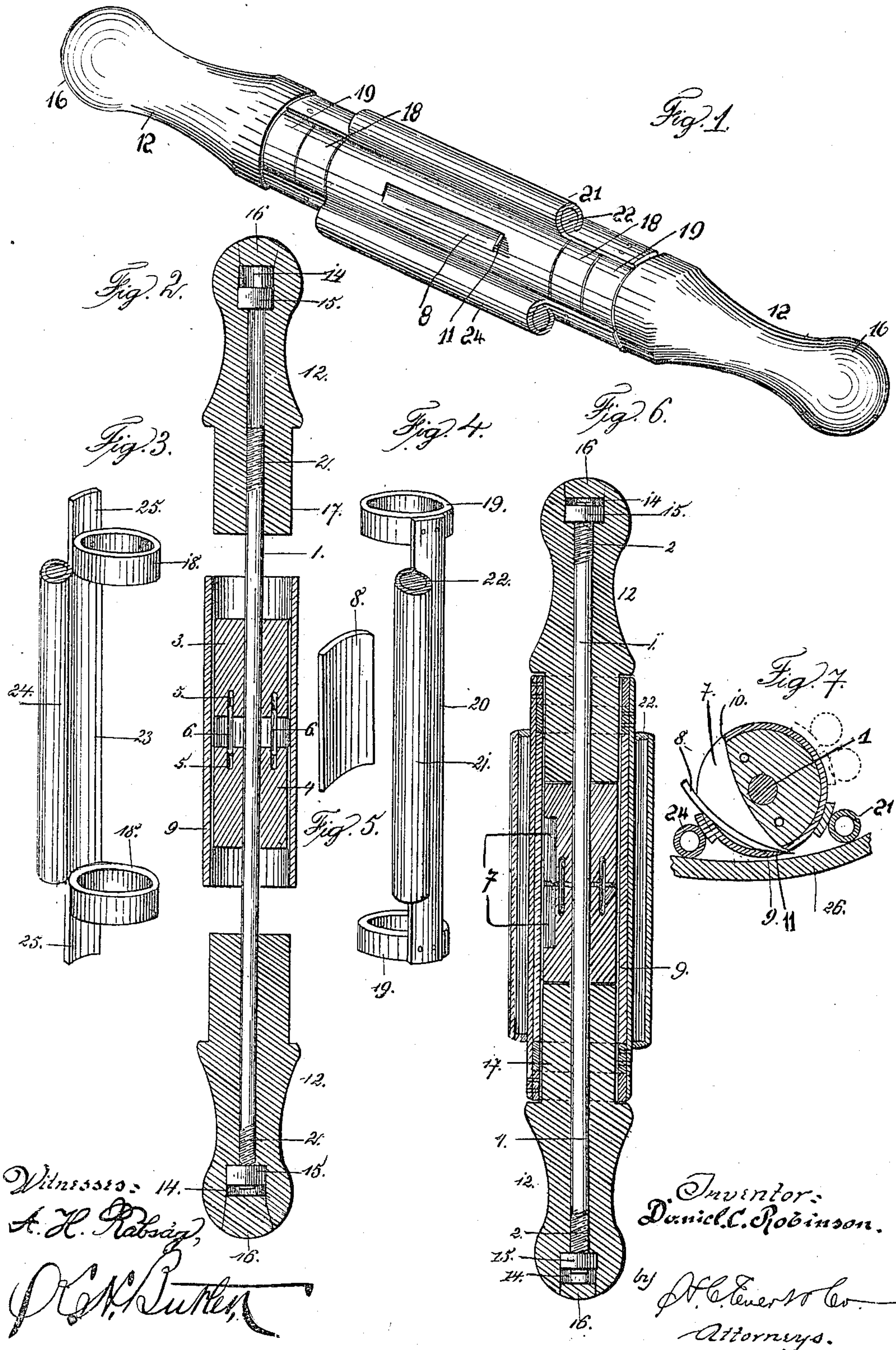


No. 831,893.

PATENTED SEPT. 25, 1906.

D. C. ROBINSON.  
CIRCULAR PLANER.  
APPLICATION FILED APR. 24, 1906.





# UNITED STATES PATENT OFFICE.

DANIEL C. ROBINSON, OF AMBRIDGE, PENNSYLVANIA.

## CIRCULAR PLANER.

No. 831,893.

Specification of Letters Patent.

Patented Sept. 25, 1906.

Application filed April 24, 1906. Serial No. 313,395.

*To all whom it may concern:*

Be it known that I, DANIEL C. ROBINSON, a citizen of the United States of America, residing at Ambridge, in the county of Beaver and State of Pennsylvania, have invented certain new and useful Improvements in Circular Planers, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to certain new and useful improvements in planers; and the primary object of this invention is to provide a novel form of carpenter's tool or instrument for planing and smoothing curved surfaces. 15 To this end I have devised a simple and inexpensive planer wherein novel means is employed for guiding the planer over a curved surface, thus preventing the cutter or knife blade of said planer from removing more than 20 a prescribed quantity of the material being planed.

My improved planer relieves a workman of the careful attention heretofore necessary when using a planer upon a curved surface, 25 it having heretofore required considerable skill to properly manipulate a planer, so as not to injure the piece of material being planed by removing more material from one part of the curved surface than from another 30 part.

