

J. T. MEYERS.  
 BACK REST FOR TURNING LATHES.  
 APPLICATION FILED NOV. 23, 1907.

898,589.

Patented Sept. 15, 1908.

2 SHEETS—SHEET 1.

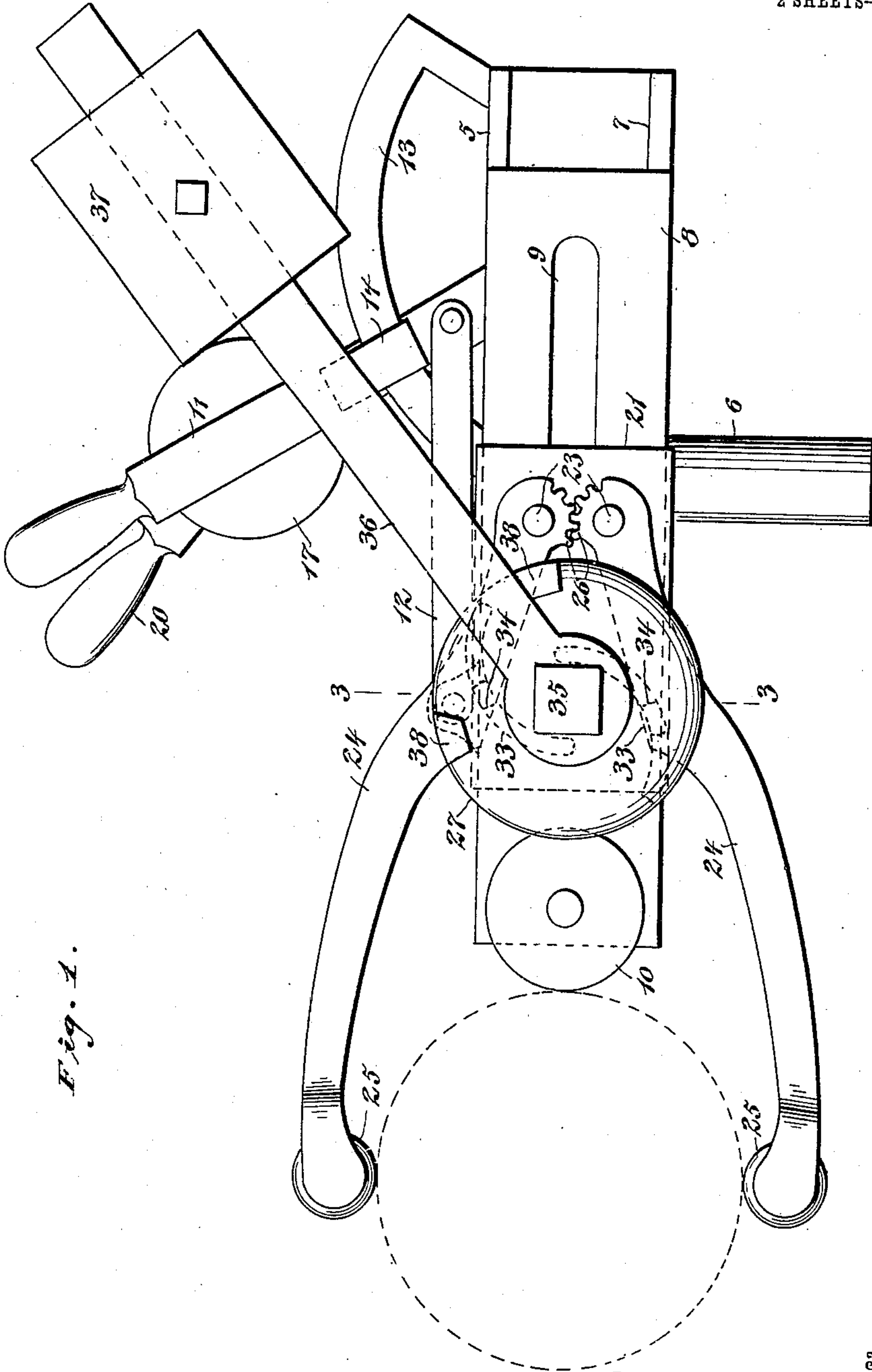


Fig. 1.

Witnesses

Arthur Wesley  
 M. Schmidt

Inventor

John T. Meyers

By

Wm B. Starnes.

