

No. 763,085.

PATENTED JUNE 21, 1904.

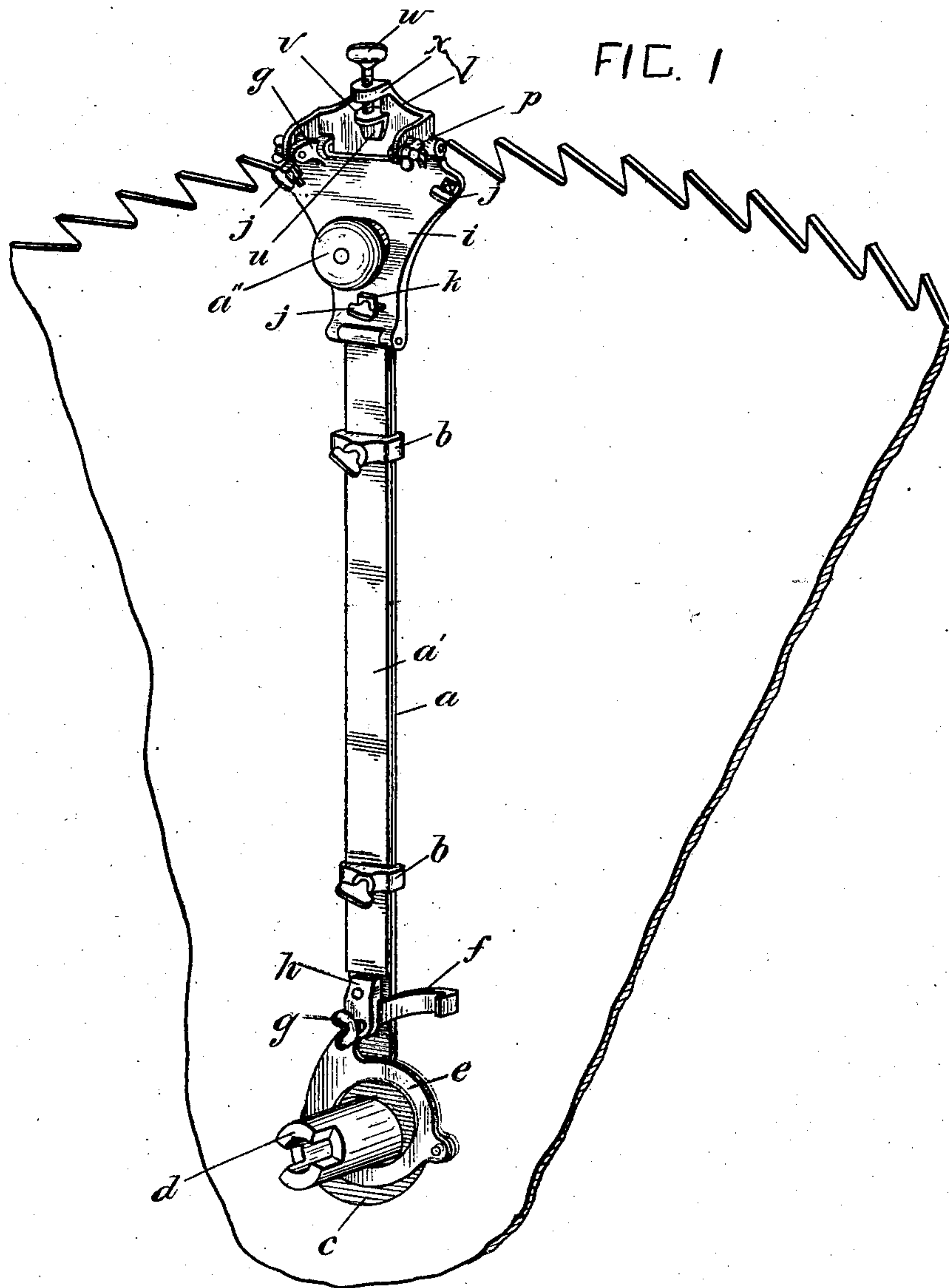
J. W. ARNOTT.

