J. E. ACKROYD.

Apparatus for Cleansing Dyed Wool, &c.

No. 143,603. Patented Oct. 14, 1873.

Fig. 1.

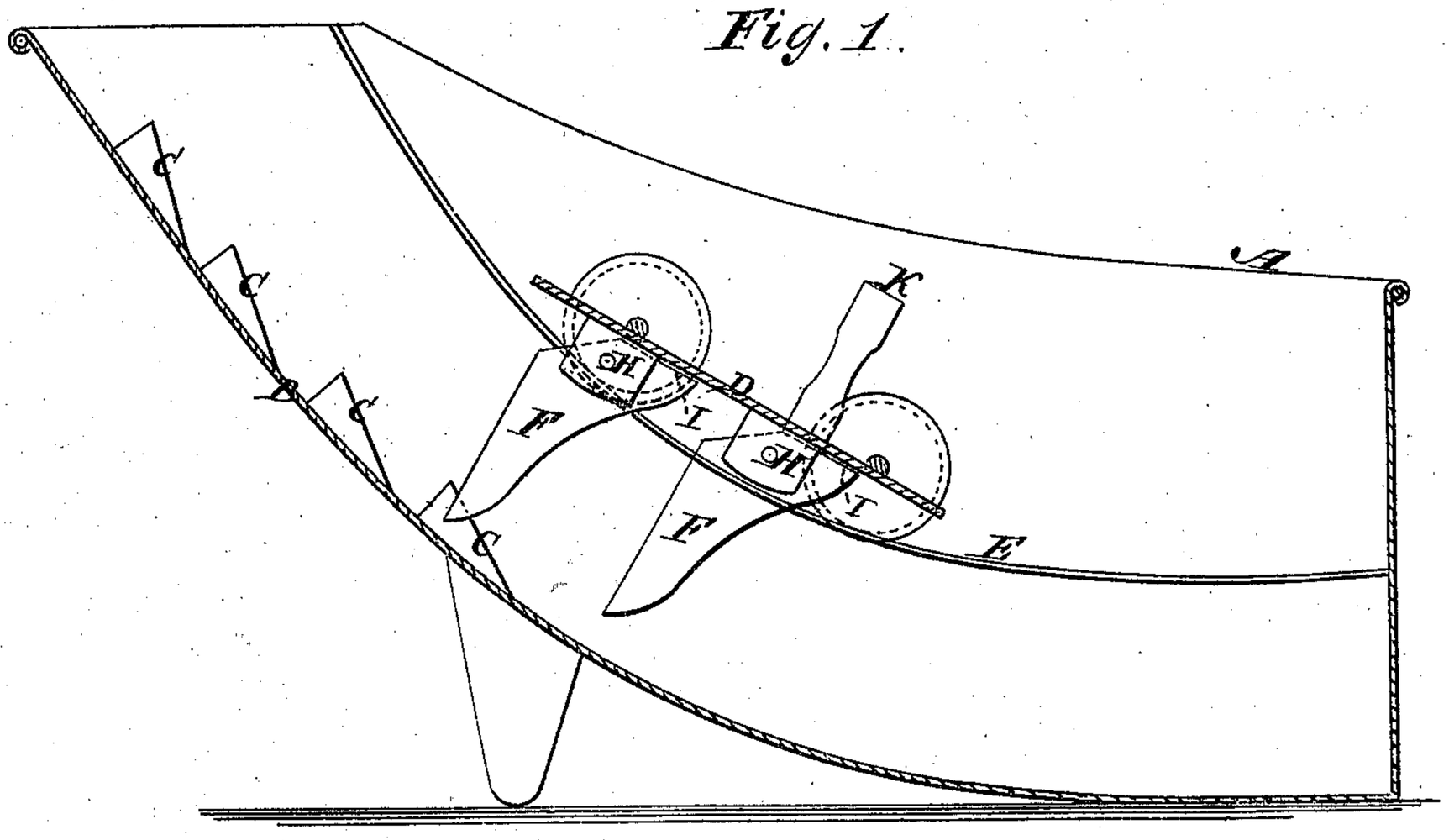
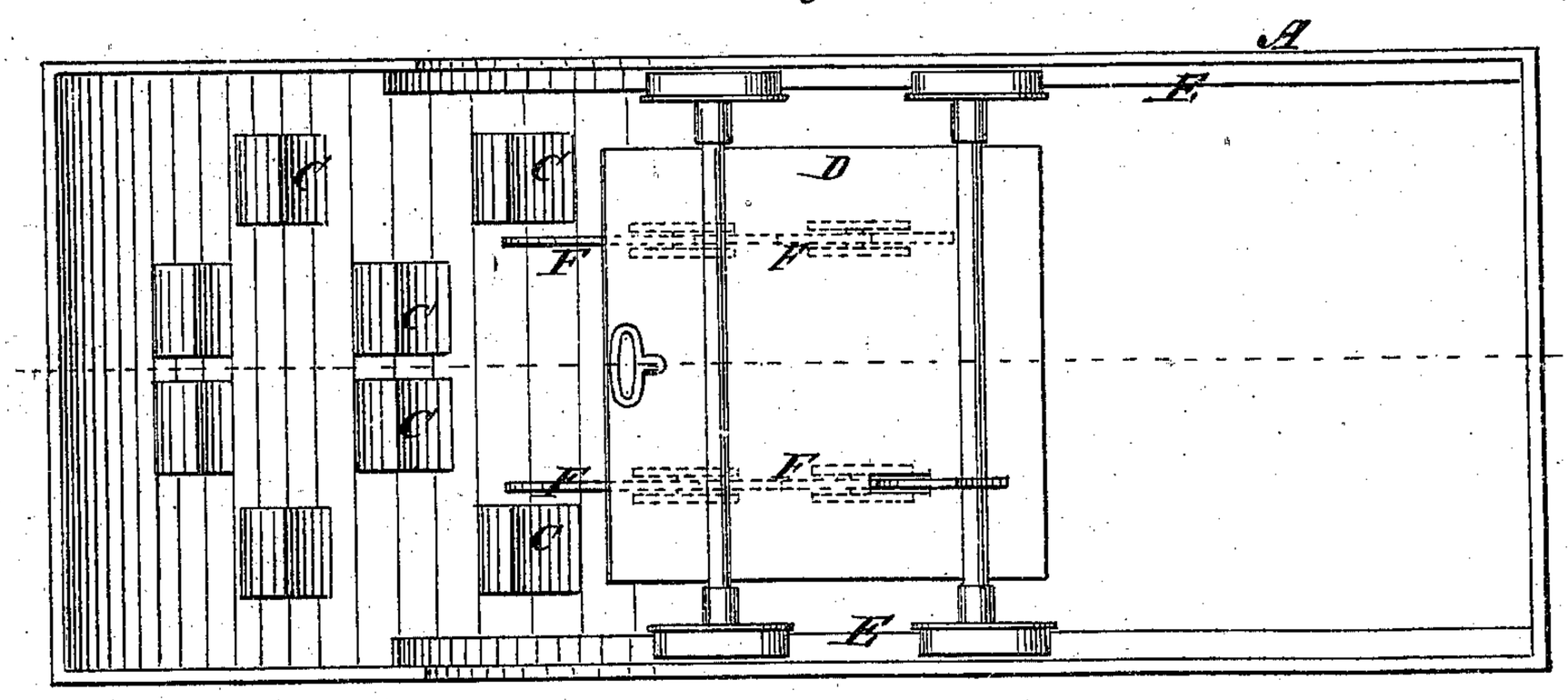


