(No Model.)

J. F. MANAHAN.

LADDER HOOK.

No. 298,597. Patented May 13, 1884.

Fig. 1.

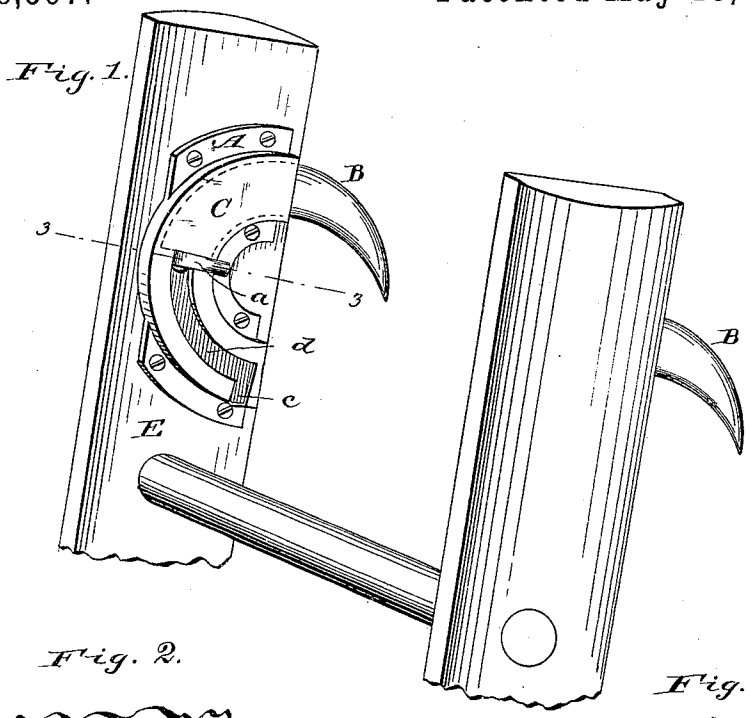


Fig. 2.

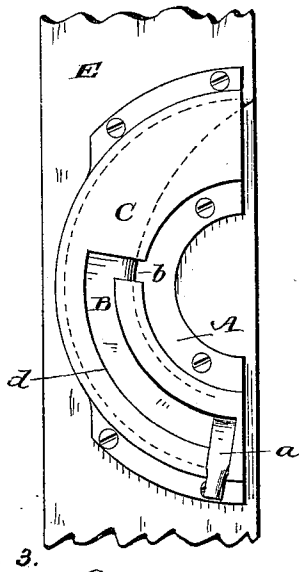


Fig. 4.

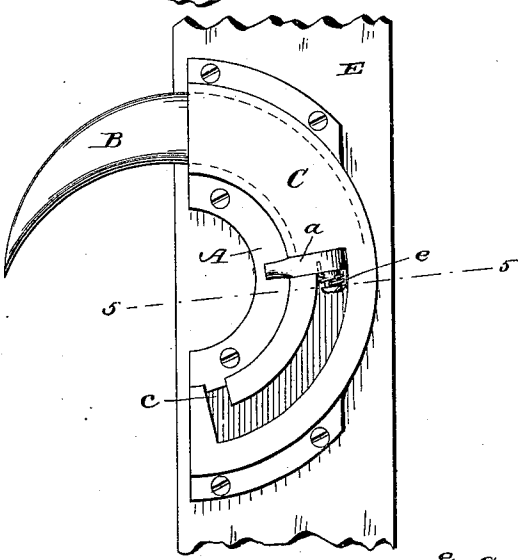


Fig. 3.

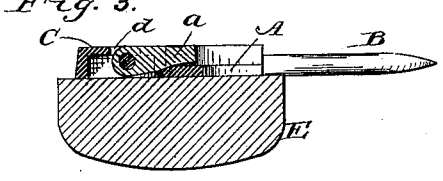
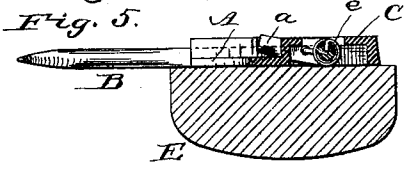


Fig. 5.