DRESSING AND FILING APPLIANCE FOR CIRCULAR SAWS.

APPLICATION FILED DEC. 4, 1902. RENEWED MAY 16, 1904.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses  
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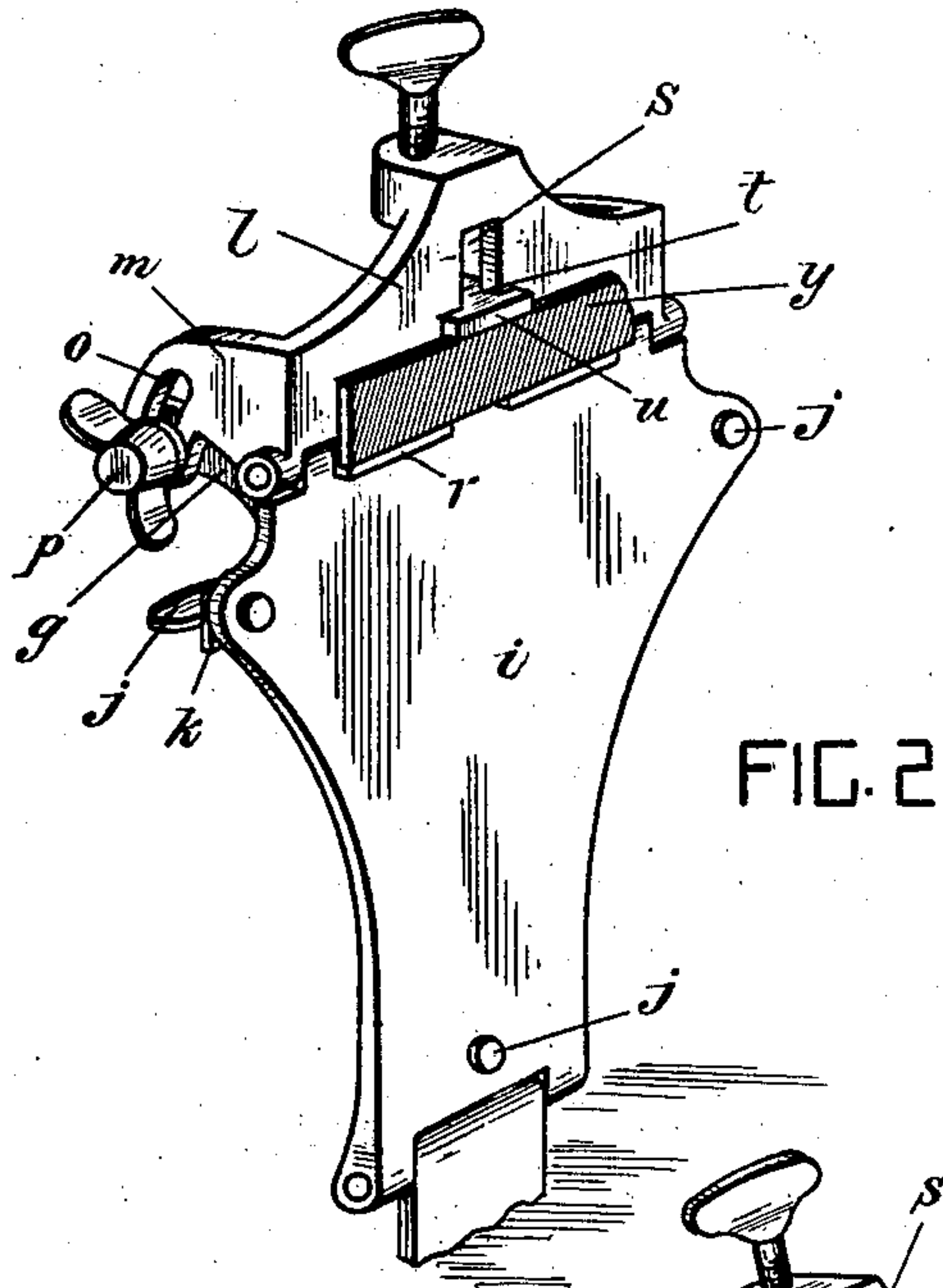


