(No Model.)

F. G. & A. C. SARGENT.

WOOL WASHER.

No. 266,900. Patented Oct. 31, 1882.

Fig. 2.

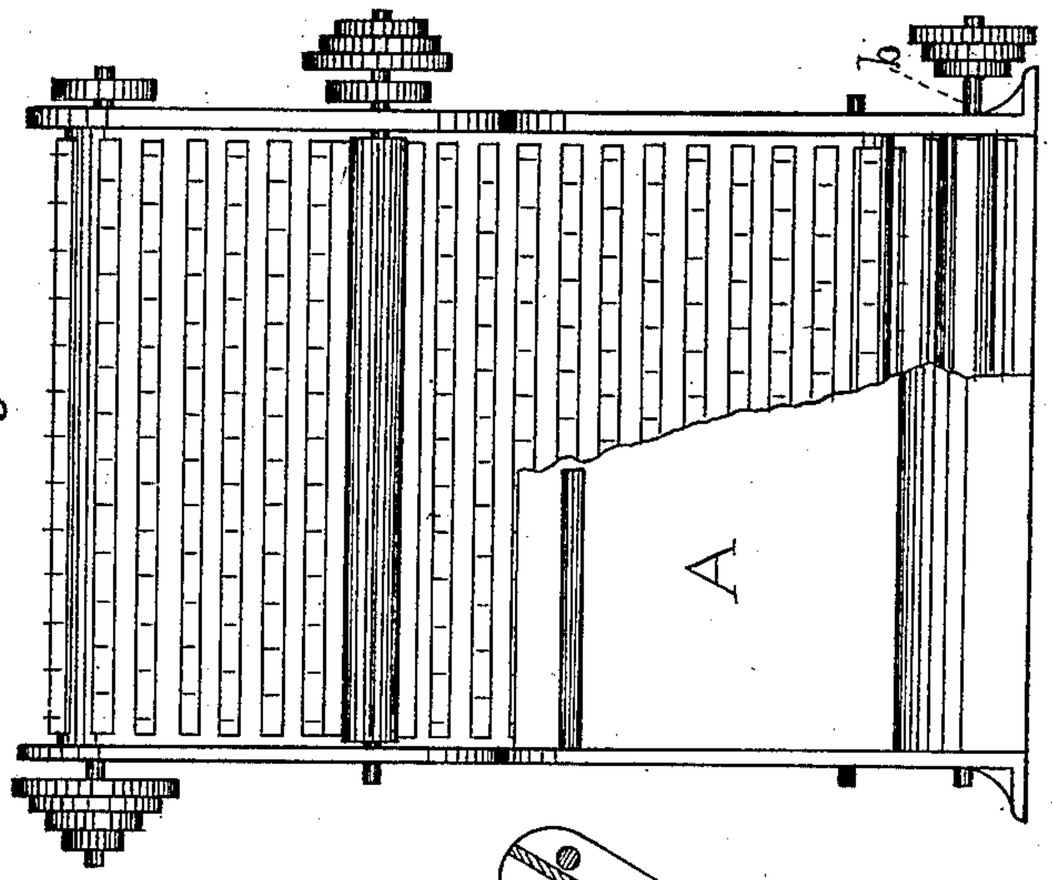
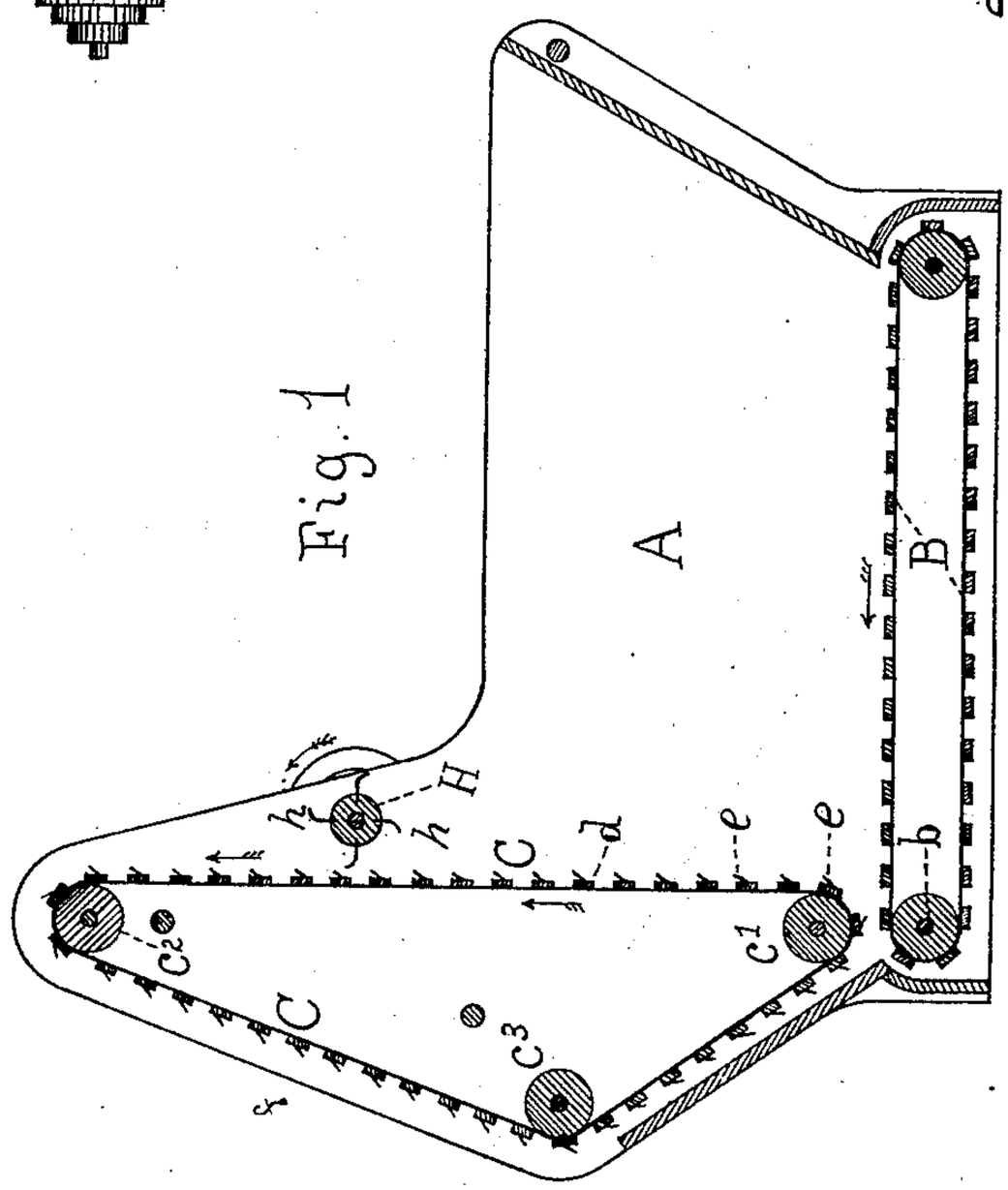


