No. 758,619. PATENTED MAY 3, 1904.

J. W. CULPEPPER.

BAND SAW GUIDE.

APPLICATION FILED FEB. 24, 1904.

NO MODEL.

Fig. 1.

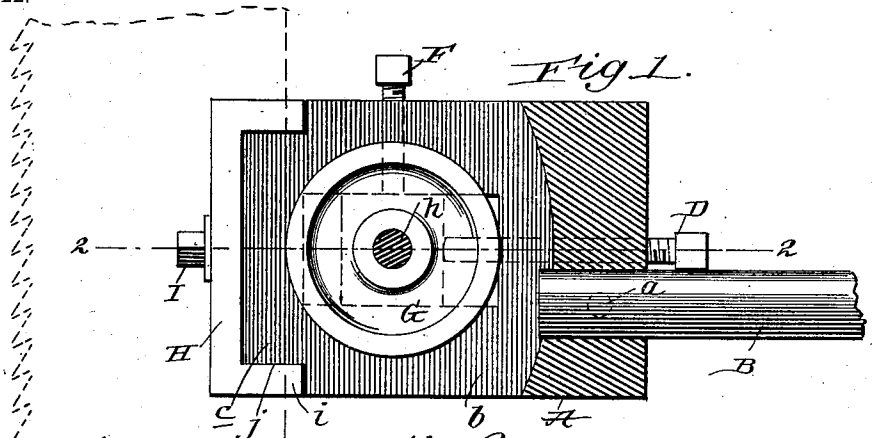


Fig. 2.

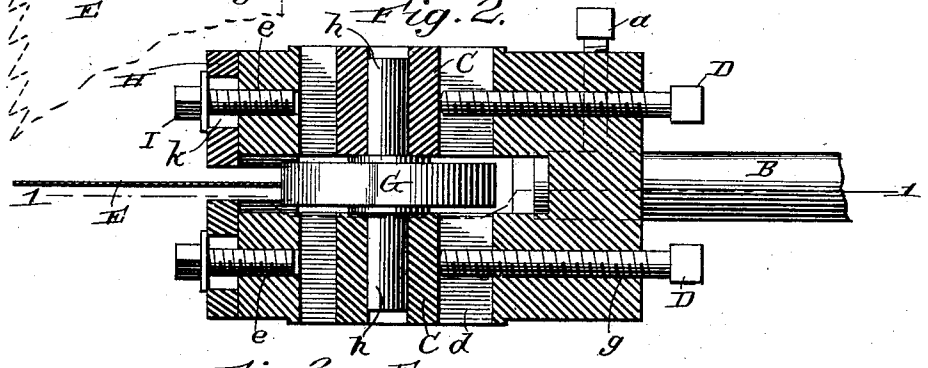
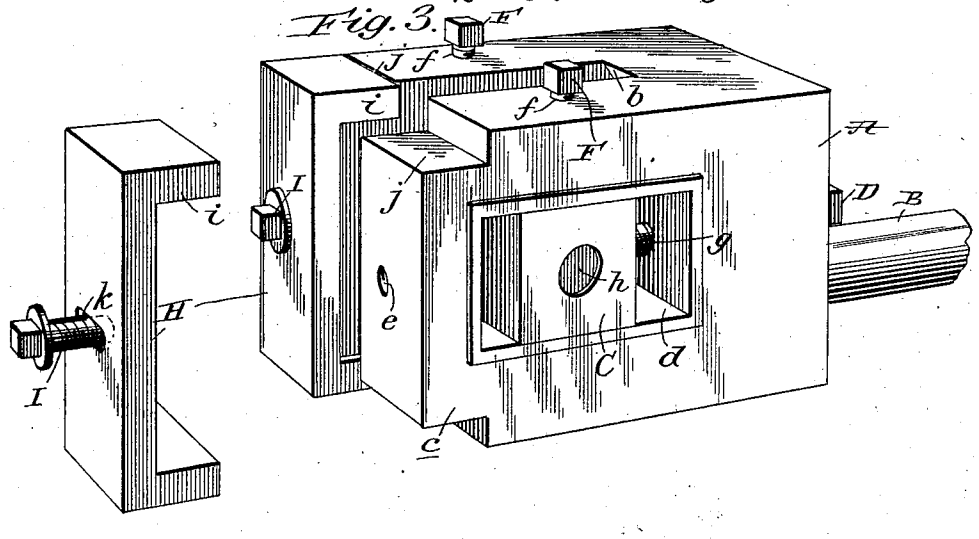


Fig. 3.



WITNESSES:

C. H. Raeder

N. C. Healy

INVENTOR

J. W. Culpepper

BY James J. Shichy.

Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 758,619. Patented May 3, 1904.

UNITED STATES PATENT OFFICE.

JOSEPH W. CULPEPPER, OF HUB, MISSISSIPPI.

BAND-SAW GUIDE.

SPECIFICATION forming part of Letters Patent No. 758,619, dated May 3, 1904.

Application filed February 24, 1904. Serial No. 195,071. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH W. CULPEPPER, a citizen of the United States, residing at Hub, in the county of Marion and State of Mississippi, have invented new and useful Improvements in Band-Saw Guides, of which the following is a specification.

My invention pertains to band-saw guides; and it consists in the novel and advantageous guide hereinafter described, and particularly pointed out in the claims appended.

