

972,515.

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SIFTER, STRAINER, AND MASHER.

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To all whom it may concern:

Be it known that I, THOMAS FRANCIS DEVLIN, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Sifter, Strainer, and Masher, of which the following is a specification.

The invention consists of a beater, presser, or the like, having the novel features of construction hereinafter described and claimed. For the purpose of explaining the invention, the accompanying drawing illustrates a satisfactory reduction of the same to practice.

Figure 1 represents a perspective view of a sifter, strainer and masher embodying this invention. Fig. 2 represents a vertical section on line $x-x$ Fig. 1. Fig. 3 represents a vertical section on line $y-y$ Fig. 1. Fig. 4 represents a side elevation of a portion of the means employed for mounting the handle of the device on the frame or stand thereof.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings:—A designates a stand or frame of skeleton form composed of side members and transversely extending rods connecting the same, two of said rods connecting the upper corners of said side members and B designates a bed of reticulated, foraminous or perforated metal or material of semi-cylindrical or circular shape, it being seated in said stand A, and having on its upper edges the out-turned flanges C, whereby it may be sustained on the top cross rods and side members of the stand and removed therefrom and substituted by a bed with a different mesh or openings therein according to the kind of work required.

The sides of the frame are substantially semicircular and have upon their inner faces inwardly projecting semicircular flanges A' at their edges in which the ends of the semicylindrical bed have full support. The substantially semicircular ends of the bed are solid, and their upper edges are bent outward to form the outwardly bent flanges which rest upon the straight and unbroken upper edges of the sides of the frame.

The flanges C at the sides are in a lower plane than the flanges C at the ends, and the side flanges are bent upon themselves upon their under faces with the terminals

extended inward toward each other, so that when the bed is forced down into position, the inturned edges will bear against the transverse rods and serve to frictionally hold the bed against accidental displacement and at the same time concealing said rods and giving a finished appearance to the device.

D designates a handle bar from which depend the arms E, which enter the bed B and carry on their lower ends the rollers F which are adapted to ride on said bed in the circular direction thereof.

G designates supplemental arms which depend from the outer ends of the bar D on the exterior of the stand A, and have on their lower ends, the bifurcations or forks H, which are fitted on the gudgeons J, the latter being secured to the opposite ends of the stand A, and project outwardly therefrom.

On the sides of the arms G, are latches K which are pivotally connected therewith and are provided with laterally extending curved slots L whereby said latches may engage with the gudgeons J from below, and so prevent displacement of the arms G in upward and lateral directions especially during the rocking of the frame formed by the arms E, G and connected parts, it being seen that the arms E G connected by the bar D, form a frame which is adapted to swing or rock on said gudgeons from above, and said latches prevent the arms from disconnection from the gudgeons from below and turn on the gudgeons as part of the bearings of the swinging frame, they also closing the sides of the bifurcations H, preventing unseating of the walls of the bifurcations from said gudgeons in lateral direction, as also the ascent of the frame.

The operation is as follows:—The material to be sifted, strained or mashed is placed on the bed B and the rollers F are moved to and fro over said bed by the handle M on the bar D, whereby said material is worked and forced through the perforations of the bed and collected in any suitable manner beneath the open bottom of the stand.

If it is desired to remove the rollers or the bed, the latches K are thrown up whereby they clear the gudgeons J when the handle bar with its connected parts may be raised from said gudgeons and so entirely disconnected from the stand. Then the bed may be lifted from the stand for purpose of cleansing, repairs, etc. or substituted by a

bed of different mesh or openings, according to the requirements of various materials.

When the bed is restored, the frame and rollers are reapplied, the forks H being fitted on the gudgeons and the latches K are lowered whereby they engage with said gudgeons when the frame and consequently the rollers F may be rocked or reciprocated as before, the gudgeons forming the bearings for said frame and the latches preventing disconnection of the frame from said bearings as hereinbefore stated, the curved slots L of the latches also serving to draw down the swinging frame tightly on the gudgeons and so hold the rollers F, in their motions on said frame, firmly to their work upon the foraminous bed.

For convenience in handling, the latches K, are provided with thumb pieces N, the use of which is evident.

It will be noticed that the interior of the bed is entirely unbroken without openings or projections by reason of the gudgeons and the arms bearing upon the same being on the outside of said members so that there will be no places for any of the substances treated in the apparatus to lodge.

The bed will be supported against the pressure from the rollers in the swinging frame by having its ends resting in the flanges upon the inner sides of the side members of the supporting frame.

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

In a device of the character stated, a frame, a foraminous bed thereon, gudgeons on opposite ends of said stand, a handle bar, arms depending therefrom and disposed within said bed, a roller on the lower ends of said arms, supplemental arms depending from said bar on the exterior of said stand and having bifurcations thereon on their lower ends, said bifurcations being freely mounted on said gudgeons, and latches movably mounted on said supplemental arms and having slots adjacent to said bifurcations adapted to embrace freely said gudgeons as bearings, retain said supplemental arms on said gudgeons and hold said roller firmly on said bed.

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