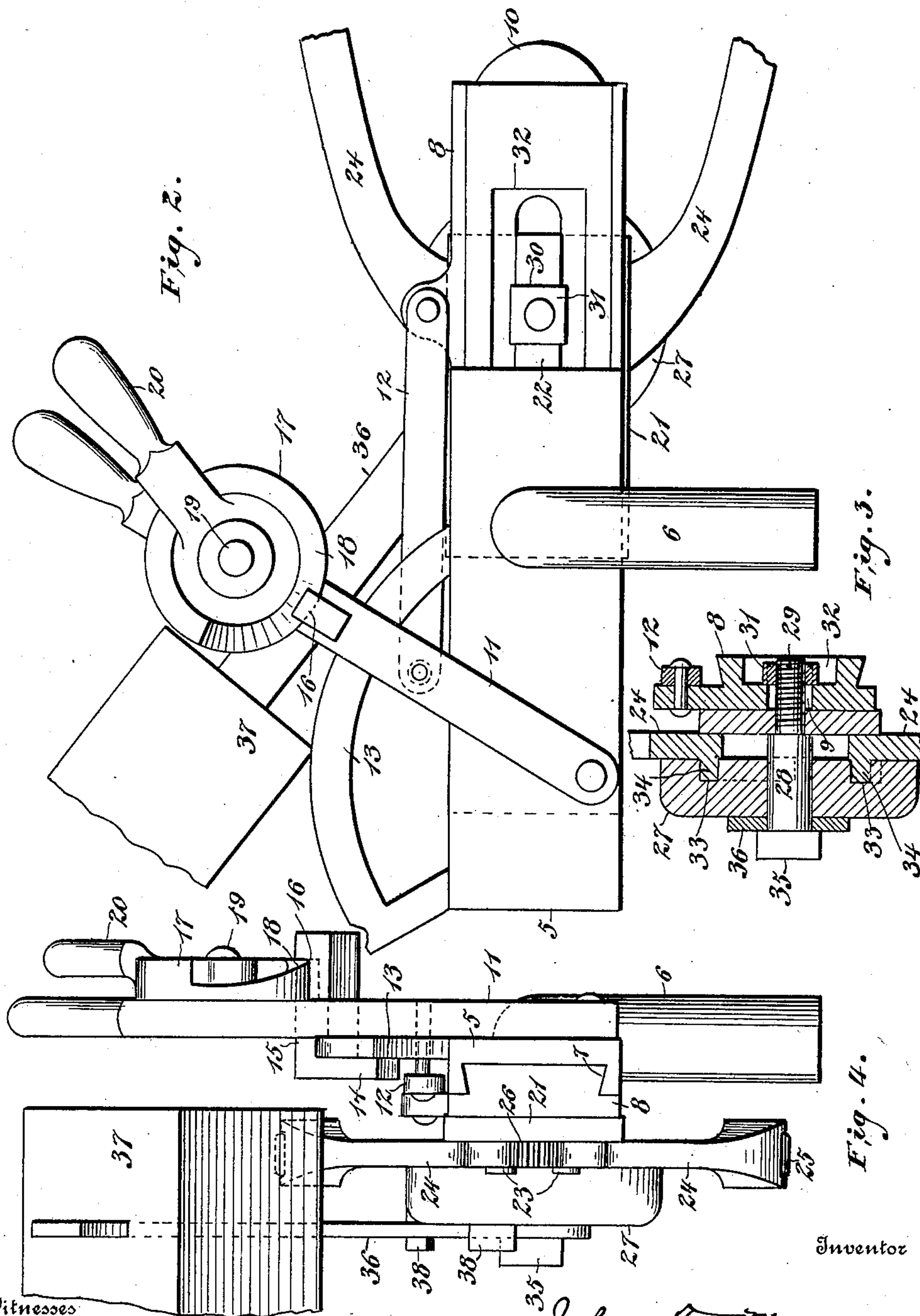
Attorney.

J. T. MEYERS.  
BACK REST FOR TURNING LATHES.  
APPLICATION FILED NOV. 23, 1907.

898,589.

Patented Sept. 15, 1908.

2 SHEETS—SHEET 2.



Witnesses  
Arthur Wesley  
M. A. Schmidt

Inventor  
John T. Meyers.  
By  
Miss B. F. Swander Attorney



# UNITED STATES PATENT OFFICE.

JOHN THEODORE MEYERS, OF DELPHOS, OHIO.

## BACK-REST FOR TURNING-LATHES.

No. 898,589.

Specification of Letters Patent.

Patented Sept. 15, 1908.

Application filed November 23, 1907. Serial No. 403,518.

*To all whom it may concern:*

Be it known that I, JOHN THEODORE MEYERS, citizen of the United States, residing at Delphos, in the county of Allen and State of Ohio, have invented certain new and useful Improvements in Back-Rests for Turning-Lathes, of which the following is a specification.

This invention is a back-rest for wood-turning lathes, and has for its object to provide a back-rest which can be readily adjusted for different sized sticks, and which will bear on the stick at three points with a minimum amount of friction.

In the accompanying drawings, Figures 1 and 2 are elevations of the invention taken from opposite sides. Fig. 3 is a transverse section on the line 3—3 of Fig. 1. Fig. 4 is an end view.

Referring specifically to the drawings, 5 denotes a plate having a depending stem 6 whereby it is mounted on the bed of the lathe. On one side of the plate is a dove-tailed groove 7 in which is mounted a slide 25 comprising a plate 8 suitably shaped on one side to fit in the groove. The slide has a longitudinal slot 9. On one end of the slide is mounted a roller 10 which projects from said end sufficiently to engage the stick or work.

