

R. A. SMITH,
GRAB.
APPLICATION FILED MAR. 3, 1920.

1,364,820.

Patented Jan. 4, 1921.

Fig. 1.

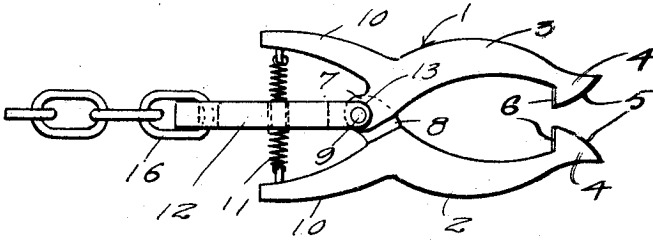


Fig. 2.

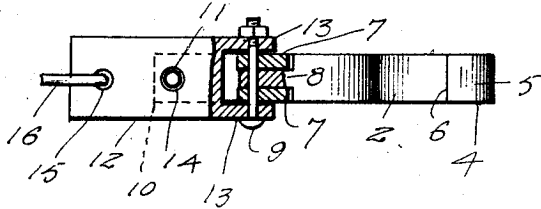


Fig. 3.

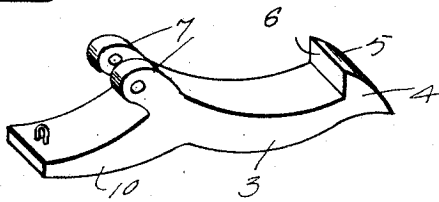


Fig. 5.

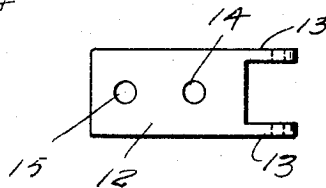
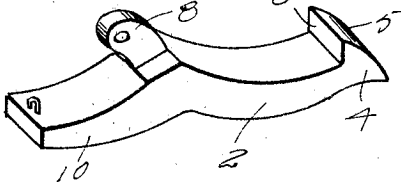


Fig. 4.



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UNITED STATES PATENT OFFICE.

ROY A. SMITH, OF SPENCER, IDAHO.

GRAB.

1,364,820.

Specification of Letters Patent.

Patented Jan. 4, 1921.

Application filed March 3, 1920. Serial No. 362,895.

To all whom it may concern:

Be it known that I, ROY A. SMITH, a citizen of the United States, residing at Spencer, in the county of Clark, and State of Idaho, have invented certain new and useful Improvements in Grabs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to new and useful improvements in grabs and has for one of its objects the provision of means which will permit the jaws to automatically receive and grip a device when pressed or forced against the same, thereby rendering the device especially adaptable for connecting a draft chain or the like to devices that are to be pulled or hauled.

Another object of this invention is the provision of a grab of the above stated character, which shall be simple, durable and efficient, and which may be manufactured and sold at a comparatively low cost.

With these and other objects in view as will become more apparent as the description proceeds, the invention consists in certain novel features of construction, combination, and arrangement of parts as will be hereinafter more fully described and claimed.

For a complete understanding of my invention, reference is to be had to the following description and accompanying drawing, in which:—

Figure 1 is a plan view of a grab constructed in accordance with my invention,

Fig. 2 is a longitudinal sectional view of the same,

Fig. 3 is a perspective view of one of the jaws,

Fig. 4 is a similar view of the other jaw,

Fig. 5 is a side elevation of a coupling block.

Referring in detail to the drawing, the numeral 1 indicates as an entirety a grab consisting of arcuate shaped jaws 2 and 3. The jaws 2 and 3 have formed upon one of their ends heads 4. The opposing faces of the heads 4 are cut away on an incline to provide inclined faces 5 for the purpose of engaging an object and guiding the same between the jaws and further to cause the jaws to move apart when engaging an object or device. The inner faces of the heads 4 are disposed straight to form shoulders 6 which engage the object after entering the jaws and

prevents said object or device from being extracted from the jaws until said jaws are manually separated. The other end of the jaw 3 is provided with spaced ears 7 to receive an ear 8 formed on the other end of the jaw 2. The ears 7 and 8 are pivotally connected by a pin 9 so that said jaws are capable of swinging toward and from each other. Laterally extending arms 10 are formed on the jaws adjacent their pivoted ends, and said arms have interposed between the same an expansion spring 11 for the purpose of forcing the heads 4 of the jaws in the direction of each other. The ends of the spring 11 are secured to the ends of the arms 10 in any desired manner.

A coupling block 12 has one end bifurcated to form spaced arms 13 that straddle the pair of ears 7 on the jaws 3 and receive the pivot pin 9 for pivotally connecting the block to the jaws. The block 12 adjacent its bifurcated end is provided with a transverse opening 14 to permit the spring 11 to pass through said block freely. The other end of the block 12 is provided with an opening 15 to which a draft chain or the like 16 can be connected.

From the foregoing description taken in connection with the accompanying drawing, it will be noted that the particular shape of the jaws provides a comparatively large space to receive the object to which the jaws are applied and which will permit the jaws to adjust themselves on the object when draft power is applied to the jaws at different angles. It is also to be noted that this grab can be conveniently applied to automobiles and like vehicles when stalled by simply pressing the faces 5 of the heads 4 against the axle or like part of the vehicle which will open said jaws and permit them to receive and grip the axle so that when draft power is applied, the stalled vehicle will be readily extracted.

While I have shown and described the preferred embodiment of my invention, it will be understood that minor changes in construction, combination and arrangement of parts may be made without departing from the spirit and scope of the invention as claimed.

Having thus described my invention, what I claim is:—

1. A grab comprising a pair of arcuate shaped jaws, spaced ears formed on one end of one of the jaws, an ear formed on one end

of the other jaw and received by the spaced ears, a pivot pin extending through said ears, heads formed on the other ends of said jaws, and having their opposing faces inclined and their inner faces disposed straight, laterally extending arms formed on said jaws adjacent their pivoted ends, expansion springs secured to the arms, and a coupling block pivoted to the pivoted ends of the jaws for connecting a draft chain thereto.

2. A grab comprising a pair of arcuate shaped jaws, ears formed on said jaws and

pivotally connected, lateral arms formed on the jaws, a spring interposed between said arms, a block having one end bifurcated and receiving said ears and the pivots of said ears, said block having an opening to receive the spring, and a draft chain connected to said blocks.

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

ROY A. SMITH.

Witnesses:

O. H. CUSICK,

O. O. SHALET.