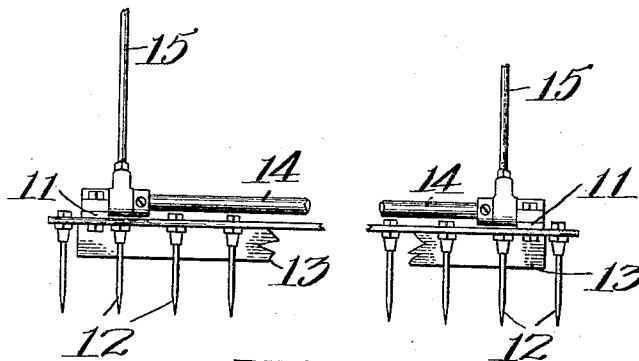
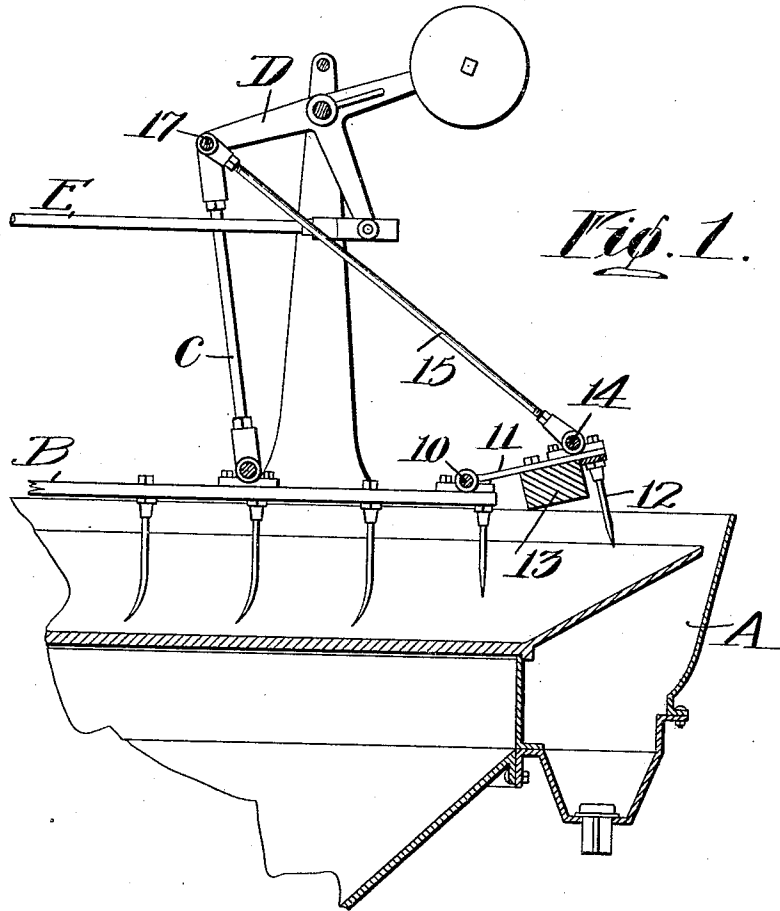


F. G. SARGENT.
CLAW ATTACHMENT FOR WASHING MACHINE HARROWS.
APPLICATION FILED NOV. 16, 1912.

1,054,036.

Patented Feb. 25, 1913.



Witnesses:

C. F. Mission
G. J. Hartnett

Fig. 2.

Inventor:
F. G. Sargent.
by Attorneys

Southgate & Southgate

UNITED STATES PATENT OFFICE.

FREDERICK G. SARGENT, OF WESTFORD, MASSACHUSETTS, ASSIGNOR TO C. G. SARGENT'S SONS CORPORATION, OF GRANITEVILLE, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

CLAW ATTACHMENT FOR WASHING-MACHINE HARROWS.

1,054,036.

Specification of Letters Patent.

Patented Feb. 25, 1913.

Application filed November 16, 1912. Serial No. 731,797.

To all whom it may concern:

Be it known that I, FREDERICK G. SARGENT, a citizen of the United States, residing at Westford, in the county of Middlesex and State of Massachusetts, have invented a new and useful Claw Attachment for Washing-Machine Harrows, of which the following is a specification.

