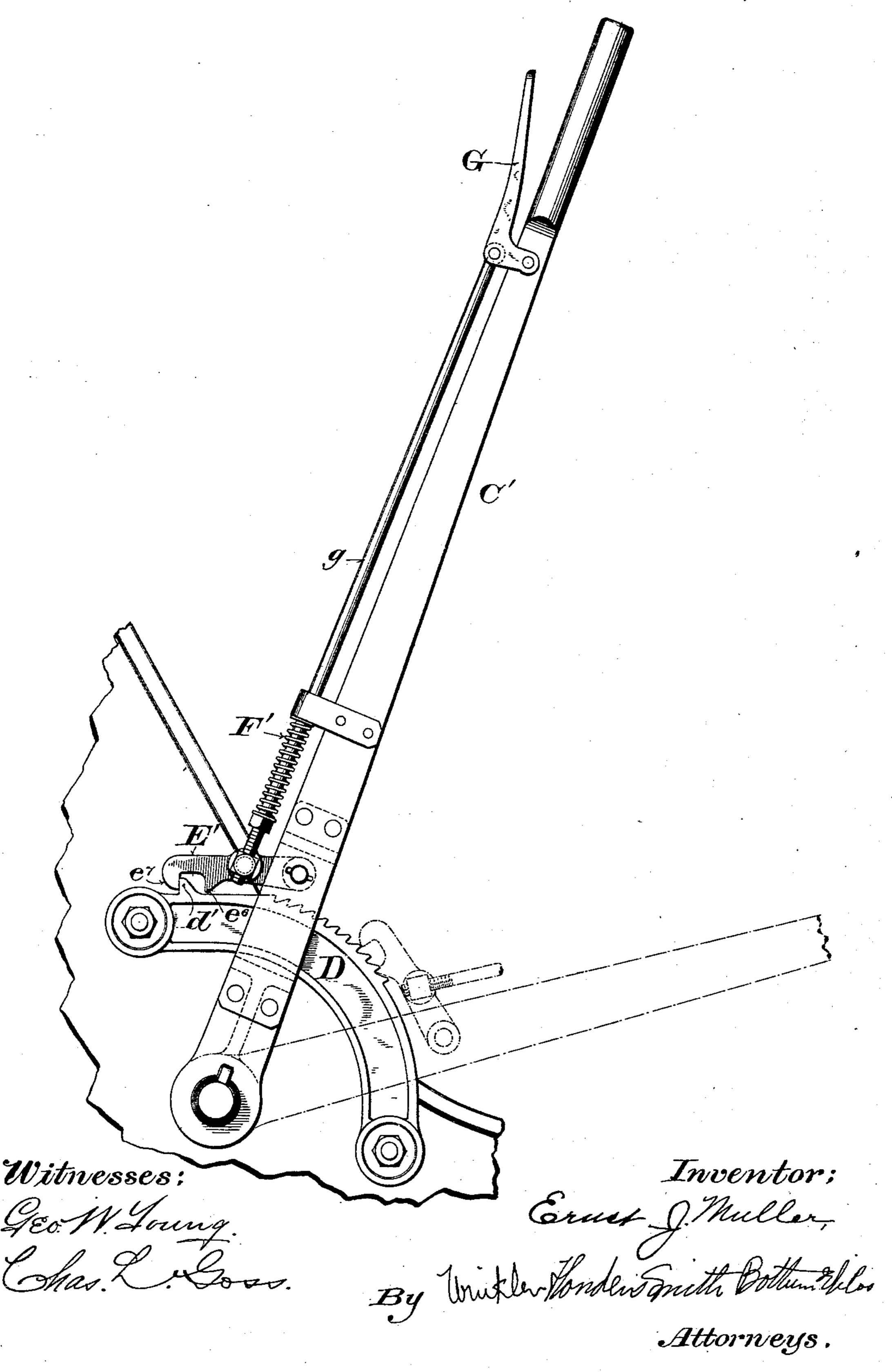
(No Model.)