In the accompanying drawings, forming part of this specification, Figure 1 is a vertical longitudinal section on the line 1 1 of Fig. 2, illustrating the arrangement of my novel guide with the relation to a band-saw, the saw being shown in dotted lines. Fig. 2 is a horizontal section taken in the plane indicated by the line 2 2 of Fig. 1 with some of the parts in plan and the saw in transverse section, and Fig. 3 comprises disconnected perspective views of the guide and one of the saw-guiding plates thereof removed therefrom.

Similar letters designate corresponding parts in all of the views of the drawings.

A is the body of my novel guide, which is mounted and secured, through the medium of a set-screw *a*, on a supporting-arm B. The said body is preferably of metal and is provided with a vertical bifurcation *b*, the side walls of which are provided with reduced forward ends *c* and longitudinal transversely-disposed slots *d*. In the forward end walls of the said slots *d* threaded apertures *e* are formed, as also in the top and rear walls of said slots, as indicated by *f* and *g*, respectively.

C C are bearing-blocks arranged in the slots *d* of the body and movable in the direction of the length thereof.

D D are longitudinal screws bearing in the apertures *g* of the body and adapted to enable an attendant to readily adjust the blocks C, so as to position the antifriction-roller, hereinafter described, with respect to a band-saw, (indicated by E.)

F F are screws disposed in the apertures *f* of the body and having for their purpose to adjustably fix the bearing-blocks subsequent to adjustment thereof.

G is the antifriction-roller for engaging the back edge of the saw, said roller being disposed in the vertical bifurcation *b* of the body and having trunnions *h* bearing in the blocks C, and H H are saw-guiding plates mounted at the forward end of the body at opposite sides of the bifurcation *b* therein. The said plates are provided at their upper and lower ends with flanges *i*, designed to occupy the rabbets *j*, formed by reducing the forward ends of the side walls of the bifurcation *b*, and are also provided with horizontal slots *k*, these latter for the passage of screws I, through the medium of which the plates are connected to the reduced ends *c* of the bifurcation-walls of the body. Being connected as stated, said plates H may obviously be adjusted with great facility to suit them to the thickness of the saw and enable them to properly guide the same.

As will be readily observed by reference to Fig. 2 of the drawings, the band-saw is arranged to travel between the inner edges of the guide-plates H, and its back edge is disposed against the perimeter of the antifriction-roller G. From this it follows that the saw will be held against lateral deflection and to its work with but a minimum amount of friction, which is an important desideratum; also, that the movement of the back edge of the saw against the perimeter of the antifriction-roller will be attended by little or no frictional wear of the saw and the roller, and hence the roller will last, with the other parts of the guide, for an indefinite period.

An important feature of my invention is the provision of the screws F for fixing the bearing-blocks C subsequent to the adjustment of said blocks through the medium of the screws D. The said screws F when properly set against the blocks C preclude casual retrograde movement of said blocks, and hence enable the antifriction-roller carried by the blocks to efficiently serve its purpose.

Notwithstanding the advantages of my novel guide, as pointed out in the foregoing, it will be noticed that the same is very simple and inexpensive in construction, is made up of but a minimum amount of parts, and is

very sturdy, and therefore well adapted to withstand the usage to which such devices are ordinarily subjected.

I have entered into a detailed description of the construction and relative arrangement of the parts embraced in the present and preferred embodiment of my invention in order to impart a full, clear, and exact understanding of the same. I do not desire, however, to be understood as confining myself to such specific construction and relative arrangement of parts, as such changes or modifications may be made in practice as fairly fall within the scope of my invention as claimed.

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

1. In the band-saw guide described, the combination of a body having a vertical bifurcation *b*, and also having longitudinal slots in the side walls of said bifurcation, and the forward ends of said walls reduced to form rabbets *j*, bearing-blocks arranged in the said slots of the body and movable in the direction of the length thereof, an antifriction-roller disposed in the bifurcation of the body and having trunnions journaled in the bearing-blocks, screws for adjusting the bearing-blocks, bearing in the rear walls of the slots and against the rear sides of the blocks, screws for adjustably fixing said blocks, bearing in the body at right angles to the first-mentioned screws, and against the blocks, guide-plates mounted on the reduced forward ends of the bifurcation-walls, and having rearwardly-extending flanges disposed in the rabbets formed by reducing said ends, and also having horizontal slots, and screws extending through said slots and bearing in the forward ends of the body.

2. The combination with a supporting-arm; of a band-saw guide having a bore receiving said arm and a set-screw for adjustably fixing it thereto, and also having a vertical bifurcation *b*, longitudinal slots in the side walls of said bifurcation, and reduced portions at the forward ends of said side walls, bearing-blocks arranged in the said slots of the body and movable in the direction of the length thereof, an antifriction-roller disposed in the bifurcation of the body, and having trunnions journaled in the bearing-blocks, screws for adjusting the bearing-blocks, bearing in the rear walls of the slots and against the rear sides of the blocks, screws for adjustably fixing said blocks, bearing in the body at right angles to the first-mentioned screws, and against the blocks, guide-plates mounted on the reduced forward ends of the bifurcation-walls, and having rearwardly-extending flanges disposed in the rabbets formed by reducing said ends, and also having horizontal slots, and screws extending through the said slots and bearing in the forward ends of the body.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOSEPH W. CULPEPPER.

Witnesses:

OSCAR VINCE,

R. MOSS.