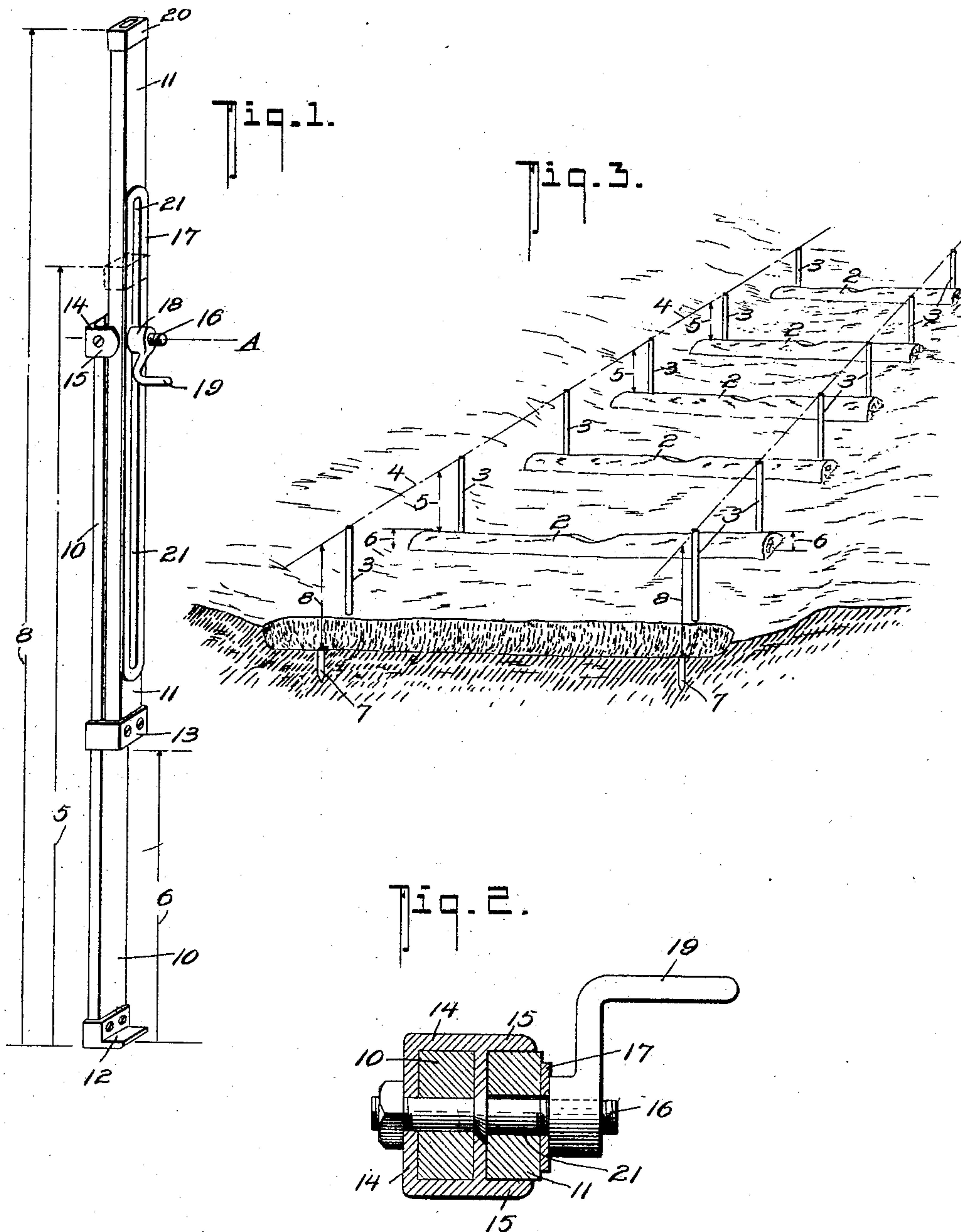


No. 839,932.

PATENTED JAN. 1, 1907.

F. HUGHES.  
SKID SETTING GAGE.  
APPLICATION FILED JUNE 27, 1906.



WITNESSES:  
*E. C. Gibson.*  
*John T. Schrott.*

INVENTOR  
*Felix Hughes.*  
BY  
*Fred G. Dysterich*  
ATTORNEY



# UNITED STATES PATENT OFFICE.

FELIX HUGHES, OF VANCOUVER, BRITISH COLUMBIA, CANADA.

## SKID-SETTING GAGE.

No. 839,932.

Specification of Letters Patent.

Patented Jan. 1, 1907.

Application filed June 27, 1906. Serial No. 323,727.

*To all whom it may concern:*

Be it known that I, FELIX HUGHES, a citizen of the Dominion of Canada, residing at the city of Vancouver, in the Province of British Columbia, Canada, have invented a new and useful Skid-Setting Gage, of which the following is a specification.

This invention relates to a gage whereby the skid-timbers of a log-skidway may be set in the bed of the track so that the tops of the skids will form an even path for the logs and will be bedded on unbroken ground.

The present practice of laying a skidway is to merely bed the skids in the cleared and roughly-graded track, judging by the eye that the upper sides of the skids are in the required alinement. This practice is unscientific and results in unsatisfactory work, as it frequently happens that after the skids are embedded the upper sides are not correct in their alinement and some may require to be lifted and the trenches in which they are embedded deepened, while in others the trenches require to be filled in to lift the skids up. In either case this necessitates a considerable expenditure of time and labor, with the further disadvantage that where the skids have been lifted they are of necessity rebedded upon loose ground, and when a line of heavy logs passes over them they will work down and out of alinement.

