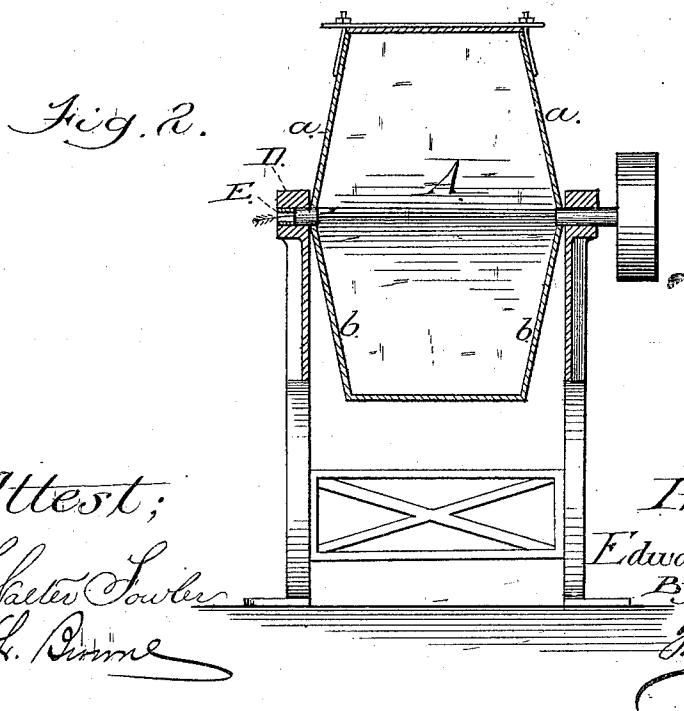
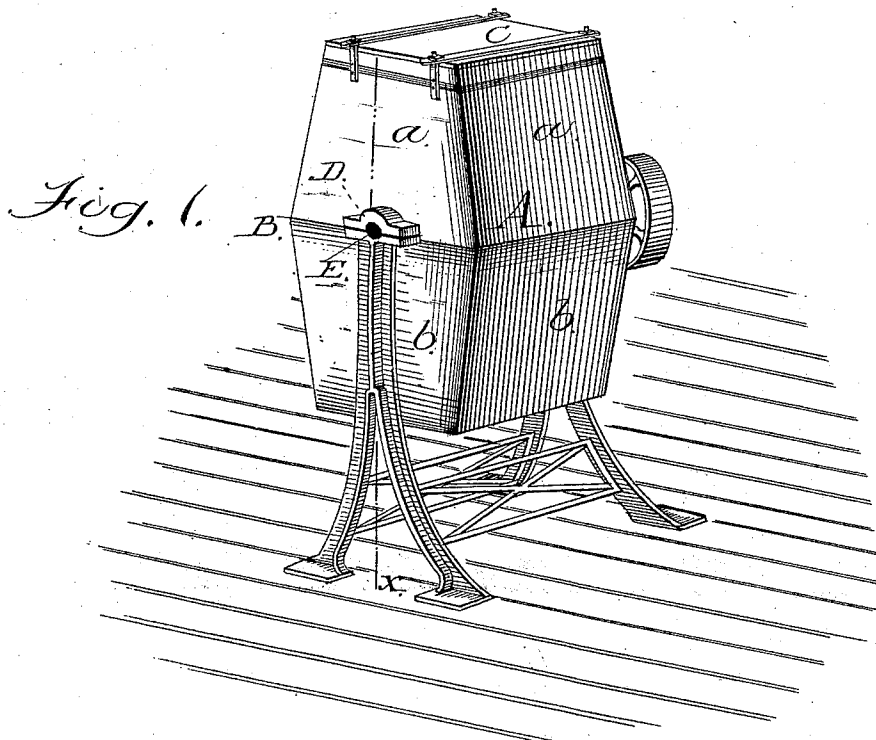


(No Model.)

E. B. HURD.
STARCHING MACHINE.

No. 285,901.

Patented Oct. 2, 1883.



Attest;
Walter Fowler
F. L. Purme

Inventor;
Edward B. Hurd
By Atty.
J. W. Smith

UNITED STATES PATENT OFFICE.

EDWARD B. HURD, OF BRIDGEPORT, CONNECTICUT.

STARCHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 285,901, dated October 2, 1883.

Application filed October 13, 1882. Renewed August 8, 1883. (No model.)

To all whom it may concern:

Be it known that I, EDWARD B. HURD, a citizen of the United States of America, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Starching-Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

10 My invention relates to machines for starching collars, cuffs, &c., and has for its object to provide such a machine in which all interior projections, known as "beaters," shall be done away with, while at the same time the result
15 obtained is more satisfactory; and with these ends in view my invention consists in the details of construction and combination of elements hereinafter fully and in detail explained, and then specifically designated by the claims.
20 In order that those skilled may more fully understand the construction and operation of my improved starching-machine, I will proceed to describe the same in detail, referring by letter to the accompanying drawings, forming
25 part of this specification, in which—

Figure 1 is a view in perspective of my improvement mounted upon a shaft, and Fig. 2 a central vertical section of the same.

Similar letters denote like parts in both figures of the drawings.

30 A is a box, largest at its central portion, B, and with its sides *a b* converging and inclined, as seen at Fig. 1, for the purpose presently explained. At the top of the box is a cover, C, which is fastened by means of bolts and nuts,
35 as will be readily understood from the drawings.

D is the shaft-bearing, and E an opening in said shaft, through which steam may be introduced into the barrel or box, if desired.

40 The operation of my improved starching-machine is as follows: Having introduced the

goods and starch within the box, the latter is turned at any desired number of revolutions per minute. As the box revolves, the goods
45 slide down the inclined sides, thereby performing the function of rubbing.

The advantage which results from using a box with inclined sides, instead of straight, is that in the latter the articles to be starched
50 collect or fall in a lump or mass at each half-revolution, while in the former they slide down the inclined sides; also, by the use of my improvement, hot starch may be used with the best results, since the starch enters the fabric
55 thoroughly and uniformly.

Prior to my invention starching-machines have been constructed in which beaters were used; but this process not only collects the articles to be starched in a mass, but it also
60 tends to wear them out. My invention is designed to accomplish the result aimed at in a thorough and more economical manner.

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

1. In a starching-machine, a revolving box whose sides converge from the horizontal plane of the axis toward the ends, whereby the starch is rubbed in as the goods slide down the
70 inclined sides, substantially as set forth.

2. The revolving box having converging sides, as shown, and provided with a removable cover, in combination with a hollow journal, whereby steam may be admitted to heat
75 the starch, substantially as set forth and described.

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

EDWARD B. HURD.

Witnesses:

W. J. HAVILAND,
JOSEPH A. JOYCE.