No. 663,883. Patented Dec. 18, 1900.

R. B. GREGORY.

SCAFFOLD HOOK.

(Application filed Oct. 10, 1900.)

(No Model.)

Fig. 1.

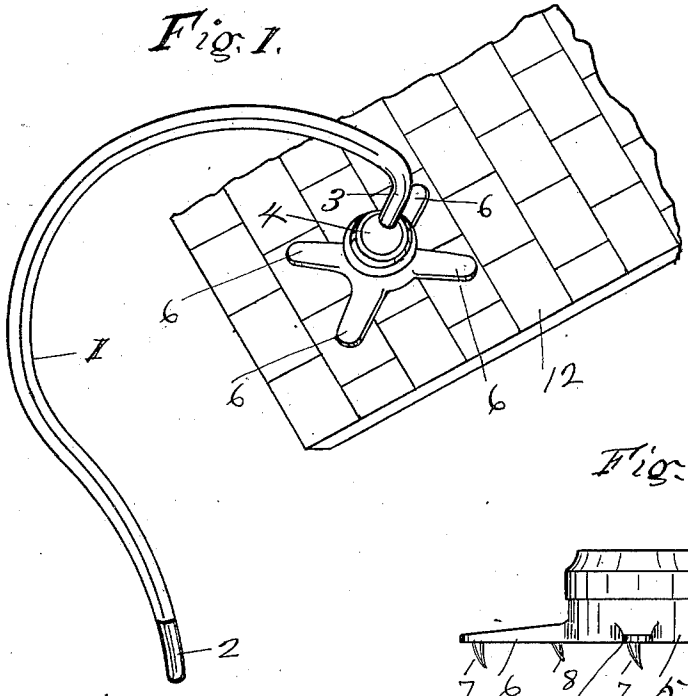


Fig. 6.

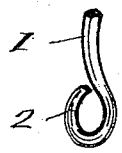


Fig. 2.

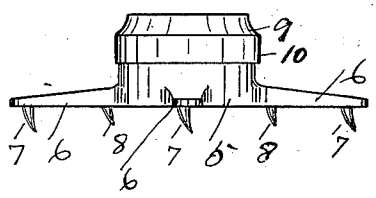


Fig. 3.

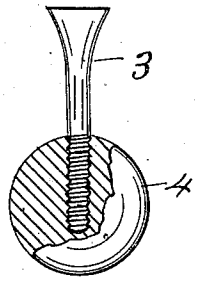


Fig. 4.

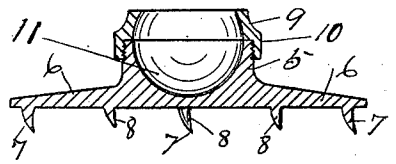
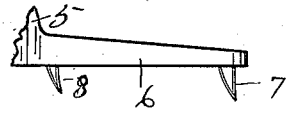


Fig. 5.



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UNITED STATES PATENT OFFICE.

ROBERT B. GREGORY, OF DECATUR, INDIANA.

SCAFFOLD-HOOK.

SPECIFICATION forming part of Letters Patent No. 663,883, dated December 18, 1900.

Application filed October 10, 1900. Serial No. 32,564. (No model.)

To all whom it may concern:

Be it known that I, ROBERT B. GREGORY, a citizen of the United States, residing at Decatur, in the county of Adams, in the State of Indiana, have invented certain new and useful Improvements in Scaffold-Hooks; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in scaffold-hooks, specially designed and adapted for use by house-painters.

The object of my invention is to provide an improved scaffold-hook for house-painters' use so constructed and arranged as to securely grapple the roof without injury to the shingles, and also adapted for use as a gutter-hook without injury to the gutter, and also adapted for a free swinging movement in either direction when in use by a ball-and-socket bearing.

My invention consists of a curved hanger-hook of proper dimensions, having an eye on one end for the block-and-tackle rope and having upon its other end a fixed ball, and a grappling-plate provided upon its lower face with a series of holding-teeth, and having upon its upper face a socket for the said ball and provided with an annular detachable cap adapted to secure said ball in its socket.

The principal novel feature of my improvement resides in the means for securing the hook to the roof in such a manner as to afford it a free swinging movement without interfering with its hold upon the roof.