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UNITED STATES PATENT OFFICE.

JOHN F. MANAHAN, OF LOWELL, MASSACHUSETTS.

LADDER-HOOK.

SPECIFICATION forming part of Letters Patent No. 298,597, dated May 13, 1884.

Application filed April 11, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. MANAHAN, of Lowell, Middlesex county, Massachusetts, have invented certain new and useful Improvements in Ladder-Hooks, of which the following is a specification.

My invention has reference to hooks adapted to be applied to the ends of ladders to take a hold on the objects to which the ladders may reach. In Letters Patent No. 285,637, of September 25, 1883, I have shown a pivoted ladder-hook for this purpose. Under my present invention the hook is not pivoted, but is fitted to a socket or to guides, to which it is held by a suitable catch or lock, which may be spring-controlled or not, as desired. The hook can be thus combined with a socket or equivalent support in a variety of ways. What is essential is that it should be held in place by a lock or catch, which, whenever need be, can be moved so as to release the hook, in order to allow it to be brought from its advanced or open position to its closed position—that is to say, a position in which it will be substantially within the compass of the ladder structure, so as to be out of the way.

One convenient way of carrying my invention into effect is to provide the base-plate of the device with a socket curved in the arc of a circle, and to place the hook (made on a corresponding curve) in this socket under such an arrangement that it can slide therein so as to be projected or retracted, according to the direction in which it is moved. With the socket and sliding hook I combine means, which may be spring-controlled or not, as desired, for locking or securing the hook in either position. Such an arrangement is represented in the accompanying drawings, in which—

Figure 1 is a perspective view of the upper end of a ladder provided with hooks embodying my improvement. In this figure the hooks are shown projected. Fig. 2 is a plan of one of the hooks in retracted position. Fig. 3 is a section on line 3 3, Fig. 1. Fig. 4 is a plan of one of the hooks projected; and Fig. 5 is a section on line 5 5, Fig. 4.

The hook consists of two parts, the base-plate A and the hook proper, B. On the face of the plate is formed a socket, C, in which the hook is held. This socket is, in the present instance, open on its under side, and is closed on this side by the ladder-piece E, to which it is applied. It can, however, be closed by continuing the body of the base-plate across it, if desired. The socket is curved on the arc of a circle, and the hook proper, B, which fits and is adapted to slide in it, is correspondingly curved. The locking device here shown in illustration of my invention consists of a hinged pin, *a*, hung on the rear end of the hook, and adapted to drop into one or the other of the notches *b c* in the base-plate or socket. That portion of the socket between the notches is slotted on its outer face, as indicated at *d*, to permit the passage of the lifted locking-pin when the hook is moved from one position to the other. When the hook is in its open position, the pin falls into the front notch, *b*, and when it is retracted the pin enters the rear notch, *c*, thus locking the hook in position. The locking-pin may, as shown in Fig. 4, be spring-controlled, the spring *e* serving to press it in a direction to cause it to engage the notches.

Having described the preferred way of carrying my improvement in ladder-hooks into practical effect, I desire it to be understood that I do not restrict myself to the particular construction and arrangement of parts herein shown in illustration of my invention.

What I claim as new and of my own invention is—

1. A ladder-hook comprising a socketed base-plate, a hook proper movable in said socket, and a lock or catch by which said hook is secured in place in said socket, substantially as hereinbefore set forth.

2. The combination of a socketed base-plate, a hook proper arranged to slide in said socket so as to be projected or retracted, as desired, and a lock or catch for securing it in either position, substantially as hereinbefore set forth.

3. The base-plate and curved socket thereon, in combination with the correspondingly-curved and sliding hook proper, and a lock or catch for securing said hook in position in the socket, substantially as hereinbefore set forth.

In testimony whereof I have hereunto set my hand this 9th day of April, 1884.

JOHN F. MANAHAN.

Witnesses:
GEO. H. STEVENS,
JOHN H. OATES.