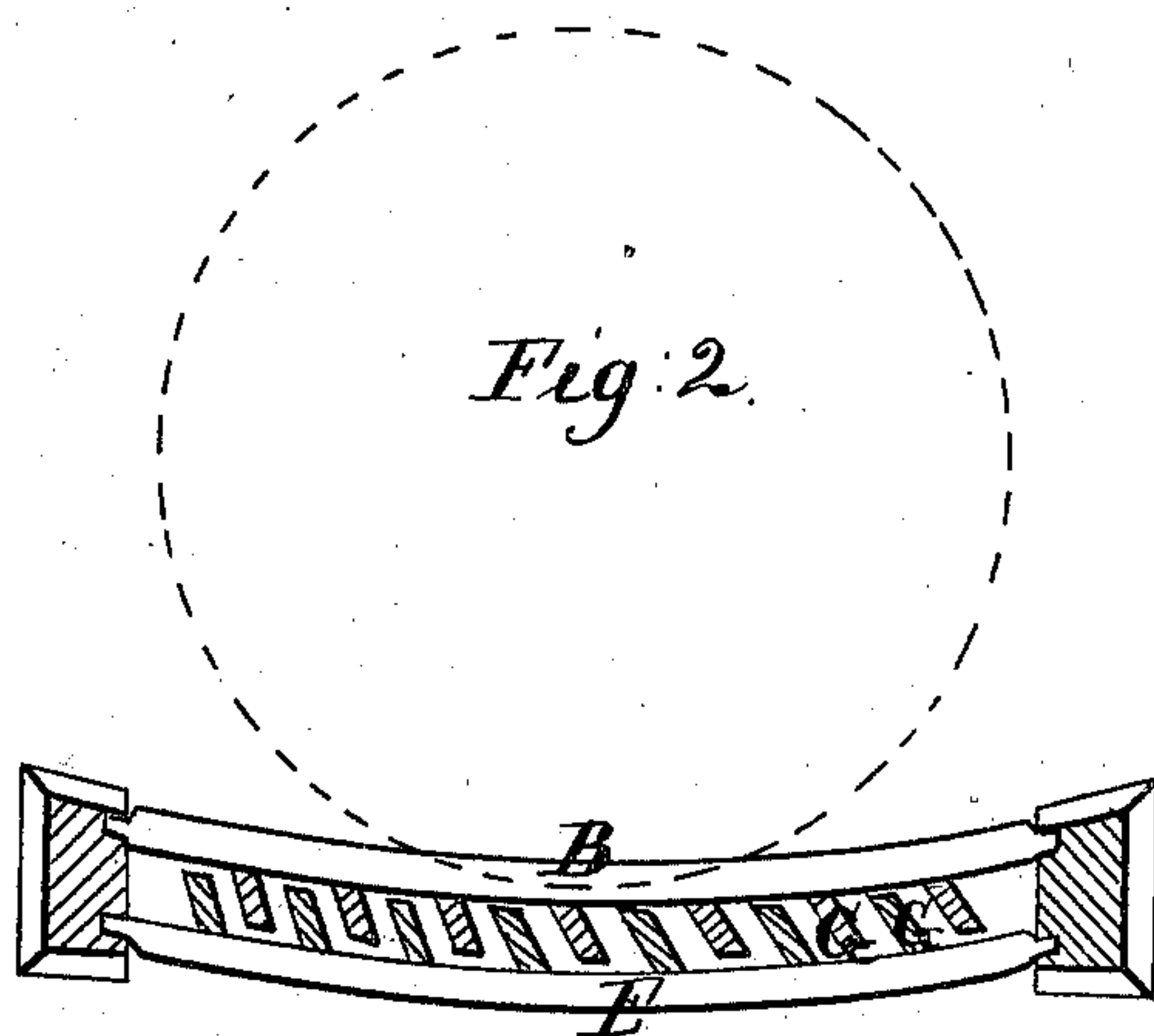
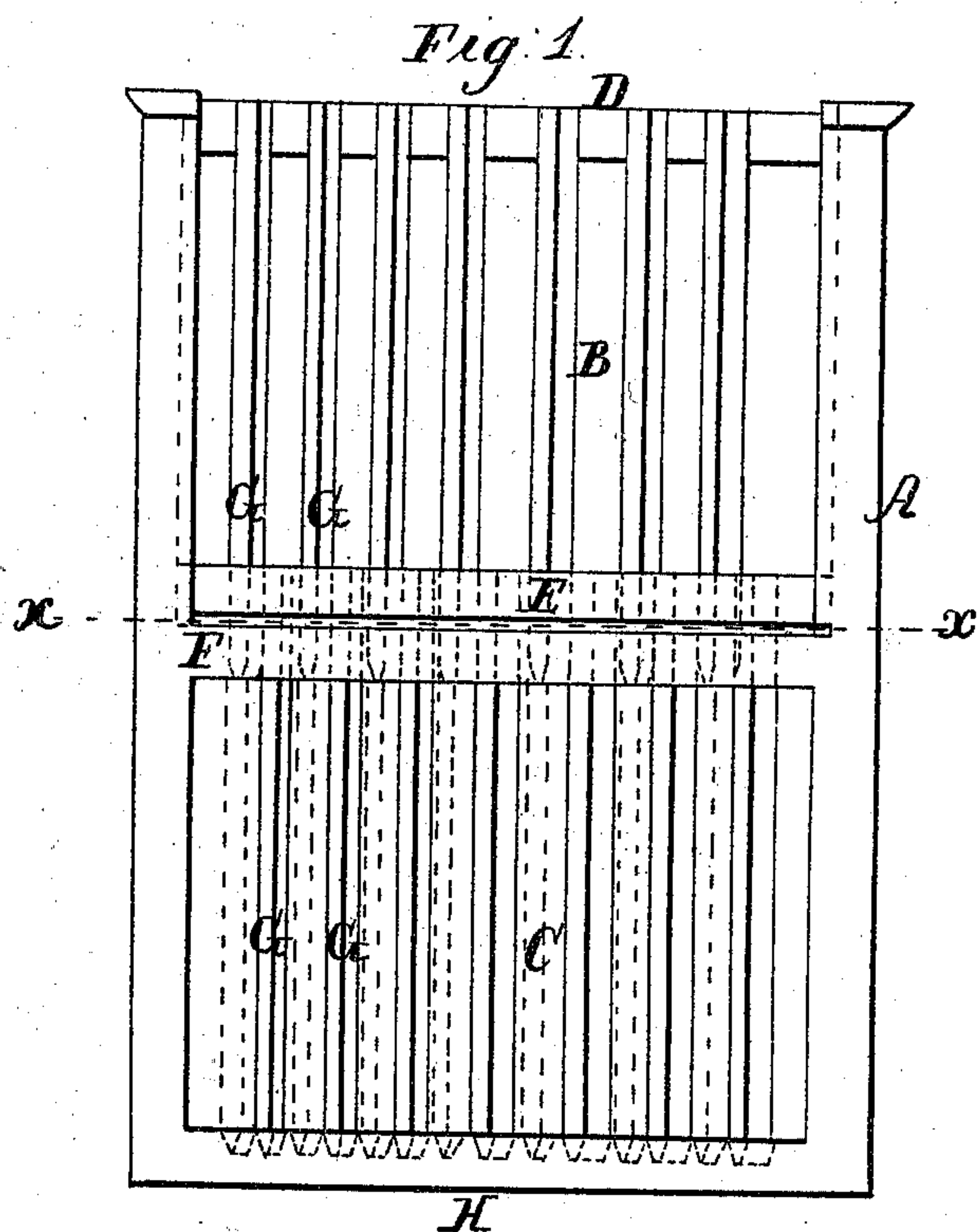


