

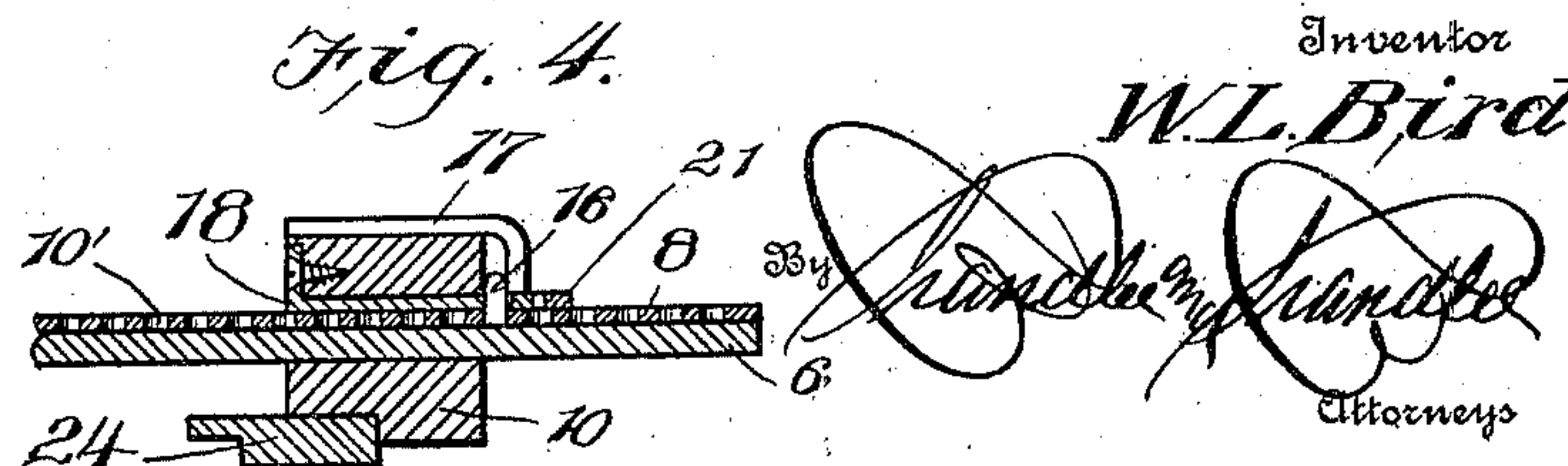
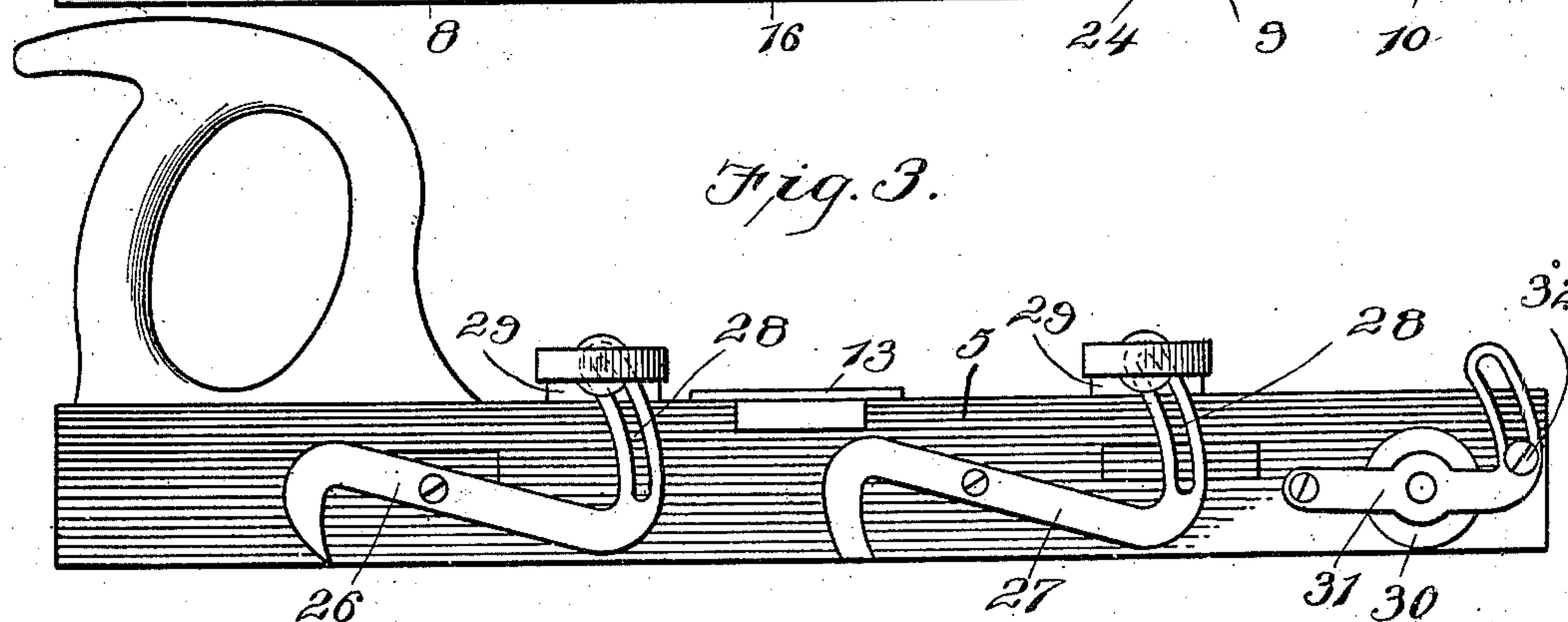
