

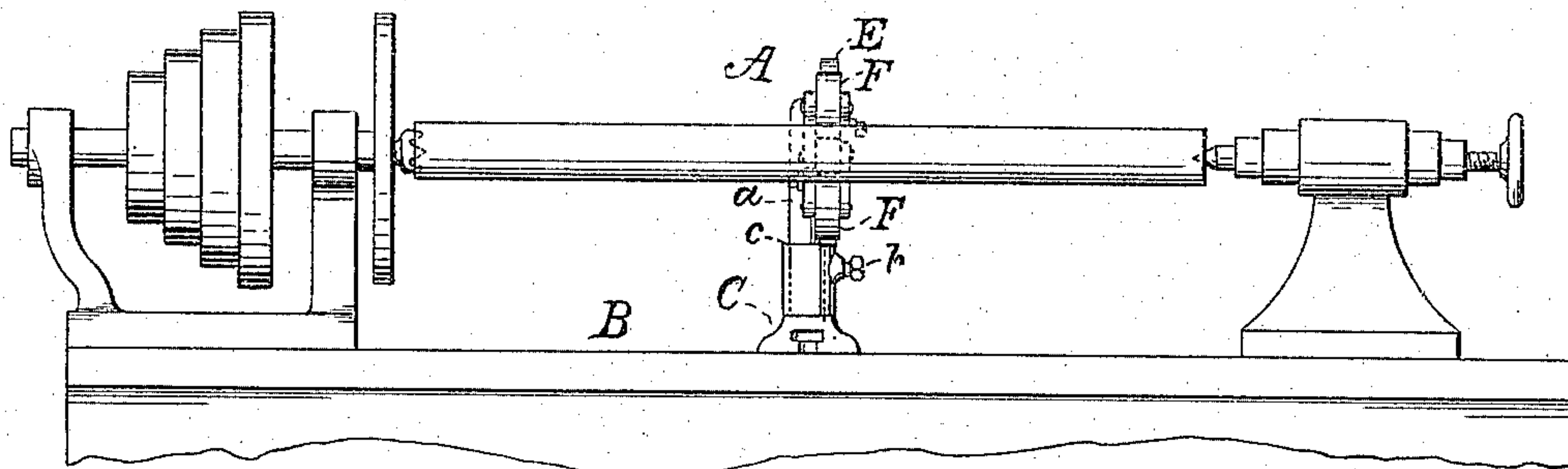
(No Model.)

