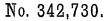
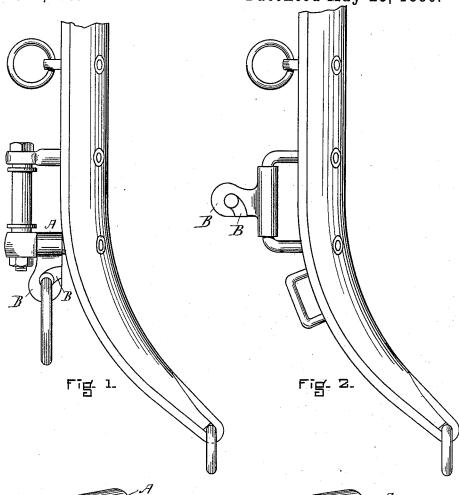
## C. E. CARR.

SAFETY HOOK.



Patented May 25, 1886.



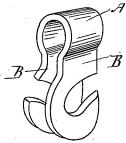


Fig. 5.

WITNESSES.

J. Henry Taylor. James J. Bligh.

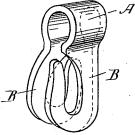


Fig. 4. Inventor. Clarence & Carr
by alex & Browne,
his attorney

## UNITED STATES PATENT OFFICE.

CLARENCE E. CARR, OF ANDOVER, NEW HAMPSHIRE.

## SAFETY-HOOK.

SPECIFICATION forming part of Letters Patent No. 342,730, dated May 25, 1886.

Application filed January 13, 1886. Serial No. 188,384. (No model.)

To all whom it may concern:

Be it known that I, CLARENCE E. CARR, of Andover, in the county of Merrimack and State of New Hampshire, a citizen of the United 5 States, have invented certain new and useful Improvements in Safety-Hooks, of which the following is a specification.

My invention relates to a device known as a "safety-hook," and is particularly adapted to serve as a connection for parts of harness, and especially for the attachment of a breast-strap or tug to any appropriate portion of a harness-hame; and its object is to provide such an attachment that the part to be attached may be readily attached, removed, or replaced when desired, while at the same time any accidental removal or displacement is prevented.

In the accompanying drawings I have shown 20 my improved safety - hook as constructed in the form now best known to and preferred by ma

Figures 1 and 2 are side views of the lower portion of a hame of ordinary construction, in which are represented the application and method of use of my improved safety-hook as a means of attachment for a holdback-strap and a tug, respectively. In Figs. 3 and 4 I have represented a safety-hook on an enlarged scale, and have also illustrated slight modifications in the contour of its slots.

My improved safety-hook is formed from a single piece of metal of sufficient size and thickness to meet the strain to which it is to 35 be subjected; and it consists of a central bent portion adapted to engage with the part to which it is to be attached, which, in the case of a hame, will be ordinarily either the lower start or the staple, ordinarily found upon har-40 ness-hames, and with which the connection of the tug or breast-strap is made. In connection with the central part, A, described, I form two opposite depending parts, B B. In each of these parts I form a slot extending 45 from one side to about the center, and these

slots are so formed as to be transverse, or so

that the closed part of either shall lie oppo-

site the open part of the other.

A ring, loop, or link is in practice to be inserted and retained in my improved safety- 50 hook, to which ring or link the tug or breast-strap above mentioned may be attached in any desired manner. To introduce this ring into the safety-hook the ring is passed in flat between the depending parts of the safety- 55 hook to a sufficient distance, or so that when turned it will enter the opposite slots. The two parts of the safety-hook may now be further compressed together, and may be then fastened by a rivet, or otherwise, if required. 60

An especial feature of advantage of my improved safety-hook, particularly when used as a hame attachment, is, that both it and the ring or loop used in connection with it may be readily attached, removed, or replaced 65 without in any way disturbing the hame start or staple.

I am aware that heretofore two overlapping hooks have been used, having their points turned in opposite directions and mounted 70 independently upon the staple of the hame. Such a construction is undesirable, in that it multiplies the number of parts, and also weakens the strength of each part. My improved safety-hook, being formed from a single plate 75 of metal, as shown, obviates those disadvantages, and furnishes a cheaper and more effective attachment than those already in use. I claim—

In a safety-hook of the character described, 80 the combination, with a single central curved portion or sleeve, A, of two hooks, B B, each depending from and connected with the said sleeve and provided with oppositely located slots or openings of the character described, 85 all substantially as herein set forth.

In testimony whereof I have hereunto subscribed my name this 4th day of January, A. D. 1886.

CLARENCE E. CARR.

Witnesses:
GEORGE W. STONE,
WILLIAM H. GRAY.