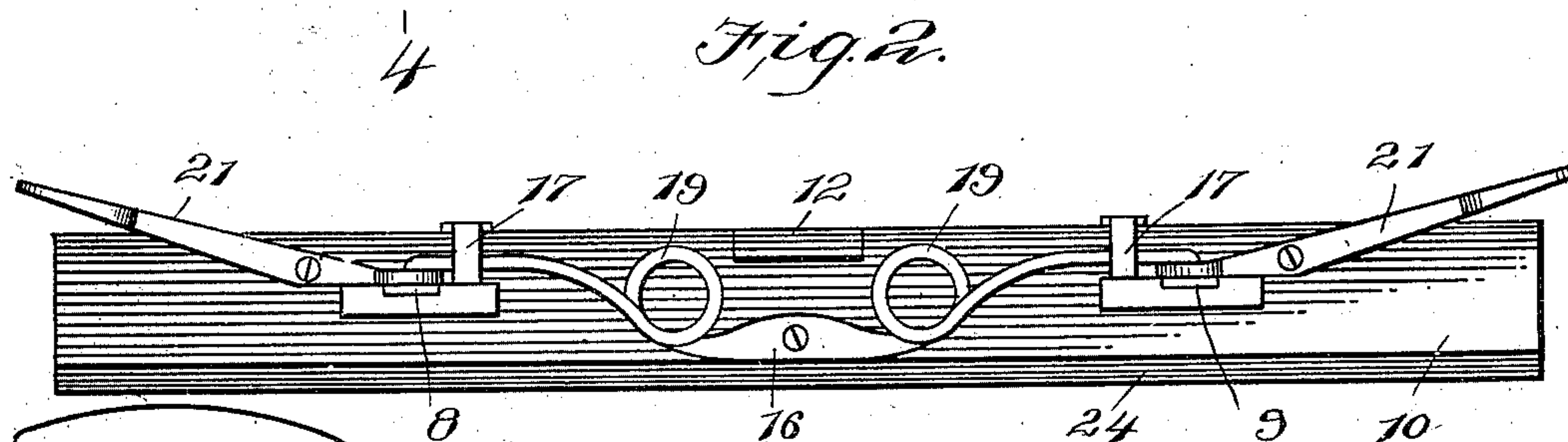
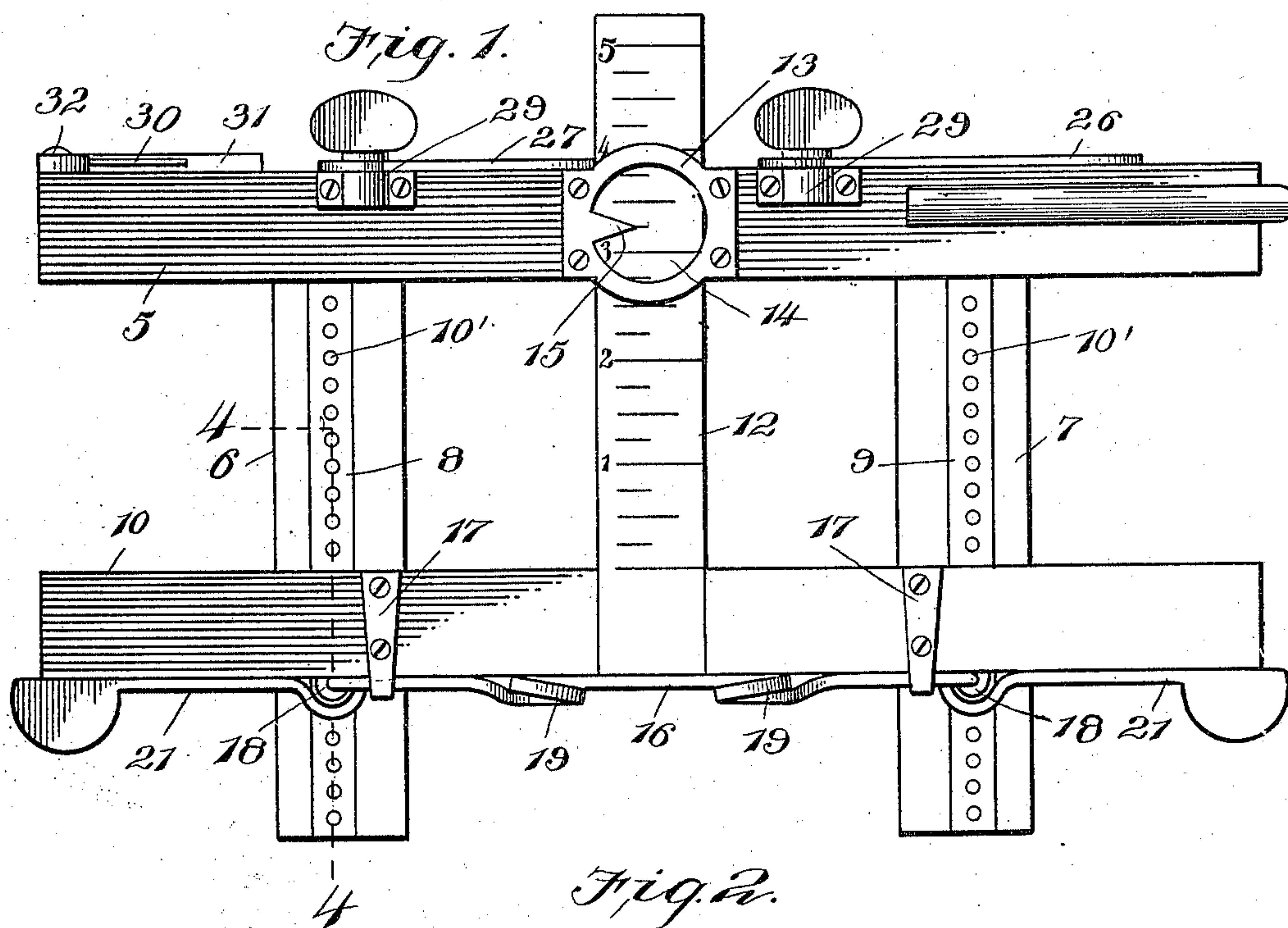
No. 687,913.