J. TYLER & J. W. RAILEY.  
BACK REST FOR TURNING LATHES.

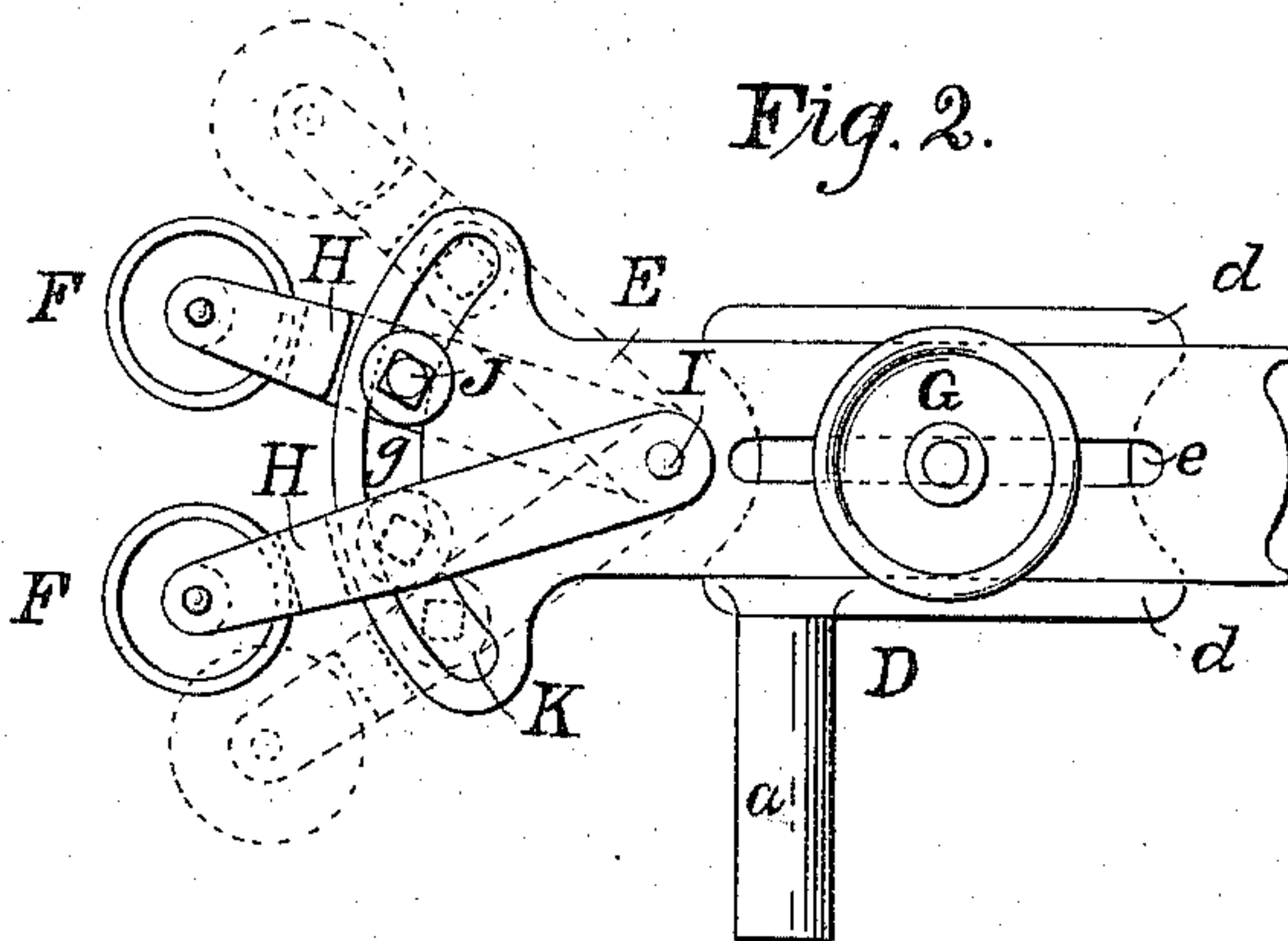
No. 301,185.

Patented July 1, 1884.

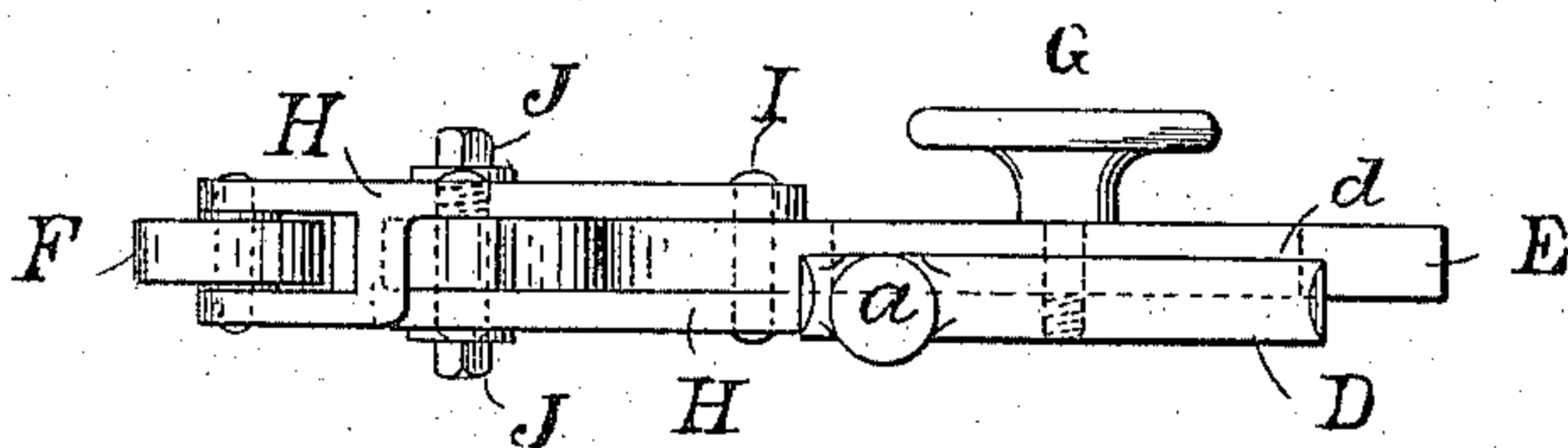
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses:  
Frank A. Ball  
Charles R. Boyce