J. Cate.
Wool Picker.

N^o 94,999.

Patented Sept. 21, 1869.



Witnesses
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United States Patent Office.

JAMES CATE, OF RUMSEY, KENTUCKY.

Letters Patent No. 94,999, dated September 21, 1869.

IMPROVEMENT IN WOOL-PICKING MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JAMES CATE, of Rumsey, in the county of McLean, and State of Kentucky, have invented a new and useful Improvement in Machines for Picking Wool; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings forming part of this specification.

This invention relates to a new and useful improvement in machines for picking and cleaning wool, whereby the operation is greatly facilitated, and it consists in the peculiar construction and arrangement of the bed or concave of the machine, as will be hereinafter more fully described.

In the accompanying sheet of drawings—

Figure 1 represents a top view of the bed.

Figure 2 is a cross-section of fig. 1 through the line *x x*.

Similar letters of reference indicate corresponding parts.

This bed is formed of an outside frame, A, (which is twice the length of the cylinder,) and two series of bars, B and C. Each set of bars is attached to a head-piece of its own. The bars of B are attached to the head-piece D, and the bars C are attached to the head-piece E.

F is a cross-bar in the frame A, through which the bars of each set pass or slide in slots or mortises, which they closely fit, but not so tightly but that they can slide freely therein, back and forth. The working bed of the picker is composed of both sets of bars, arranged as seen in fig. 2, each alternate bar belonging to the different sets.

The head-pieces of these sets slide in grooves in the extended portion of the frame, as seen in fig. 2, the bars being supported in their mortises in the cross-piece F of the frame.

In picking and cleaning the wool, the concaves of the ordinary picker soon become filled up with the grease and filth which is detached from the wool in the process of picking.

I form my concave as described, in two sections, and

it will be seen that they are arranged so that either series or set of bars may be drawn back into the extended portion of the frame, and through the piece F. In so drawing the section B out, the bars in passing through the slots or mortises in F, will be effectually scraped and cleaned of all filth and trash which has adhered to them, which filth and foreign matter will drop down beneath the machine. When B has been thus cleaned, it will be returned or shoved back, and C will be withdrawn and returned, and this operation may be repeated as often as may be required. Any suitable mechanism actuated by the power which revolves the cylinder, may be employed for operating the sections of the bed as described, or it may be done by hand.

The bars G are made of steel, or other suitable metal or material, bevelled at their edges, and set on an incline toward the feed-rollers of the machine, at an angle of thirty degrees (more or less,) as seen in the drawing.

The wool being driven against the sharp edges of the bars by the rapidly revolving cylinder, will effectually separate from it the foreign matter with which it was combined.

In the end piece H of the frame, the ends of the bars are supported in mortises, as indicated by dotted lines in the drawings. This concave can be attached to any of the pickers now in use, and effectually overcomes all the obstacles heretofore met with in this branch of the business.

The wool is left clean, light, and ready for the cards.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

The bed or concave of a wool-picker, made in two or more sections, which are constructed and arranged substantially as described, so that they are susceptible of a longitudinal motion for cleaning the bars.

JAMES CATE.

Witnesses:

ROBERT HARRISON,

C. G. SMALLHOUSE.