A further object of this invention is to provide a planer in which various kinds and sizes of knife-blades may be easily and quickly mounted and firmly held while the 35 planer is being used.

A further object of this invention is to provide a simple and inexpensive planer which will be positive in its action and free from all danger of being injured by constant use.

40 With the above and other objects in view, which will more readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts to be hereinafter more fully described and claimed, 45 and, referring to the drawings accompanying this application, like numerals of reference designate corresponding parts throughout the several views, in which—

50 Figure 1 is a perspective view of my improved planer. Fig. 2 is a vertical sectional view of a portion of the planer illustrating the parts thereof separated. Fig. 3 is a perspective view of the guides used in connection with the planer. Fig. 4 is a similar view 55 of another guide. Fig. 5 is a perspective

view of a knife-blade or cutter used in connection with the planer. Fig. 6 is a vertical sectional view of the planer in its entirety. Fig. 7 is a cross-sectional view of the same, 60 illustrating the planer as resting upon a curved surface.

To put my invention into practice, I construct my improved planer of a rod 1, having screw-threaded ends 2 2. Upon the rod are 65 mounted two cylindrical heads 3 and 4, the confronting faces of said heads being provided with diametrically-opposed recesses 5 5, in which guide-pins 6 are mounted to prevent one head from rotating independently of 70 its associate head. The confronting faces of the heads 3 and 4 have their edges cut away, as at 7, to form a blade, chisel, or bit cavity, in which I have illustrated a blade 8 as being 75 mounted. Upon the heads 3 and 4 is mounted a sleeve 9, said sleeve having two slots 10 and 11 formed therein to permit of the blade 8 being inserted between the heads 3 and 4.

Mounted upon the ends of the rod 1 are handles 12 12, said handles having recesses 80 formed in their ends to hold nuts 15 15, by which the screw-threaded ends of the rod 1 are retained within the handles, said recesses being afterward plugged, as at 16 16, to prevent the nuts 15 from becoming detached 85 from the handles 12 12 also to prevent dirt from accumulating within the recesses 14 14 of the handles. The handles are formed with contracted ends 17 17, which extend into the ends of the sleeve 9, and upon the contracted 90 ends 17 17 of the handles are revolubly-mounted bands or rings 18 18 and 19 19. The bands 19 19 are connected together by a strip of metal 20, the one edge of which is rolled to form a guard 21, the ends of the 95 guard being plugged, as at 22 22, to prevent dirt and shavings from entering the rolled edge or guard 21. The bands 18 18 are connected together by a strip of material 23, said strip also being formed with a rolled 100 edge or guard 24, similar to the guard 21 just described. The ends of the strip of material 23 protrude beyond the bands 18 18, as at 25 25, to overlie the bands 19 19, as clearly illustrated in Fig. 6 of the drawings. 105

As the nuts 15 15 are held stationary within the recesses 14 of the handles 12 12 of the planer, the handles can be rotated relative to one another to move the contracted ends 17 17 inwardly upon the rod 1 to impinge the 110 heads 3 and 4 and hold the blade 8 between said heads, said heads engaging the ends of



the blade and firmly holding it at an inclination at which it may be placed in the recesses 7 7. Since the bands 18 18 and 19 19 are revolvably mounted upon the contracted ends 5 of the handles 12 12, the guards or rolled edges 21 and 24 can be rotated to lie approximately in a common plane. As illustrated in Fig. 7 of the drawings, the guards 21 and 24 have been moved to engage the 10 curved piece of material 26 and prevent the cutting edge of the blade 8 from entering the material 26 to any extent, and in this connection I desire to call particular attention to the fact that the guards 21 and 24 can be 15 easily adjusted to give the blade 8 greater or less cutting properties, as may be desired.

From the foregoing it will be observed that a circular planer or draw-knife constructed in accordance with my invention can be 20 easily and quickly manipulated without a skilled person manipulating the same, the guards when once set preventing a piece of material being planed from being injured by the cutting edge of the blade 8.

25 It is obvious that my improved guards, together with their appurtenant parts, can be readily used upon other instruments or tools than the planer herein described and illustrated, and for this reason I do not care to 30 confine myself to the specific construction shown, as slight changes in the size, proportion, and minor details of construction as are permissible by the appended claims may be

resorted to without departing from the spirit and scope of the invention.

What I claim, and desire to secure by Letters Patent, is—

1. A planer of the character described consisting of a rod, heads movably mounted upon said rod, a slotted sleeve surrounding 40 said heads, handles adjustably mounted upon said rod and adapted to engage said heads, guards adjustably mounted upon said handles, a blade, and means to lock said blade between the heads of said planer, substantially as described. 45

2. A planer of the character described consisting of a rod, heads mounted upon said rod, said heads having recesses formed therein to receive a blade, handles adjustably 50 mounted upon said rod and adapted to engage said heads to hold said blade therebetween, and guards revolvably mounted upon said handles to guide said blade, when said planer is used, substantially as described. 55

3. The combination with a planer having a detachable blade, of guards revolvably mounted upon said planer and adapted to 60 guide said blade when said planer is used, substantially as described.

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

DANIEL C. ROBINSON.

Witnesses:

H. LEE GORMAN,  
E. G. SCHELL.