On one side of the plate 5 is fulcrumed a hand-lever 11 which is connected by a link 12 to the plate 8 whereby the latter may be moved back and forth in the groove 7. On the top edge of the plate 5 is a segment 13 which is engageable by a hook 14 on one end of a stem 15 which extends transversely through a hole in the hand-lever 11. At the opposite end of the stem is a groove 16 into which extends the edge of a disk 17 having a cam-face 18. This disk is pivoted at 19 on the hand-lever 11 and has a handle 20. The hook 14 is clamped to the segment 13 by turning the disk 17 on its pivot, whereupon the cam 18, by its engagement with the end of the groove 16, draws the stem 15 through the hole in the lever 11 in the direction to bind the hook against the segment. This locks the hand-lever and holds the plate 8 at adjustment. Upon turning the disk 17 in the opposite direction, the cam releases the hook from the segment and the plate is then free to be slid in or out on the plate 5.

On the face of the plate 8 is slidably mounted a plate 21 having on one side a rib 22 which fits in the slot 9. On the other side

of this plate are studs 23 on which are pivoted jaw-members 24 carrying friction rollers 25 at their outer ends. The inner ends of the jaw-members are formed with cogs 26 which mesh so that the jaws may move together. The plate 21 carries a disk 27 for a purpose to be hereinafter described. This disk is rotatably mounted on a stud 28 having a reduced end 29 which screws into the plate and projects from the back thereof. A portion of the rib 22 is cut away to form a recess 30 to receive a nut 31 screwed on the threaded end of the stud whereby the latter is secured. The width of the recess 30 is such that the nut is prevented from turning therein. The back of the plate 5 has a groove 32.

Upon unscrewing the stud 28, the plate 21 can be slid back and forth on the plate 8, and it will be securely clamped in adjusted position by the nut 31 and the shoulder formed by the reduced portion 29 of the stud, said shoulder engaging the face of the plate 21, and the base of the nut engaging the floor of the groove 32. Inasmuch as the nut cannot turn by reason of its location in the recess 30, it will be necessary to turn the stud to make the adjustment stated. The nut and the rib 22 do not project beyond the groove 32 and therefore do not interfere with the adjustment of the plate 8 on the plate 5.

The jaw-members 24 work between the face of the plate 21 and the back of the disk 27, the latter being spaced from said plate sufficiently for this purpose. On the back of the disk are cam-grooves 33 into which extend studs 34 projecting from the jaw-members. The cam-grooves are inclined in such a direction that the jaw-members are caused to open when the disk is turned in one direction and to close when it is turned in the opposite direction. On the stud 28, between its head 35 and the face of the disk 27, is mounted an arm 36 carrying an adjustable weight 37. The arm is loose on the stud and swings between stop projections 38 on the face of the disk.

In use, the jaw-members 24 are opened, and the plates 8 and 21 are adjusted in the manner herein described so as to bring the roller 10 against the stick on one side thereof, and the jaw-members in such a position that when they are closed the rollers 25 will bear against the stick at the top and bottom thereof. The weighted arm 37 is so positioned that when it engages one of the stops 38 it tends to turn the disk 27 in a direction which



will close the jaw-members, and the weight 38 is heavy enough to hold the rollers 25 firmly against the stick.

By the construction herein described a  
5 wide range of adjustments is had, and the stick is held in three places with a minimum amount of friction. By the plate 8, the entire apparatus can be moved toward or from the stick, and by making the plate 21 adjust-  
10 able also, the relative position of the rollers 10 and 25 may be varied according to the dimension of the stick. The weight will be adjusted to suit the work. It takes more weight to hold some sticks, and some can be  
15 held firmer than others. The stick can also be cut between the rollers 25, the weight closing the jaws so that the rollers follow up the stick as it gets smaller. The roller 10 can be moved forward by the hand-lever 11.

20 I claim:—

1. A back-rest for turning-lathes comprising a support, an adjustable plate thereon, bearings carried by the plate and engageable  
25 yieldingly with the work, and a stationary bearing on the support between the yielding bearings.

2. A back-rest for turning-lathes comprising a support, a slide mounted thereon, a  
30 plate adjustable on the slide, bearings carried by the plate and engageable yieldingly with the work, and a stationary bearing on the slide between the yielding bearings.

3. A back-rest for turning-lathes compris-

ing a support, a slide mounted thereon and having a longitudinal slot and a groove on 35 one side, a plate on the slide having a rib fitting in the slot and extending into the groove, jaw-members pivoted to the plate and provided with bearings engageable with the work, a similar bearing on the slide between 40 the jaw-members, a stud screwed into the plate and passing through the aforesaid slot into the groove, the aforesaid rib being cut away adjacent the projecting end of the stud to form a recess, a nut screwed on said 45 end of the stud and seating in the recess, the base of said nut engaging the floor of the groove, a disk rotatably mounted on the opposite end of the stud and having cam-grooves, and studs on the jaw-members en- 50 tering said cam-grooves.

4. A back-rest for turning-lathes comprising bearings engageable with the work yieldingly, and a stationary bearing between the yielding bearings. 55

5. A back-rest for turning-lathes comprising bearings engageable with the work yieldingly, a stationary bearing between the yielding bearings, and means for varying the relative position of said bearings. 60

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

JOHN THEODORE MEYERS.

Witnesses:

CHAS. F. WEGER,

DAVID KAVERMANN.