My invention is designed to insure that the bedding of the skids is accurate and positive by first laying out a double line of stakes, one line at each side of the skid-track, over which stakes the eye of the track-layer may aline the contour of the track, and thereafter by the use of the gage, which is the subject of this application, the proper depth of the trench in which each skid is to be embedded may be accurately determined, so that the man who is digging the trenches may do so with assurance that the upper side of each skid will be at the correct height to be parallel to the contour of the track as laid out by the stakes, and that each skid will be bedded on unbroken ground.

The particular construction of the gage and the manner of its application and use is fully described in the following specification, reference being made to the drawings which accompany it, in which—

Figure 1 is a perspective view of the gage, showing it partially opened as in its application. Fig. 2 is a section, at A in Fig. 1, to an enlarged scale; and Fig. 3 illustrates

in perspective a portion of a skidway, showing the stakes by which the contour of the track is given and in the foreground a trench dug for the reception of a skid to show how the gage is applied.

In Fig. 3 of the drawings, 2 represents the skids, and 3 the stakes, over the tops of which the contour alinement 4 of the track is determined by the eye of the man who is laying out the track. My gage is designed to furnish the measurement 8 from the contour-line 4 to the bottom of each trench by adding the depth 6 of the skid-timber 2 to the normal depth of the gage, which normal depth corresponds with the distance 5 which the upper sides of the skid-timbers are designed to be below the contour-line 4 over the tops of the stakes 3. The men are thus enabled to dig the ends of the trenches and drive in pegs 7, the tops of which correspond to the set-gage dimension 8. The trench may then be dug evenly between the pegs 7 with confidence that the upper side of the skid when embedded in the trench will be at the correct height to suit the alinement of the track.

The gage consists of a lower member 10 and an upper member 11, preferably of wood, slidable endwise one on another. On the bottom of the lower member 10 is secured a foot-piece 12, outwardly projecting from the face of 10, on which the member 11 is slidable, and on the lower end of 11 is secured a guide member 13, passing round the member 10, so as to be endwise slidable on it. On the upper end of the lower member 10 is secured a mounting 14, having lateral projections 15 to engage the sides of the upper member 11. Secured in the center of this member 14 and projecting from it to pass through an elongated slot 21 in the member 11 is a screw 16, on the outer end of which is threaded as a nut the eye 18 of a crank-handle 19, the face of the slot 21 being provided with a metal facing 17 to protect the face of the rod 11 from injury. The member 11 is thus slidable endwise on the member 10 and may be secured in any desired position of extension by tightening the nut 18 on the screw 16.

The total height 5 from the lower end of 10 to the upper end of 11 when the gage is closed may be any convenient height for the alinement by the eye over the stakes 3, say three feet six inches.

In the use of the device the handle-nut 18 is slackened and the member 11 moved up to



gage the depth dimension 6 of the skid between the foot projection 12 and the lower end of 11. The height of the gage then represents the measurement from the top of the adjacent stake 3 or from the line over the stakes to the bottom of the trench required for that particular skid. The ground is dug out at each end in accordance with measurements so obtained and a peg 7 driven in the bottom. The trench then may be dug and leveled between the two pegs 7 to receive the skid-timber, which will thus be on firm unbroken ground and have its upper side in the correct alinement.

The use of this gage will effect a considerable saving in time and labor, not only because the work can be proceeded with with more confidence, but it will also save the necessity for adjusting the skids where they may happen to be too high or too low, and there is a further advantage in the fact that the skids will always be bedded on unbroken ground.

Having now particularly described my invention and the manner of its application and use, I hereby declare that what I claim as new, and desire to be protected in by Letters Patent, is—

1. In a device of the class described, two members endwise slidable one on the other, a foot-base removably secured to the lower end of one of said members and having a projecting portion, a band removably secured to the adjacent end of the other member and encircling the first member, said second member having an elongated slot, a metal face secured to said second member and having a slot to cooperate with the slot in said second member, a screw secured to the upper end of the first member and projecting through the elongated slot in the second member, and a nut on said screw by which the two members may be secured in any position of endwise extension.

2. In a device of the class described, two members endwise slidable one on the other, one of said members having a foot portion secured thereto, a band secured to the other

member at one end adjacent the foot portion and encircling the first member, said second member having an elongated slot, a mounting held on the upper end of the first member and surrounding the same, said mounting having lateral projections for engaging the sides of the other slidable member, and means projecting through said mounting, said first member and the elongated slot in said second member, for securing the first and second members together in any position of endwise extension.

3. In a device of the class described, two members endwise slidable in relation to one another, an outward projection at the lower end of one of said members forming a foot, the second member having an elongated slot, means carried by the second member and embracing the first member for holding it in position, a mounting carried by the first member and surrounding the same and having projecting portions to engage each side of the second member, said second member having an elongated slot, a screw-bolt passing through said mounting, said first member and the elongated slot in said second member, a nut for securing said screw-bolt to said mounting and to said first member, and a turn-nut secured to said screw-bolt for holding said slidable members together in any position of endwise extension.

4. In a device of the class described; the member 10 having the projection 12 at the lower end and the screw 16 secured in and projecting from the other end, the member 11 slidable on the face of 10 and having the elongated slot 21 through which the screw 16 projects, the band 13 secured to the lower end of 11 and encircling the member 10, and the crank-handle 19 the eye 18 of which is threaded onto the screw 16.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FELIX HUGHES.

Witnesses:

ROWLAND BRITAIN,  
ELLICE WEBBER.