Feb. 13, 1934. P. J. STEARNS 1,946,720

NOTCH PLATE

Filed March 29, 1932

Fig. 1.

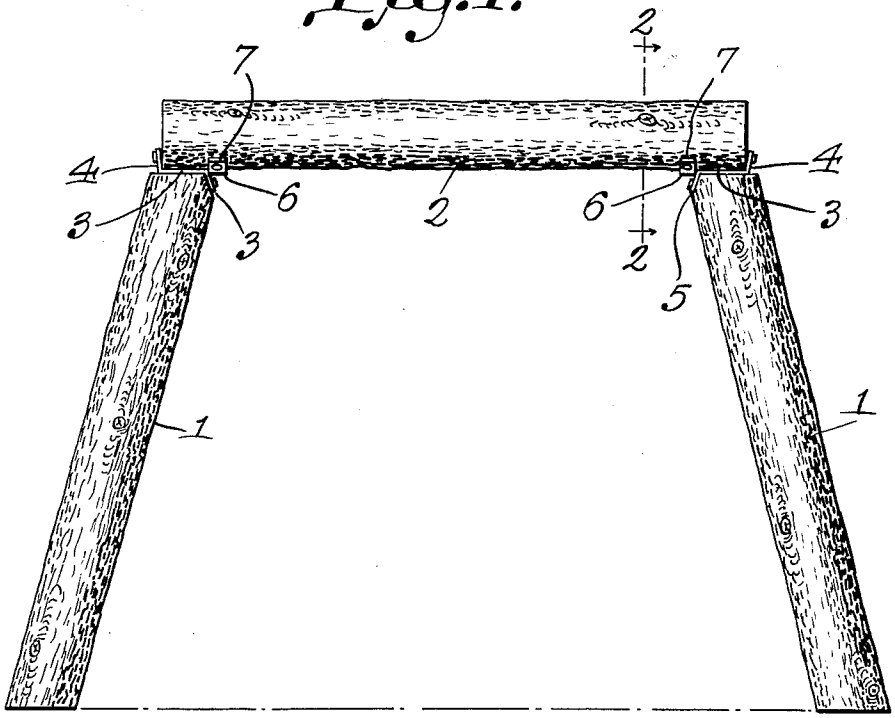


Fig. 2.

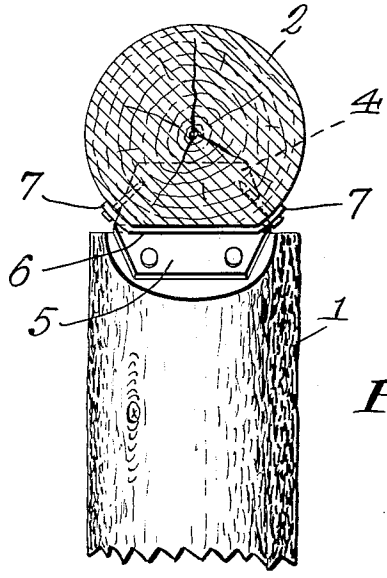
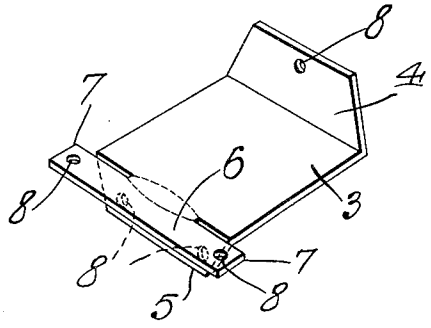


Fig. 3.



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NOTCH PLATE

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Application March 29, 1932. Serial No. 601,838

2 Claims. (Cl. 61—45)

This invention relates to mine timbers and the like and more especially to a means whereby the cap or headpiece of the timber can be held securely to the legs or uprights without the necessity of notching and weakening the headpiece.

A further object is to provide notch plates which are adapted to be interposed between and secured to the lapping portions of the timber so as to hold them assembled properly.

Heretofore it has been the practice to cut notches in the ends of the headpiece or cap of a timber and to extend the upper ends of the legs into these notches. Frequently those portions of the headpiece between the notches have been split off because of the lateral pressures exerted by the legs and this has resulted in the collapse of the structure.

An object of the present invention is to eliminate such conditions and provide a timber which will securely support the ceiling of a gallery or the like.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed may be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawing the preferred form of the invention has been shown.

In said drawing:

Figure 1 is a front elevation of a timber equipped with the present improvements.

Figure 2 is an enlarged section on line 2—2, Figure 1.

Figure 3 is a perspective view of one of the notch plates.

Referring to the figures by characters of reference, 1 designates the usual legs and 2 the headpiece of a timber. Instead of notching the ends of the headpiece a notch plate 3 is interposed between each end thereof and the leg thereunder. Each plate has one end bent upwardly to form an outer flange 4 while its other end is bent downwardly to form an inner flange 5. A narrow strip 6 of lighter gage metal is joined, preferably by welding at its center, to the plate 3 close to the flange 5 and the ends of this strip are left free to constitute bendable wings 7. Openings 8 are provided in the wings and also in flanges 4 and 5.

When each plate is positioned properly its flange 4 laps the adjacent end of headpiece 2 while flange 5 laps the inner side of the end of leg 1. Nails are driven into the timber through the openings 8 and, if desired, wings 7 can be bent upwardly to lap the sides of headpiece 2 where they are fastened by driving nails through the openings in the wings. This has been shown clearly in Figure 2. As the wings are bendable they can be adapted to headpieces of different sizes and shapes.

What is claimed is:

1. A one-piece notch plate including a flat plate having an upturned outer end and a down-turned inner end, each end having a fastener receiving opening, and a strip joined to the plate at the base of the down-turned inner end, said strip having upwardly diverging bendable end portions providing a saddle for embracing the bottom portion of a headpiece resting on the plate.

2. The combination with a timber including a leg and a headpiece of undetermined sizes, of a one-piece notch plate including a flat plate interposed between the leg and headpiece and engaged thereby, an unbroken outer flange on and extending over the entire width of the plate and lapping and secured to the end of the headpiece, an inner flange on and extending over the entire width of the plate and lapping and secured to the inner side of the leg, and a retaining strip joined to the plate near the center of the inner flange and providing bendable portions diverging upwardly and forming a saddle for tightly embracing the bottom of a headpiece of less or greater width than the plate, there being fastener receiving openings in said portions, and fasteners for connecting the plate and timber.

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