Patented Dec. 3, 1901.

W. L. BIRD.  
GAGE.

(Application filed May 3, 1901.)

(No Model.)



Witnesses  
*J. P. Brett*  
*Harry E. Lin & Co.*

Inventor  
*W. L. Bird*  
*W. L. Bird*  
Attorneys



# UNITED STATES PATENT OFFICE.

WALTER L. BIRD, OF BURDETT, WEST VIRGINIA.

## GAGE.

SPECIFICATION forming part of Letters Patent No. 687,913, dated December 3, 1901.

Application filed May 3, 1901. Serial No. 58,599. (No model.)

*To all whom it may concern:*

Be it known that I, WALTER L. BIRD, a citizen of the United States, residing at Burdett, in the county of Putnam, State of West Virginia, have invented certain new and useful Improvements in Gages; 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.

This invention relates to lumber-gages; and it has for its object to provide a construction which may be easily and quickly adjusted to different widths, which will be held positively in its adjusted positions, and wherein the markers may be thrown into operative position interchangeably, while their depth of marking may be varied.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a top plan view of the gage. Fig. 2 is an elevation showing the outer face of the beam 10 and the parts thereon. Fig. 3 is a view similar to Fig. 2 and showing the outer face of the opposite beam. Fig. 4 is a section on line 4 4 of Fig. 1.

Referring now to the drawings, the gage consists of a beam 5, to which are rigidly attached two bars 6 and 7, lying parallel and at right angles to the beam and having metallic plates 8 and 9 set into their upper faces and provided each with a line of perforations 10'. A second beam 10 is provided and has openings therein with which are slidably engaged bars 6 and 7, and in order to determine the distance between the two beams a rod or bar 12 is provided and is attached rigidly to the beam 10 at right angles and engages slidably the recessed face of the beam 5, it being understood that the beams 5 and 10 are to be moved toward and away from each other. A plate 13 is fixed upon the upper face of the beam 5 and across the bar 12, and this plate has a central opening 14, into which projects an index 15, lying transversely of the bar 12. The bar 12 has a scale marked upon its upper face and which coöperates with the index to show the separation of the beams 5 and 10.

