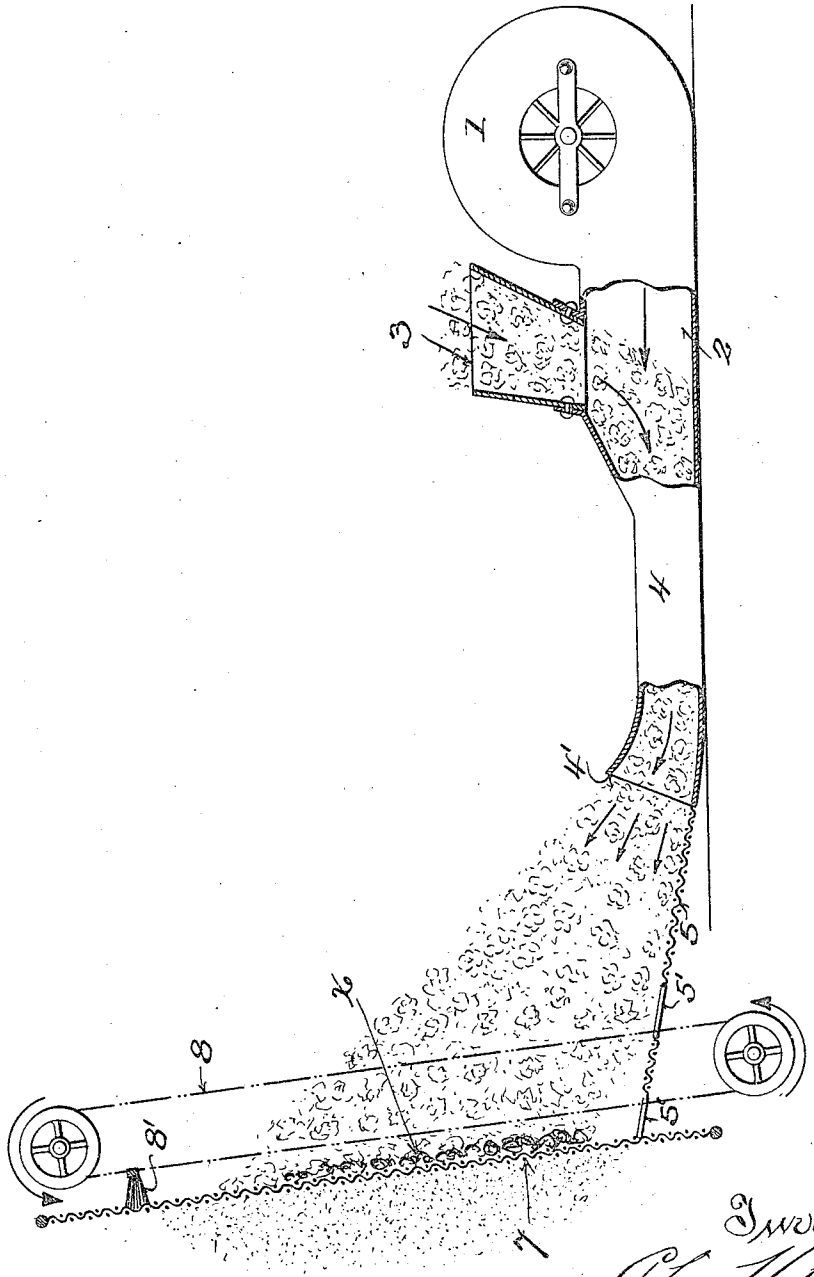
J. HUBLER.

METHOD FOR COLLECTING SHORT TOW AND FLYINGS FROM HURDS.

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1,293,444.

Patented Feb. 4, 1919.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN HUBLER, OF BRANDON, WISCONSIN.

METHOD FOR COLLECTING SHORT TOW AND FLYINGS FROM HURDS.

1,293,444. Specification of Letters Patent. Patented Feb. 4, 1919.

Application filed April 23, 1917. Serial No. 163,965.

To all whom it may concern:

Be it known that I, JOHN HUBLER, a citizen of the United States, and resident of Brandon, in the county of Fond du Lac and State of Wisconsin, have invented certain new and useful Improvements in Methods for Collecting Short Tow and Flyings from Hurds; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention refers to hemp fiber treatment and has for its object to provide a method for collecting short tow and flyings from hurds.

Heretofore, in practice, the short fluffy tow and flyings which are mixed through the hurds, constitute waste for the reason that the hurds are subjected to a blast whereby they are delivered to the furnace or pile, the said hurds being utilized as a fuel. Owing to the fact that the short tow is found in the form of fluff, throughout the hurds, it has been impossible to collect the same at a cost that would render them commercially profitable. It is well known in the art that, if this material could be collected, it is a very desirable by-product from which to manufacture paper stock, insulating material, fiber board and various other articles.

With the above object in view I provide a simple and economical process for salvaging this by-product without adding anything material to the cost of handling the tow in the manner usually employed.

The drawing represents a diagrammatic elevation of an apparatus employed in my improved method for collecting the short tow, parts being in section to more clearly illustrate certain features in detail.

Referring by characters to the drawings, 1 represents a blast fan and 2 the discharge trunk thereof having a hopper 3 in communication therewith, which hopper is adapted to receive the hurds or scrapings that accumulate from the fiber treating machines. The fan trunk is provided with a discharge end 4 which is reduced in proportions with relation to the intake end and this discharge end terminates with a slight upward flared mouth 4′, the lower wall of which intersects a screen cloth table 5 that forms an extension thereof and, as shown, this table is preferably slightly oblique. The table 5 is intersected by a vertically disposed collector screen 7, it being understood that the screen material is of comparatively coarse mesh.

As exemplified in the drawing, I provide some means for cleaning the collector screen and in this instance I have shown an endless carrier 8 having a brush 8′ connected thereto, the carrier being trained over suitable sheaves and is adapted to travel slowly at a continuous speed or it may travel intermittently. The screen table 5 is provided with slots 5′ through which the brush may travel upon its downward working stretch and its upward idle stretch.

Having described one type of an apparatus for carrying out my method, the said method consists in feeding the hurds into the hopper 3 and causing them to travel through the fan trunk, from the mouth of which they are discharged, as indicated in the diagram, against the collecting screen 7. The hurds pass through this screen and any fluffy bunches of short tow or flyings will be trapped against the inner face of the screen, as indicated at *x*. The hurds will be cleared of the short tow and are then collected for fuel and they may be either collected into a furnace room or storage chamber or be discharged into the atmosphere for future use. It is understood that, after a layer of the tow or flyings has been collected upon the screen 7, they are removed from said screen and will form an important by-product of a hemp treating plant, for the reason that the cost of collecting them is practically nominal. While I have shown an endless carrier for automatically taking the hurds from the collector screen, it is manifest that any device can be employed as a substitute for that shown, as, for example, where labor is cheap, it might be advantageous to utilize an attendant for the purpose specified, but various means can be provided within the knowledge of the skilled mechanic for automatically collecting them.

I claim:

The herein described method of separating short tow and flyings from a co-mingled mass of tow, flyings and hurds, which consists in feeding said mass into a restricted portion of a current of air having another portion unconfined, in screening said mass while expanded in the unconfined portion

of the current of air, whereby the hurds pass through the screen and the short tow and flyings are arrested thereby, and in removing short tow and flyings from the screen transversely of the direction of the air current.

In testimony that I claim the foregoing I have hereunto set my hand at Brandon, in the county of Fond du Lac and State of Wisconsin, in the presence of two witnesses.

JOHN HUBLER.

Witnesses:
R. C. SCHWANDT,
J. G. BOELIN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents Washington, D. C."