## E. J. MULLER. LATCH LEVER.

No. 570,674.

Patented Nov. 3, 1896.



## United States Patent Office.

ERNST J. MULLER, OF BUTTE, MONTANA.

## LATCH-LEVER.

SPECIFICATION forming part of Letters Patent No. 570,674, dated November 3, 1896.

Application filed November 6, 1893. Serial No. 490,083. (No model.)

To all whom it may concern:

Be it known that I, ERNST J. MULLER, of Butte, in the county of Silver Bow and State of Montana, have invented certain new and 5 useful Improvements in Latch-Levers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it pertains to make and use the same, to reference being had to the accompanying drawing, and to the letters of reference marked thereon, which forms a part of this specification.

The main object of my invention is to sim-15 plify and improve the construction and operation of latch-levers; and it consists, essentially, of certain peculiarities of construction and arrangement hereinafter particularly described, and pointed out in the claims.

In the accompanying drawing like letters

designate the same parts.

The drawing illustrates a side elevation of my improved lever and its connections as adapted and applied to the knee or standard 25 of a sawmill-carriage for the operation of the dogs.

Although my improvements are applicable to levers employed for many other purposes, for convenience of illustration I have shown 30 and will describe them as applied to a dogging-lever in connection with a head-block

and knee of a sawmill-carriage.

Referring to the drawing, C' is the handlebar of the lever, D' a notched quadrant or 35 arc, and E' a latch pivoted to the handle-bar C' and provided with a tooth  $e^6$ , beveled on one side to correspond with the notches in said quadrant, over which it loosely drags when the handle-bar is advanced or swung to 40 the right. This latch is not operated automatically by an independent initial movement of the handle-bar, but by an elbowshaped grip-lever G, pivoted to the handlebar C' and connected with said latch by a rod 45 g. It is held in engagement with the quadrant by a spring F' bearing at one end against a keeper or guide f, through which said rod passes, and at the other end against an adjusting-nut on said rod. This lever is auto-50 matically locked when moved into its home position by a hook  $e^7$  on said latch passing over the beveled or inclined side of and engaging with a tooth d' on said quadrant and |

constituting a home-catch. Said hook is disengaged from said tooth d' by means of the 55

grip-lever G.

It will be observed that in the lever described a single spring not only performs the ordinary function of holding the latch in engagement with the quadrant, but also serves 60 with the latch to positively lock the lever in its home position. In dog-operating levers this latter function is ordinarily performed by a separate spring or device.

Various changes in the details of construc- 65 tion and arrangement of parts in the adaptation of my improvements to different uses may be made within the intended scope and

spirit of my invention.

I claim—

1. In a latch-lever, the combination with a quadrant having notches or teeth beveled on one side, and a home-catch, of a handle-bar fulcrumed concentrically with said quadrant, a latch pivoted to said handle-bar and pro- 75 vided with a tooth to ride freely over said teeth when moved away from said home-catch and with means to positively engage said catch and hold the lever when it is in its home position, a spring arranged to hold said 80 latch in engagement with the ordinary notches in said quadrant and in positive engagement with said home-catch, and means to operate the latch, substantially as and for the purposes set forth.

2. In a latch-lever, the combination with a quadrant having inclined notches and provided at one end with a tooth constituting a home-catch, of a handle-bar fulcrumed concentrically with said quadrant, a latch piv- 90 oted to said handle-bar provided with a beveled tooth to slide over the notches of the quadrant and having a hook to engage the home-catch tooth of the quadrant, an operating-rod connected to said latch, and a spring 95 for holding the latch in engagement with the quadrant and positively locking the lever in its home position, substantially as and for

the purposes described.

In testimony that I claim the foregoing as 100 my own I affix my signature in presence of two witnesses.

ERNST J. MULLER.

Witnesses:

CHAS. L. Goss, E. H. BOTTUM.