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per John W. Railey  
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# UNITED STATES PATENT OFFICE.

JOHN TYLER AND JOHN W. RAILEY, OF CLAREMONT, NEW HAMPSHIRE.

## BACK-REST FOR TURNING-LATHES.

SPECIFICATION forming part of Letters Patent No. 301,185, dated July 1, 1884.

Application filed February 13, 1884. (No model.)

*To all whom it may concern:*

Be it known that we, JOHN TYLER and JOHN W. RAILEY, both of Claremont, in the county of Sullivan and State of New Hampshire, have  
5 invented certain new and useful Improvements in Back-Rests for Wood-Turning Lathes, of which the following is a clear and exact description.

This invention consists of an adjustable anti-friction back-rest for lathes, intended to be  
10 placed about midway between the head and tail stocks of the lathe, and at right angles to their length, the same being adapted to be brought against the back of the stick placed in  
15 the lathe, to hold the stick against all danger of springing when the cutting-tool is pressed against it.

Reference is to be had to the accompanying drawings, forming part of this specification, in  
20 which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 shows our invention in front elevation as it appears when in use. Fig. 2 is a side  
25 elevation of back-rest for wood-turning lathes, and Fig. 3 is an inverted plan view of the same.

The back-rest A is attached to the lathe-bed B by the slide-rest attachment C, in the socket  
30 c of which the post a of the supporting-arm D is adapted to be placed and held by the set-screw b.

Our improved back-rest is composed of the supporting-arm D, having formed therein a  
horizontal groove or guideway composed of the lips d d, the plate or head E, fitted to and  
35 adjustable horizontally in said guideway by means of the screw G and slot e, and provided near its front end with the slot g in the form of a single arc of a circle, the two radius-

arms H H, pivoted by a common axis to the plate E, the anti-friction wheels F F, mounted  
40 upon the movable ends of said radius-arms H H, and the clamping-screws J J, by which the arms H H may be secured in any desired position within the compass of the slot g. The wheels are adjusted to the stick to be turned  
45 by moving one or both of the arms H, by means of the set-screw J, in a circular slot, K, in the end of the sliding head E, thus firmly holding the wheels against the stick to be turned.

Constructed and applied in the manner de-  
50 scribed, it will be seen that the rest furnishes a firm support for the stick at the back, so that it cannot bend or spring when the cutting-tool is applied to it, and by using the anti-friction wheels F in this manner it will be seen that  
55 the device adds but little friction to the lathe. Besides these advantages, the rest is cheap, durable, strong, and convenient to handle.

Having thus described our invention, what we claim as new, and desire to secure by Let-  
60 ters Patent, is—

In a back-rest for lathes, the combination of the support D, the horizontally-adjustable plate E, provided with a slot, g, in the form of a single arc of a circle, the two radius-arms  
65 H H, pivoted to the plate E by a common axis, the anti-friction wheels F F, mounted in the movable ends of said arms H H, and the clamping-screws J J, all arranged and adapted to operate substantially as and for the purposes  
70 described.

JOHN TYLER.  
JOHN W. RAILEY.

Witnesses:

F. A. BALL,  
C. B. BOYCE.