No. 695,197. Patented Mar. 11, 1902.

E. DILLINGHAM.

ATTACHMENT FOR HANDLES OF BROOMS, HOES, OR LIKE ARTICLES.

(Application filed Sept. 27, 1901.)

(No Model.)

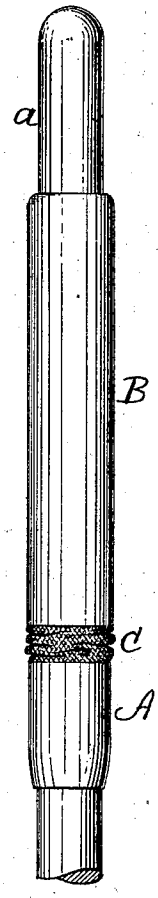


Fig. 2.

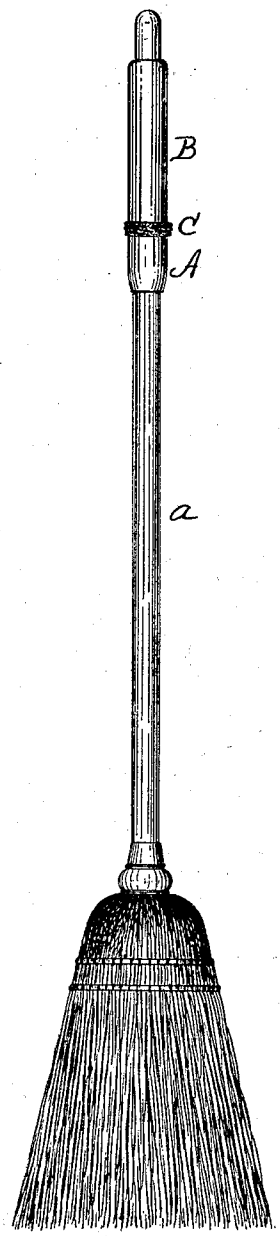


Fig. 1.

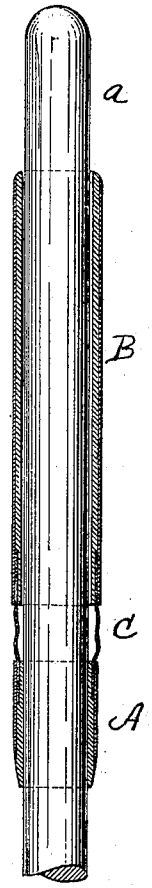


Fig. 3.

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UNITED STATES PATENT OFFICE.

EDWARD DILLINGHAM, OF CHELSEA, MASSACHUSETTS.

ATTACHMENT FOR HANDLES OF BROOMS, HOES, OR LIKE ARTICLES.

SPECIFICATION forming part of Letters Patent No. 695,197, dated March 11, 1902.

Application filed September 27, 1901. Serial No. 76,785. (No model.)

To all whom it may concern:

Be it known that I, EDWARD DILLINGHAM, a citizen of the United States, residing in Chelsea, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Handles for Brooms, Hoes, or Similar Implements, of which the following is a specification.

My invention relates especially, but not necessarily exclusively, to broom-handles, and particularly to that class of broom-handles which are provided with attachments having for their principal objects to lessen the labor of sweeping, to diminish the strain upon the arms and shoulders of the operator, and to prevent discomfort and injury to the hand which is held uppermost on the handle, such injuries arising from the friction produced by moving and rubbing the palm over the surface of the handle during the process of sweeping.

My invention or improvement comprises a preferably short tube encircling and rigidly secured to the handle, a tube a trifle larger in diameter placed loosely or slidingly on the handle above the short tube and made long enough to accommodate the hand of the operator which is uppermost and of sufficient diameter to slip freely up and down on the handle, and a flexible and collapsible connection, preferably tubular, secured at its opposite ends to the adjacent ends of the shorter stationary and longer movable tubes, such connection allowing a limited play of the longer and sliding tube on and longitudinally with the handle between the shorter tube and the upper end of the broom-handle.

The nature of the invention is fully described in detail below and illustrated in the accompanying drawings, in which—

Figure 1 is a view in elevation of a broom-handle embodying or provided with my invention. Fig. 2 is an enlarged view in elevation of the upper portion of the broom-handle. Fig. 3 is a similar view of the handle, showing the attachment in vertical section.

In Figs. 1 and 2 the sliding tube is at about its lowest point, and in Fig. 3 it is at nearly its highest point.

Similar letters of reference indicate corresponding parts.

a represents a broom-handle, the main portion of which is constructed as usual.

A is a tube or collar made of stiff paper or other suitable material and cemented or in any other practicable manner rigidly and immovably secured to the handle not far from the upper end thereof.

B is a tube or sleeve constructed of suitable stiff material and large enough in diameter to slip freely up and down on the handle above the tube A. Connecting the tubes A and B is a flexible or collapsible tube made of fabric or equivalent material and secured firmly by cement or other suitable means at its opposite ends to the inner ends of the movable and stationary tubes B A. The stationary tube A is made, preferably, shorter than the movable tube B, as its principal function is to serve as an anchor to secure the tube B to the handle, while allowing it a certain amount of play longitudinally thereon. The tube B is long enough to easily accommodate the hand of the operator.

In practice the operator grasps the broom-handle with both hands, one hand being applied to the handle proper below the stationary tube A and the other being clasped around the sliding tube B. As the broom is operated the sliding tube moves up and down relatively with the handle, reciprocating between the stationary tube and the upper end of the handle. More specifically, as the broom is extended obliquely with the floor the tube B rises relatively into the position indicated in Fig. 3, while as the broom assumes a vertical position the handle rises in the tube B and said tube drops relatively into the position indicated in Figs. 1 and 2. Thus it will be seen that the upper hand of the operator does not come into contact with the handle proper, and hence does not rub over and on it, and, moreover, this hand has less movement than the handle by practically the length of the tubular connection when extended, the effect being to lessen the strain on the arms and shoulders.

The connection C should be made of sufficiently thin and flexible material to allow as nearly as possible a complete collapse in order that the throw or reciprocation of the sliding tube may be sufficient. It should not,

however, be so thin as to allow any material rotation of the tube B, as it is intended that the movement of this tube should be wholly longitudinal with the handle.

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

1. In combination with the handle of a broom or similar implement, a stationary tube or collar encircling and rigidly secured to said handle not far from its upper end; a movable tube or sleeve encircling said handle between the stationary tube and the upper end of the handle; and a flexible or collapsible connection between said tubes and rigidly secured at its opposite ends to the stationary and movable tubes, whereby the movable tube is allowed to slide or play longitudinally on the handle between the end thereof and the stationary tube while being anchored to and having its movement limited by the latter, substantially as set forth.

2. In combination with the handle of a broom or similar implement, a stationary tube or collar encircling and rigidly secured to said handle not far from its upper end; a movable tube or sleeve encircling said handle between the stationary tube and the upper end of the handle; and a flexible or collapsible tube between said tubes and rigidly secured at its opposite ends to the stationary and movable tubes, whereby the movable tube is allowed to slide or play longitudinally on the handle between the end thereof and the stationary tube while being anchored to and having its movement limited by the latter, substantially as described.

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

EDWARD DILLINGHAM.

Witnesses:
A. N. BONNEY,
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