To hold the beams 5 and 10 properly spaced, latch-levers are provided and are formed of a single piece of spring metal 16, which is at-

tached to the face of the beam 10, and the extremities of this spring-metal piece are taken under keepers 17, attached to the beam 10, and are then taken downwardly for engagement with the perforations 10' in the plates 8 and 9, set into the faces of the bars 6 and 7 above referred to. Additional keeper-plates 18, Fig. 4, are disposed in the recessed upper walls of the openings in the beam 10, through which the bars 6 and 7 are passed, and the downturned ends of the latches are passed through the perforated ends of these plates 18, which project beyond the face of the beam 10. These plates in addition to the other keepers referred to hold the latches positively against lateral displacement.

The spring-metal piece 16 between its point of attachment and the latches at the ends thereof is bent to form convolute springs 19, and to raise the latches against the tendency of these springs levers 21 are pivoted to the face of the base 10 and have their ends turned laterally and engaged under the latches, so that when the levers are depressed at their outer ends they will raise the latches and the beams may be adjusted.

On the under side of the beam 10 is a shoulder formed by an irregular recess in a plate 24, secured to the beam, and in the use of the gage the beam is disposed to receive in this angular groove or channel one upper edge of the plank or stick to be gaged, the marking being done by markers carried by the beam 5.

Each marker, of which there are two, (shown at 26 and 27,) consists of an S-shaped plate pivotally mounted upon the vertical outer face of the beam 5, and the upwardly-directed end of which is provided with a slot 28, which receives a thumb-screw engaged with a block 29 on the beam 5. When the thumb-screw is loosened, the plate may be moved pivotally to project its opposite end beyond the lower face of the beam. This lower end of one of the gage plates or markers is formed as a knife-edge, so as to make a fine mark, while the end of the other plate is broadened to provide a chisel-edge, which will form a wider groove or mark and which is desirable under some conditions. By adjusting these plates pivotally the depth of the mark may be varied.

A device of this nature possesses more or



less weight, so that there is difficulty in sliding it, owing to the friction between the beams and the material to be gaged, and to lessen this friction a bearing roller or wheel 30 is provided, which is mounted upon a bracket 31, which is pivoted at one end to the face of the beam 5. This bracket or plate has an arcuate outer end portion in which is a similar slot, and through this slot is passed a set-screw 32, which is engaged with the beam and which is adapted to clamp the plate or bracket at different points of its pivotal movement to hold the roller or wheel projected or retracted, as desired. When the roller is projected, it bears upon the material to be gaged and partly supports the apparatus. With this construction it will be seen that the gage may be quickly set to any width within the limits of the bars 6 and 7 and that the beams will be held positively in their adjusted position.

What is claimed is--

1. A gage comprising spaced parallel beams, bars fixed to one of the beams and slidably engaged with the other beam and having perforations, a scale carried by one of the beams and disposed transversely of the other beam, which latter is provided with an index, latches carried by the beams with which the bars are slidably engaged and adapted for engagement with the perforations of the bars, levers engaged with the latches for raising them from the perforations, a stop-shoulder upon one of the bars and a marker carried by the other bar.

2. A gage comprising spaced parallel beams, bars fixed to one of the beams and slidably engaged with the other beam and provided with perforations, a spring-plate attached to the second beam and having downwardly-bent ends for engagement with the perfora-

tions of the bars, levers disposed to raise the ends of the plate from the perforations, and a marker carried by the first bar.

3. A gage comprising spaced beams and a marker carried by one of the beams and including a compound curved plate pivoted to the beam for projection of one of its ends below the beam, the opposite end of the plate being slotted, and a clamping-screw engaged with the slot and with the beam to clamp the plate at different points of its pivotal movement.

4. A gage including spaced beams, bars fixed to one of the beams and slidably engaged with the other beam, said bars having perforations, spring-latches attached to the second beam for engagement with the perforations, keepers for holding the latches against lateral movement and levers pivoted to the second beam and engaged with the latches to raise them from their operative position.

5. A gage including spaced beams, bars fixed to one of the beams and engaged slidably with the other beam and having perforations, a keeper-plate engaged with the second beam above the line of perforations of each bar, a spring-plate mounted upon the second beam and having its ends bent downwardly and engaged with the keeper-plates, and with the perforations of the bars, and levers pivoted to the second beam and engaged with the spring-plate to disengage the ends thereof from the perforations.

In testimony whereof I hereunto sign my name, in the presence of two subscribing witnesses, on the 25th day of March, 1901.

WALTER L. BIRD.

Witnesses:

W. M. CARPENTER,  
A. G. ESCUE.