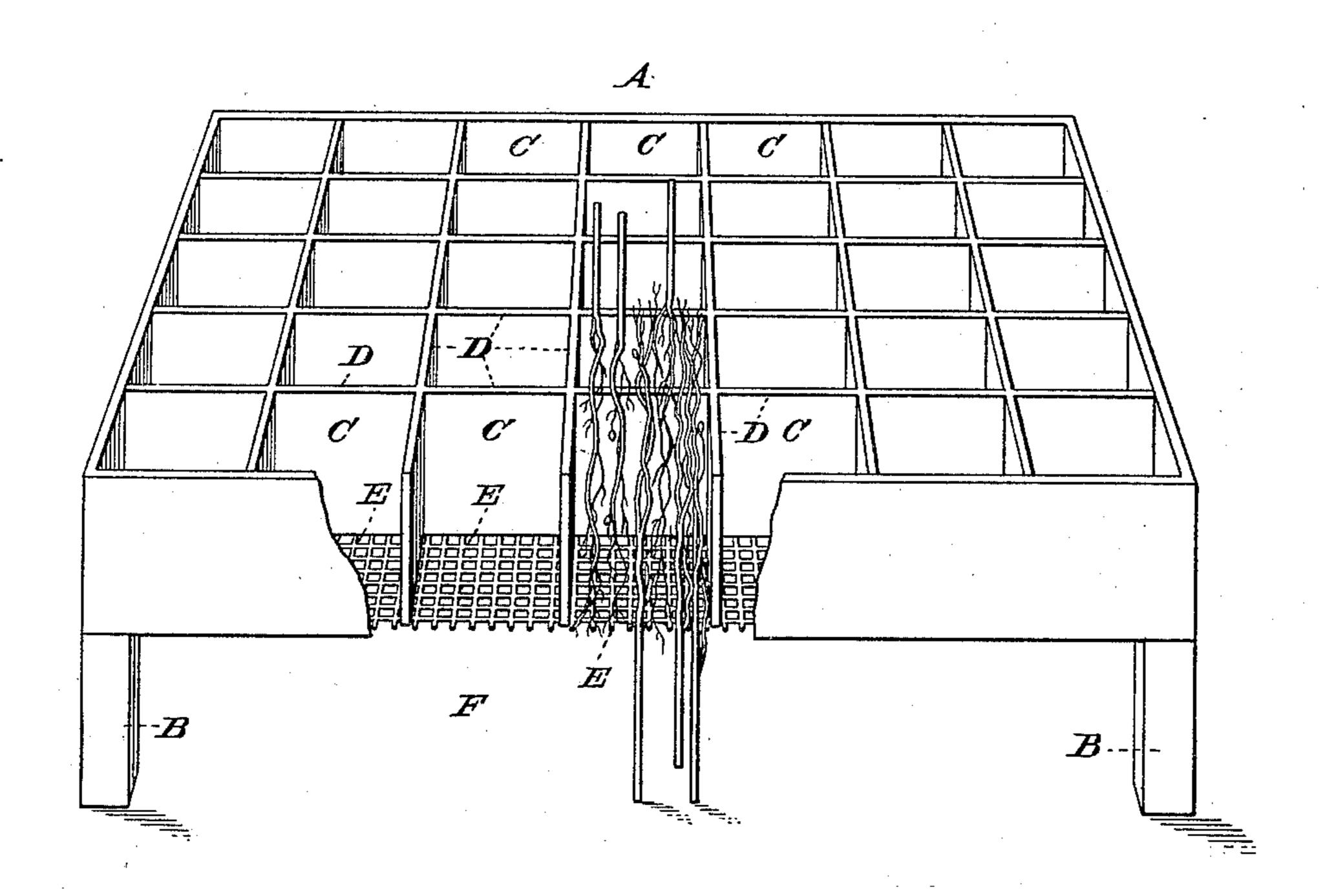
(No Model.)

## S. M. YOUNGJOHN.

DEVICE FOR UTILIZING WASTE BROOM CORN.

No. 397,482.