FIG. 2

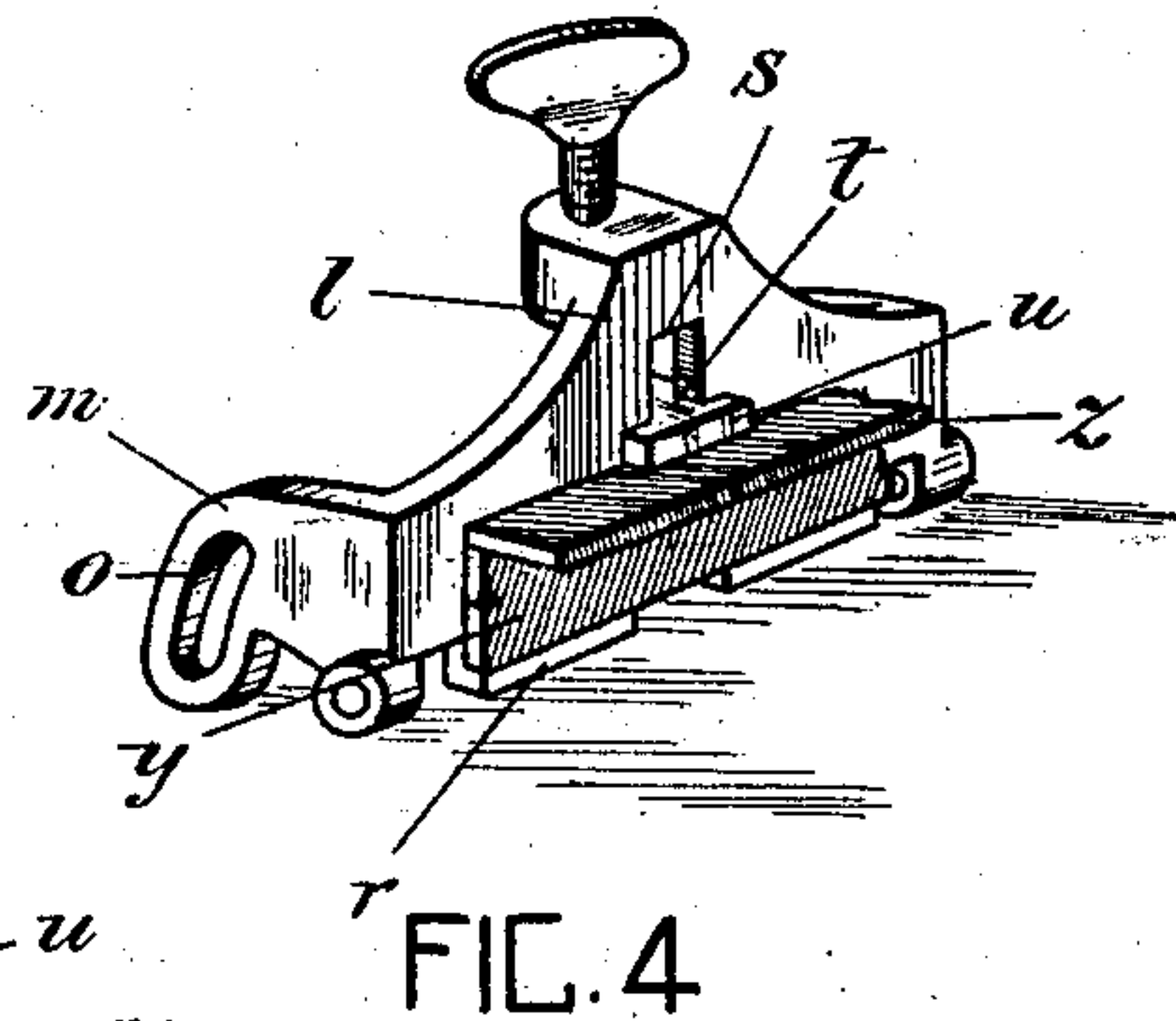


FIG. 4

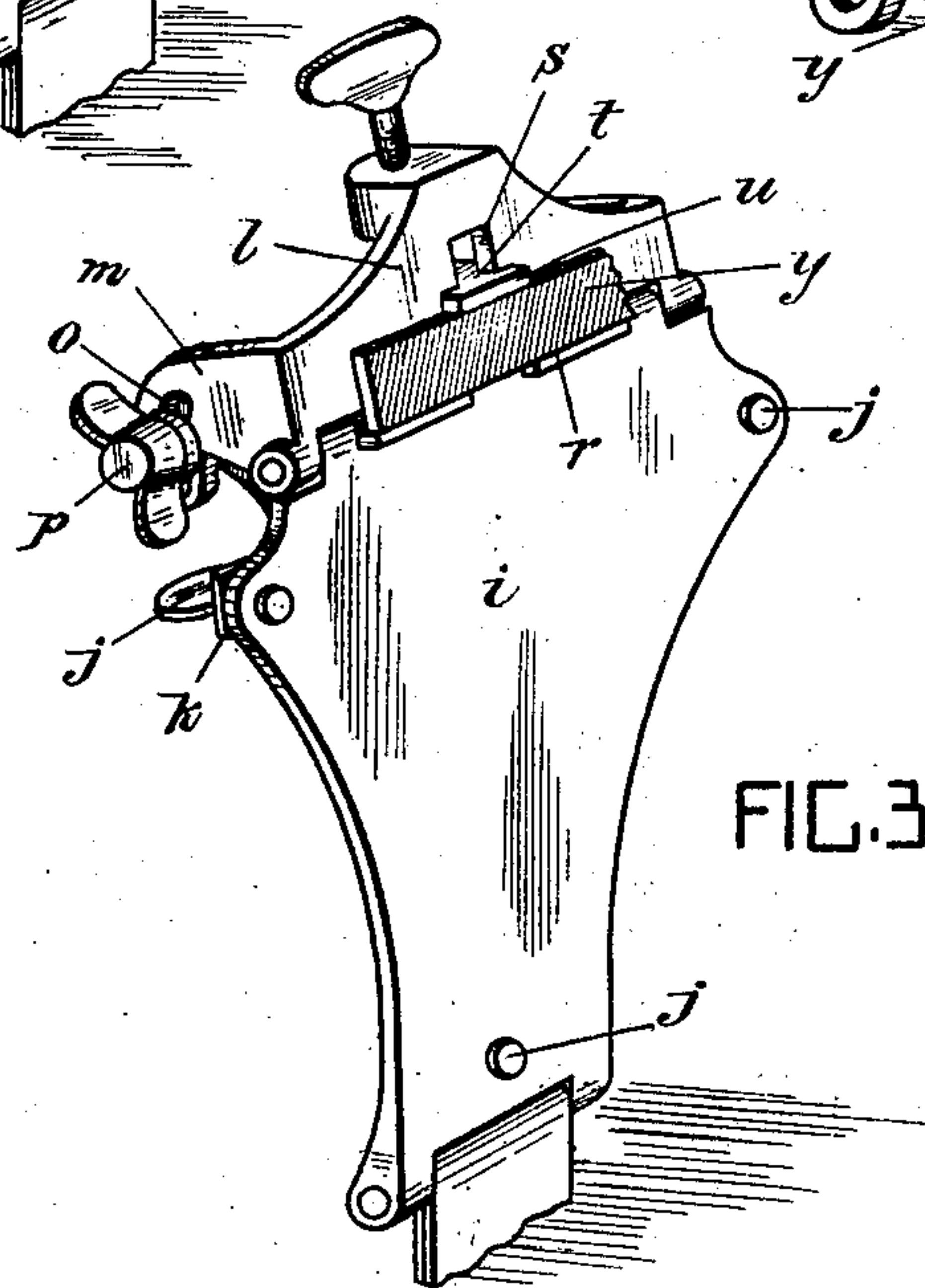


FIG. 3

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## UNITED STATES PATENT OFFICE.

