A. A. KNOOP.

CLAW BAR.

APPLICATION FILED OCT. 21, 1920.

1,412,356. Patented Apr. 11, 1922.

Fig. 1.

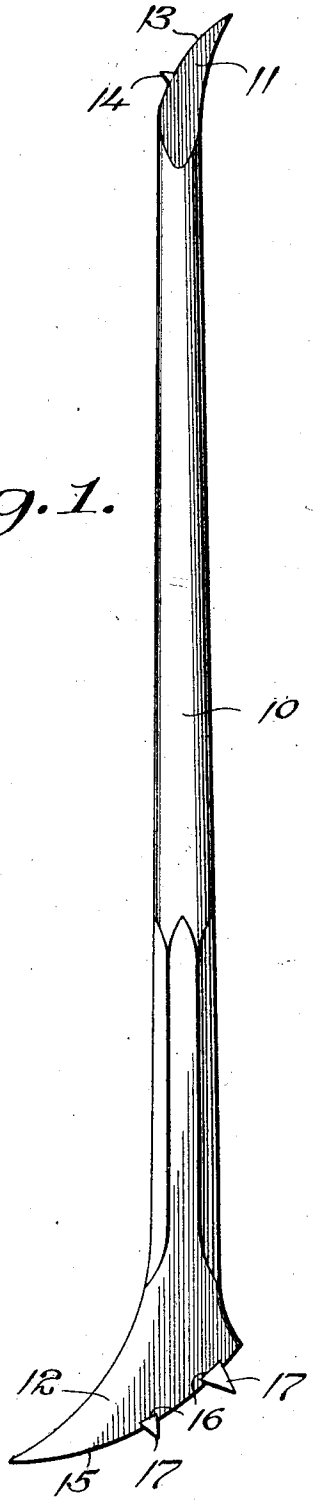


Fig. 2.

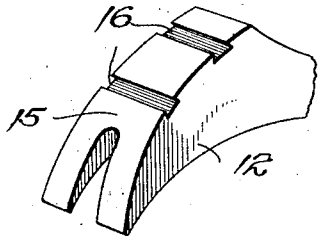
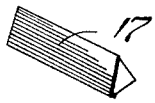


Fig. 3.



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CLAW BAR.

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To all whom it may concern:

Be it known that I, AUGUST A. KNOOP, a citizen of the United States, and resident of Oshkosh, in the county of Winnebago and State of Wisconsin, have invented certain new and useful Improvements in Claw Bars, of which the following is a specification.

My invention relates to an improved claw bar particularly designed for pulling rail spikes and prying up rails, although it is susceptible of various other uses, and an important purpose sought to be accomplished thereby is to provide a bar which is especially useful and efficient in extracting firmly embedded spikes whose heads have been sunk below the face of a tie.

Another important purpose of my invention is to provide a claw bar of the character mentioned with one or more fulcrum devices so arranged with respect to the bar and with respect to one another, if a plurality of them are used, that they will successively act as the fulcrum of the bar and prevent slipping of the same during the operation of extracting a spike.

Furthermore, it is a purpose of my invention to provide the bar with removable fulcrum devices so that they can be replaced when they become damaged, which devices, however, when they are properly associated with the bar, to all intents and purposes form a fixed part thereof, so that the liability of them becoming loose or otherwise failing to function is practically eliminated.

I will illustrate and more particularly describe the nature and utility of my invention in the best form known to me at present, but it is to be understood that this is merely intended as a disclosure of the essential features of my invention and that its scope is as defined in the appended claim.

In the drawing, wherein like characters of reference denote corresponding parts in the different views:—

Fig. 1 is a side elevation of a claw bar embodying the essential features of my invention;

Fig. 2, a detailed perspective of the fulcrum face of the bar, with the fulcrum devices removed; and

Fig. 3, a detailed perspective of one of the fulcrum devices.

Referring to the drawings in detail, 10 designates a bar of any desired dimensions and formed from any desired material, preferably steel, to include at one end a chisel 11 and at the other end a claw head 12. The chisel 11 is formed by flattening the material of the bar and tapering and curving such flattened portion to produce the chisel end of desired shape and preferably to include a fulcrum face 13, upon which is formed transversely at any desired point a wedge shaped fulcrum device 14.

The claw head 12, like the chisel 11, is formed by flattening and broadening the material of the bar and curving the same in a direction opposite to the chisel, and bifurcating such broadened portion to produce the forks of said claw head, which head, like the chisel 11, also includes a fulcrum face of suitable curvature as designated at 15, and transversely across which at suitable points are formed dovetailed slots 16.

Wedge-shaped fulcrum devices 17 are adapted for removable association with the fulcrum face 15 and when properly associated with said face 15 extend transversely thereacross in relative spaced relation with their apexes directed outwardly and their bases received and retained in the dovetailed slots 16. These fulcrum devices are applied to and removed from the slots by simply driving them in or out of engagement with said slots by means of a suitable implement asd when driven in to all intents form a fixed part of the bar as is apparent, although if they become damaged they may be replaced as is also apparent.

Ordinarily to extract a spike the forks of the claw head 12 are engaged with the head of the spike and a thrust exerted upon the bar in a direction in which the face 15 will act as a fulcrum to cause the spike to be pulled, but in many instances the heads of the spikes are so far embedded in the ties supporting railroad rails that the chisel end 11 becomes extremely useful for first prying the rail up to loosen the spike which may then be removed by means of the claw head 12.

Heretofore much inconvenience has been caused particularly in wet weather and when ice has collected upon the ties by slipping of claw bars during the operations of pulling spikes and raising rails, and the fulcrum devices 14 and 17 have been provided to overcome this objection. It is apparent that as the bar is swung to extract a spike the wedges 17 will successively bite into the tie and act as the fulcrum of the bar and that any slippage thereof will as a result be prevented.

By use of a bar as constructed in accordance with the foregoing it has been found

that one man can accomplish work that has required the services of two men using devices as heretofore employed for a similar purpose.

I claim—

A prying bar comprising a straight handle portion having a claw head provided with a curved fulcrum face in such relation to the handle as to dispose the latter in substantially vertical position when the claw head is initially engaged with an object whereby the entire operation of the bar is effected by downward thrust, a plurality of spaced fulcrum devices detachably engageable in transverse grooves in the claw head and opening through said fulcrum face, said devices projecting beyond said fulcrum face and successively increasing in depth from the forward end of the claw head rearwardly, and the advanced fulcrum device being sufficiently remote from the forward end of the claw head to permit said bar to fulcrum entirely on said fulcrum face during its initial operation.

In testimony whereof I hereunto affix my signature.

AUGUST A. KNOOP.