This invention relates to a wool washing machine of the type in which a harrow is reciprocated in the bowl for the purpose of feeding the wool therealong. It is frequently the case that the wool is fed into the feed end of the bowl in a very open or loose condition, particularly when it is run through an opener or self-feeder. In such cases the usual harrow is apt to carry the wool along the bowl in bunches so that it is not likely to be washed evenly and thoroughly.

The principal object of this invention is to provide a simple and compact construction at the feed end of the harrow, movable relatively to the harrow, for engaging the stock at the feed end of the bowl, and assisting in feeding it forward into a position to be engaged by the harrow as it performs its cycle of operations so as to feed the wool forward more evenly.

Further objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawings, in which—

Figure 1 is a longitudinal central sectional view of the feed end of a wool washing bowl with a preferred embodiment of this invention applied thereto, and Fig. 2 is an end elevation of the attachment.

The invention is shown as applied to a type of wool washing bowl A which is now on the market. In this bowl is a harrow B which is connected by a plurality of links C with counter-weighted levers D which are operated by links E so as to give the rack a circular or elliptical reciprocating motion as is now well understood in this art. The present invention involves the application to this or any type of reciprocatory harrow of an attachment at the feed end thereof for more thoroughly and evenly feeding the wool from the place in which it is deposited in the bowl into a position to be engaged by the harrow as it operates. For this purpose the harrow is shown as provided with

a transverse rod 10 on which is pivoted a frame 11. This frame is provided with teeth 12 at the outer end thereof constituting claws for the purpose of clawing the wool down into the bowl. On the under side of this frame is shown a ducker 13 in the form of a transverse bar which on striking the wool forces it down under the water so as to thoroughly wet it. For the purpose of operating this claw it is provided with a transverse rod 14 to which are pivoted lower ends of two links 15 which are connected to pivots 17 by which the links C and D are connected. Now in operation the harrow passes through its usual cycle and as it moves it will be obvious that when it gets back to the extreme position in which it is about to move down and forward from the feed end of the bowl the pivot 17 will be at its greatest distance from the end of the harrow, and consequently the claw will be raised. Now as the harrow passes forward this distance decreases and the claw is gradually lowered so that the teeth can dig into the wool and the ducker can press the wool in front of the teeth down under the liquor. As the harrow moves up out of the liquor at the forward end of its stroke it carries the claw with it in about the same relative position and then raises it relatively to the harrow again as the harrow moves back to the opposite end of the stroke so that the harrow will be ready to again enter the wool and manipulate it.

It will be understood of course that many other mechanisms can be employed for the purpose of operating the claw and that other features of construction can be changed within the scope of the invention as expressed in the claims. I do not wish, therefore, to be limited in these respects, but

What I do claim is:—

1. The combination with a harrow for a wool washing machine, of a claw mounted on the feed end thereof, and movable up and down relatively to the harrow.

2. In a wool washing machine, the combination with a reciprocatory harrow, and means for supporting it, of a claw pivotally mounted on the feed end thereof, and means connected with said supporting means for swinging the claw on its pivot.

3. In a wool washing machine, the combination with a reciprocatory harrow, of a

- counter-weighted lever, a link depending from the lever for supporting the harrow, means for swinging the lever to raise and lower the link and harrow, a link connected
5 with said lever and the first named link and extending beyond the feed end of the harrow, and a claw movably mounted on the feed end of the harrow and connected with said link.
- 10 4. In a wool washing machine, the combination with a reciprocatory harrow, of a transverse rod mounted at the feed end thereof, a frame extending beyond the feed end of the harrow from said rod and pivoted
15 thereto, teeth depending from said frame, and means connected with said frame for swinging it on the rod as a pivot.
5. In a wool washing machine, the combination of a harrow, a frame connected therewith and extending beyond the feed end
20 thereof having teeth projecting downwardly therefrom, means for moving said frame relatively to the harrow, and a ducker thereon.
- In testimony whereof I have hereunto set my hand, in the presence of two subscribing
25 witnesses.
- FREDERICK G. SARGENT.
- Witnesses:
CHAS. G. SARGENT,
W. F. SARGENT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."