JOSEPH W. ARNOTT, OF CALLANDER, CANADA.

## DRESSING AND FILING APPLIANCE FOR CIRCULAR SAWS.

SPECIFICATION forming part of Letters Patent No. 763,085, dated June 21, 1904.

Application filed December 4, 1902. Renewed May 16, 1904. Serial No. 208,293. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH WESLEY ARNOTT, of Callander, in the district of Parry Sound and Province of Ontario, Canada, have  
 5 invented certain new and useful Improvements in Dressing and Filing Appliances for Circular Saws; and I hereby declare that the following is a full, clear, and exact description of the same.

10 This invention relates to the peculiar construction of a side-dressing, filing, and jointing appliance for circular saws, the object of the invention being to adjustably connect the file-holder to the head-piece in such a manner  
 15 that the file when held thereby can be set at any predetermined angle to the plane of the side face of the saw and substantially concentric with the edge thereof. In carrying out this object I employ a lever fitted at one end  
 20 with an adjustable clamp to embrace the saw-arbor and securely hold the lever thereon and at the other end with a head-piece to which is adjustably connected the file-holder fitted with a file-holding vise consisting of a sta-  
 25 tionary jaw and an adjustable jaw opposed thereto.

In the drawings, Figure 1 is a perspective view of the side-dressing, filing, and jointing appliance and a section of a circular saw.  
 30 Fig. 2 is a perspective view of the head-piece and file-holder, showing the same adjusted for side dressing the saw. Fig. 3 is a perspective view of the parts shown in Fig. 2, showing the file-holder adjusted to enable the file  
 35 to undercut the points of the teeth. Fig. 4 is a perspective view of the file-holder, showing the arrangement of the files for jointing or truing the circle of the saw.

Like letters of reference refer to like parts  
 40 throughout the specification and drawings.

The lever consists of two adjustable members  $a$   $a'$ , fitted with adjustable clamps  $b$  to hold them in their extended or contracted positions. The outer end of the telescoping  
 45 member  $a$  is fitted with a hub  $c$  to embrace the saw-arbor  $d$ , the hub  $c$  being of a sufficient size to encircle the arbor of the largest saw within the range of the appliance. Pivoted to one side of the hub  $c$  is a supplemental hub  
 50 or clamp  $e$ , arranged to move eccentrically to

the hub  $c$ , and integrally formed with or connected to the clamp  $e$  is an arm  $f$ , adapted to be engaged by the set-screw  $g$ , adjustable in the lug  $h$ , connected to or forming part of the adjustable member  $a$  at or close to its junction with the hub  $c$ . In fitting the appliance to the saw the hub  $c$  and clamp  $e$  are set on the same center, so as to readily pass onto the saw-arbor  $d$ , the top of the hub  $c$  being placed against the top of the saw-arbor. The  
 60 clamp  $e$  is then moved to contract the lower edge of its bore against the under side of the saw-arbor and is held by the set-screw  $g$ , which is adjusted to lock it in this position and lock the saw-arbor between the hub and  
 65 clamp.