Fig. 1



Witnesses
F. V. Stentiford.
E. L. Rice.

Inventor,
F. G. Sargent.
A. C. Sargent.
by their Attys
Dupee & Rice.

UNITED STATES PATENT OFFICE.

FREDERICK G. SARGENT AND ALLAN C. SARGENT, OF GRANITEVILLE, MASS.

WOOL-WASHER.

SPECIFICATION forming part of Letters Patent No. 266,900, dated October 31, 1882.

Application filed May 23, 1882. (No model.)

To all whom it may concern:

Be it known that we, FREDERICK G. SARGENT and ALLAN C. SARGENT, of Graniteville, county of Middlesex, and State of Massachusetts, have invented a new and useful Feeding Mechanism for Wool-Washers, of which the following is a specification.

Our invention relates to an automatic feeding mechanism to feed wool to washing or other machines, and its objects are to provide a mechanism which will deliver the wool supplied irregularly to it regularly to the wool-washer or other machinery designed to be fed by it, and one which will not be liable to become clogged or choked. We accomplish these objects by the mechanism illustrated by the accompanying drawings, in which—

Figure 1 is a vertical longitudinal section of one of our machines. Fig. 2 is a front elevation with a portion of the front broken away.

A is a trough or box into which the wool is thrown by the attendant.

B is an endless apron, which forms the bottom of the trough and on which the wool put into it rests. This apron is given a slow forward movement by the rotation of the shaft *b*, which carries the roll over which the apron passes.

C is an apron carried by rolls c', c^2, and c^3, which are arranged in a triangle, so that the apron will present a vertical face to the wool in the trough and an inclined side toward the machine into which the wool is discharged. This apron is provided with slats *d*, which have spurs *e* projecting in a forward direction, so that as the apron moves these spurs will hook into the wool brought toward them by the apron B and carry up small quantities on each, which as the apron passes over the upper roll will, by reason of the inclination given the spurs, be no longer held by them, but will fall freely down over the inclined side *f* of the apron, which is given such an angle of inclination that it will discharge all the wool so falling directly into the machine designed to be fed.

The roll c^2 is placed a sufficient distance from the roll c^3 to give such length to the inclined side *f* as will permit of a sufficient momentum being obtained by the wool as it falls down that side to strip off from the spurs any small locks or bunches which may be so entangled as to have too great a hold upon the slats and spurs to be overcome by their own gravity. By this means I make the machine doff itself.

The shaft H is provided with the guards *h*, which are given a backward curvature, and which serve to knock down and throw back any extraordinary masses of fiber elevated by the spurs from the trough, and thus make the apron C feed more regularly than it would otherwise. The apron C is given a movement much more rapid than the apron B, so that the wool will be presented slowly to the action of the spurs carried by the apron C, and therefore be more perfectly separated by them.

What we claim as new and of our invention is—

1. The combination of the trough A and apron B with the feeding-apron C, provided with spurs *e e*, and moving vertically upward over the roller c^2 and at an incline downward over the roller c^3, substantially as described.

2. The combination of the apron B, carrying the fiber forward to the feeding-apron C, the latter being provided with spurs *e e*, and moving vertically and at an incline over the rollers c^2 c^3 at a greater surface speed than that of the apron B, substantially as described.

F. G. SARGENT.
A. C. SARGENT.

Witnesses:
H. W. CHURCH,
W. H. A. EVANS.