Patented Feb. 5, 1889.



WITNESSES Willette Anderson. ER, Gengenoon

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## UNITED STATES PATENT OFFICE.

SANFORD M. YOUNGJOHN, OF AMSTERDAM, NEW YORK.

## DEVICE FOR UTILIZING WASTE BROOM-CORN.

SPECIFICATION forming part of Letters Patent No. 397,482, dated February 5, 1889.

Application filed November 12, 1887. Serial No. 255,001. (No model.)

To all whom it may concern:

Be it known that I, SANFORD M. YOUNG-JOHN, a citizen of the United States, and a resident of Amsterdam, in the county of Mont-5 gomery and State of New York, have invented certain new and useful Improvements in Devices for Utilizing Waste Broom-Corn; and I do declare the following to be a full, clear, and exact description of the invention, such 10 as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to letters or figures of reference marked thereon, which form a part of this 15 specification.

The drawing is a representation of this invention and is a perspective view, a portion

of the outer side being broken away.

This invention has relation to means for 20 utilizing waste broom-corn; and it consists in a novel process of separating such corn in which the butts and points lie together in a mixed state, so that the butts will lie in one direction and the points in the opposite direc-25 tion, as hereinafter set forth.

In the preparation for broom-corn for use the stalk is cut off to leave the brush, and in this operation much of the cut-off portion or "shoulders" falls to the floor and becomes a 30 confused mass of waste, because the butts and points extend in every direction without

order.

The object of the invention is to reduce the waste shoulders to order, so that the butts will 35 lie in one direction and the points in the op-

posite direction.

Each shoulder consists of a stem portion and delicate branches or "points" which extend therefrom. These branches have other 40 small branches which lie close thereto, and when the shoulders lie in a confused mass the branches become intermingled, so that they are not easily disentangled by hand without employing too much time for the purpose.

In the accompanying drawings, the letter A designates a box which is provided with legs or supports B, and is divided into compartments C by partitions D, said compartments having reticulate or sieve bottoms E. I

The compartments are made deep, but are 50 not made broad enough to allow the shoulders to lie therein at length upon the sieve-bottoms. There is an interval between the sievebottoms and the floor, as indicated at F.

The waste broom-corn is gathered up in 55 handfuls, which are placed in the compartment in vertical position, one end down or toward the sieve-bottom. This end being composed of mixed butts and points it will remain as placed until motion is given to the 60 separator-box by a knocking action, such as may be produced by raising the separator and dropping it, so that its legs or supports will strike the floor or blocks thereon, and then a separating movement will take place, those 65 shoulders which have their butts pointing downward being forced down through the meshes of the sieve-bottoms, while those which have their butts pointing upward will be caught by the engagement of their delicate 70 branches with the sieve-bottom, so that they will remain therein. When the butts are fund to project through the meshes of the sieve-bottom sufficiently, they can be grouped. and the shoulders drawn down out of the sepa-75 rator and laid together butts to butts. Then the shoulders remaining in the separator-compartments, which now have all their butts pointing upward, can be removed out of said compartments and laid with those which were 80 drawn through the sieve-bottom with their butts in the same direction.

It is apparent that by striking the screenframe on the bottom with hammers or knockers the effect desired will be produced, forc- 85 ing downward the broom-shoulders, of which the butts are toward the sieve-bottoms. By this means an important result is designed to be effected, as the waste broom-corn having been reduced to order is in proper condition 90 to be utilized in the work of the factory.

Having described this invention, what I claim, and desire to secure by Letters Patent, is-

The process of rectifying waste broom-corn, 95 which consists in placing the mixed corn in a vertical position in a suitable receptacle having openings in its bottom, percussing the receptacle to forcibly extract through the said bottom those stems which have their butts directed downward, withdrawing from the receptacle those stems which remain having their butts directed upward, and, finally, disposing the latter with the former, butts to butts and points to points, substantially as specified.

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

SANFORD M. YOUNGJOHN.

Witnesses:

T. H. BENTON CRANE, GEO. W. WEST.