Hinged to the upper end of the adjustable member  $a'$  is the head-piece  $i$ , fitted with gage members  $j$ , having lock-nuts  $k$  to lock them in their set position. Hinged to the  
 70 top of the head-piece  $i$  is the file-holder  $l$ , having rearwardly-projecting lugs  $m$ , fitted with curved slots  $n$ , through which pass set-screws  $p$ , connected to rearwardly-projecting arms  $q$ , forming part of the top of the head-piece  $i$ .  
 75 By means of the slotted lugs  $m$  and set-screws  $p$  the front of the file-holder can be set either in the same plane as the front of the head-piece  $i$  or at a rearward inclination thereto, as may be required by the user.  
 80

Projecting from the lower edge of the front of the file-holder  $l$  is the stationary jaw  $r$  of the file-holding vise, and formed in the upper end of the file-holder is a vertical slot  $s$ , in which moves the shank  $t$  of the movable jaw  
 85  $u$ , the movable jaw  $u$  when in its operative position being arranged parallel with the stationary jaw  $r$ . At the rear end of the shank  $t$  is a screw-engaging lug  $v$ , with which is adapted to engage the pressure-screw  $w$ ,  
 90 working vertically through a screw-threaded lug  $x$ , projecting rearwardly from the top of the file-holder  $l$ . Held between the jaws  $r$  and  $u$  is the file  $y$  for side-dressing and undercutting purposes, as shown in Figs. 2 and 3,  
 95 and held between the top of the file  $y$  and the under side of the movable jaw  $u$  is a file  $z$  for jointing and truing purposes, as shown in Fig. 4. When the appliance is to be used for side dressing a saw, the gage members  $j$   
 100



are adjusted to compensate for the thickness of the file and engage the side face of the saw, the front face of the file being in the same plane as the inner ends of the gage members.

5 The appliance can then be held stationary by means of the handle  $a''$  and the saw rotated against the file  $y$ , or the appliance can be rotated by means of the handle  $a''$ , in which case the saw must be held stationary. For  
10 undercutting the point of the teeth to give them the requisite clearance the front face of the file-holder is set at a rearward inclination to the front face of the head-piece, as shown in Fig. 3, to cause the lower edge of  
15 the file to undercut the teeth. For jointing purposes—that is, for truing the circle of the saw—a file  $z$  is arranged at right angles to the top of the file  $y$  and caused to rotate around the edge of the saw or the saw caused  
20 to rotate against it.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a side-dressing and filing appliance for  
25 circular saws, the combination of a lever-arm, a hub secured to the inner end thereof, a ring eccentrically connected to the hub, means for holding the ring in its adjusted position to form with the hub, a clamp for the saw-ar-  
30 bor, a head-piece connected to the other end of the lever-arm, a file-holder adjustably hinged to the head-piece and means for securing the file-holder in its adjusted position, substantially as specified.

35 2. In a dressing and filing appliance for circular saws the combination of a lever-arm, an arbor-engaging member connected to one end thereof, and a head member hinged to the other end, a file-holder hinged to the free end  
40 of the head member capable of being adjust-

ed relatively thereto, a stationary jaw for the file-holder and an adjustable jaw opposed to the stationary jaw and means for holding the file-holder in its adjusted position, substantially as specified.

45 3. In a dressing and filing appliance for circular saws the combination of a lever-arm, an arbor-engaging member connected to one end thereof, and a head member hinged to the other end, a file-holder hinged to the free end  
50 of the head member and slotted projections forming part of the file-holder and clamping-bolts for the arms passing through the slotted projections to hold the file-holder adjusted relatively to the head member, substan-  
55 tially as specified.

4. In a side-dressing and filing appliance for circular saws the combination of a lever-arm, an arbor-encircling member secured to one end of the lever-arm and arranged to be contract-  
60 ed and expanded on the arbor, a head-piece hinged to the other end of the lever-arm, a file-holder adjustably hinged to the head-piece and means for holding the file-holder in its adjusted position, substantially as specified.

65 5. In a side-dressing and filing appliance for circular saws, the combination of a lever-arm, an arbor-engaging member connected to one end thereof, a head member hinged to the other end, a file-holder hinged to the free end  
70 of the head member and arranged to be set at an inclination to the side face thereof to hold the file at an angle to the side face of the saw, substantially as specified.

Toronto, November 21, 1902.

J. W. ARNOTT.

In presence of—

C. H. RICHES,  
L. F. BROCK.