Fig. 2.



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UNITED STATES PATENT OFFICE

JAMES E. ACKROYD, OF CHESTER, PENNSYLVANIA.

IMPROVEMENT IN APPARATUS FOR CLEANSING DYED WOOL, &c.

Specification forming part of Letters Patent No. **143,603**, dated October 14, 1873; application filed August 4, 1873.

To all whom it may concern:

Be it known that I, JAMES E. ACKROYD, of Chester, in the county of Delaware and State of Pennsylvania, have invented a new and Improved Apparatus for Cleansing Dyed Wool, also for Scouring Wool, of which the following is a specification:

My invention consists of a tank or trough attached to a tank for holding the wool and the scouring and cleansing mixture, having one side curved from bottom to top, and provided on the inside with fixed blocks or wire-netting, above which there is a curved track, on which a carriage having blades or arms projecting down to the curved bottoms arranged to run forward and backward to force the wool up the sides of the tank and over the blocks, the said blocks being inclined on the sides against which the wool is forced, and the arms of the truck being hinged so as to swing up and pass over any portion of the wool that may be under the points in going back, so as not to tear and injure the fiber.

Instead of a truck rolling on wheels for carrying the blades, one sliding in grooves or on ways on the sides of the tank may be used.

Figure 1 is a longitudinal sectional elevation of my improved apparatus for cleansing dyed wool, also for scouring wool, taken on the line *x x* of Fig. 2. Fig. 2 is a plan view.

Similar letters of reference indicate corresponding parts.

A represents the scouring-tank; B, the side, which is curved from the bottom to top to answer for the purpose of holding the wool while the carriage moves backward. C represents the blocks on the inner surface of said side. D represents the truck; E, the curved way above the side B, on which the truck runs; and F, the blades projecting from the truck down to the curved side of the tank. The studs C on this curved side are inclined on the top, so that the wool forced against them in the upward direction will rise over them without catching. The upper sides of the blocks are at right angles to the side B, so as to prevent the wool from sliding back, and the blades F are pivoted to the truck at H to swing when going back, and prevent tearing and pulling the fiber. They have a shoulder, I, which holds them to the work when going forward. The blades may have a handle, K, extending upward above the truck, to which a motion can be attached, if necessary, to work them.

The apparatus is designed more particularly for scouring and cleansing dyed wool; but it is also applicable to any other requiring to be cleaned.

The most essential advantage is the quality of the apparatus to manipulate the wool without tearing and breaking the fiber.

The truck will in some cases be worked by hand, but for factory purposes it will be geared and worked by power.

For slow motion I will use the truck on wheels to carry the blades; but for quick-motion machines I prefer to dispense with the wheels and arrange the truck to slide on ways.

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

The combination of a rolling or sliding truck or trucks, D, and blades F, with a tank having a curved side, B, with studs or blocks C or equivalent wire-netting on its inner surface, substantially as specified.

JAMES E. ACKROYD.

Witnesses:

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