Similar reference-numerals indicate like parts throughout the several views of the accompanying drawings, in which—

Figure 1 is a perspective view of my invention in position upon a roof, showing the relative arrangement of its operative parts. Fig. 2 is a side view of the two-part socketed grappling-plate. Fig. 3 is a detail of the ball, broken away in part, showing the preferred manner of securing it to the hook. Fig. 4 is a vertical central section of Fig. 2. Fig. 5 is an enlarged detail of one claw of the grappling-plate, showing the different-sized teeth thereon. Fig. 6 is a detail of the eye on the lower end of the said hook.

All parts of my improvement are made of suitable metal, preferably of malleable iron.

Referring now to Fig. 1, the scaffold-hook 1 is curved, as shown, so that in use the upper portion thereof will be in substantially a horizontal position, while the lower portion will be approximately vertical. The lower extremity of said hook is provided with a proper eye 2, in which the block and tackle, which supports the scaffold in a well-understood manner, is secured. The upper extremity of the said hook is provided with a straightened pendent portion 3, whose outer end is preferably screw-threaded to rigidly secure a ball 4 thereon of proper size and material. This ball 4 may of course be secured in position on the said end 3 in any suitable manner. The two-part gripping-plate in which the said ball 4 forms a bearing consists of a plate 5, having a plurality of radiating arms or claws 6, having upon their lower face a plurality of sharpened teeth 7 and 8, preferably two teeth to each claw. These teeth are slightly curved or inclined all in the same direction to increase their holding power and are of slightly different lengths, the outer teeth 7 being somewhat longer than the inner teeth 8. The central portion of this plate is cylindrical, with its upper portion externally screw-threaded and provided with an approximately semispherical socket 11, adapted to receive and loosely contain the lower portion of the said ball 4, which is then secured in position by the annular cap 9, having an internally-screw-threaded flange 10, adapted to fit the said screw-threaded portion of the said plate 5. The opening in the said cap 9 is of course less than the diameter of the ball 4 to secure the same in position. This cap must obviously be placed in position by first slipping it on the hook 1 over the eye 2.

In manufacturing my improvement the upper end portion 3 of the hook 1 can be made integral therewith or can be made in a separate piece, as shown in Fig. 3, and then welded to the upper end of hook 1, if desired.

The manner of employing my invention thus described is obvious, and briefly stated is as follows: The operator places the said gripping-plate in the desired position on the

roof 12, with the teeth 7 and 8 pointing downwardly, whereby the greater the weight upon the hook 1 the more firmly will the said teeth embed themselves in the said roof. As the ball 4 turns freely in the socket 11, the hook 1 can be swung freely in any desired position to the limit of its movement without releasing the said gripping-plate and without material injury to the shingles.

My invention is thus of simple and economical construction, convenient, efficient, and reliable in use.

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

1. A scaffold-hook curved as shown, and provided upon its upper end with a ball adapted for a loose bearing in a socketed gripping-plate, in combination with a gripping-plate provided with radial arms or claws having a series of teeth upon their lower face, the said plate having a removable annular cap adapted to firmly secure the said ball in its socket.

2. The combination in a scaffold-hook of a curved hook from which the scaffold is supported having upon its upper end a fixed pendent ball; and a gripping-plate provided upon its lower face with a plurality of holding-teeth, having upon its upper face a socket adapted to loosely receive the said ball, and provided with an annular detachable cap adapted to secure the said ball in its said socket.

3. A scaffold-hook consisting of a curved arm provided upon its upper end with a fixed ball, and a two-part gripping-plate having upon its upper face a socket for the said ball, and having upon its lower face a series of holding-teeth, and provided with a detachable annular cap adapted to secure the said ball in position.

4. In a scaffold-hook, a gripping-plate consisting of a base-plate having a series of radial arms or claws provided upon their lower face with a series of holding-teeth, and provided upon its upper face with a socket for the purpose specified, and an annular cap adapted to tightly but detachably fit the upper face of said plate, the opening in said cap being contracted as shown for the purpose described.

Signed by me at Decatur, Adams county, State of Indiana, this 3d day of October, A. D. 1900.

ROBERT B. GREGORY.

Witnesses:

R. H. GALBRETH,

A. C. GREGORY.