(No Model.)

T. M. WILSON.

SPRING FOR MIDDLINGS SHAKERS.

No. 263,375. Patented Aug. 29, 1882.

FIG. 1

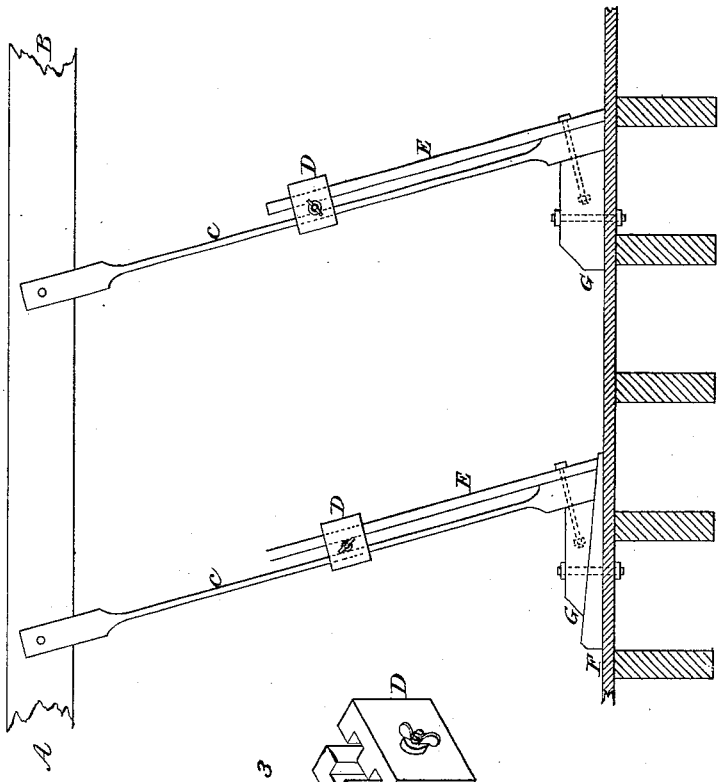


FIG. 3

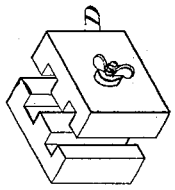
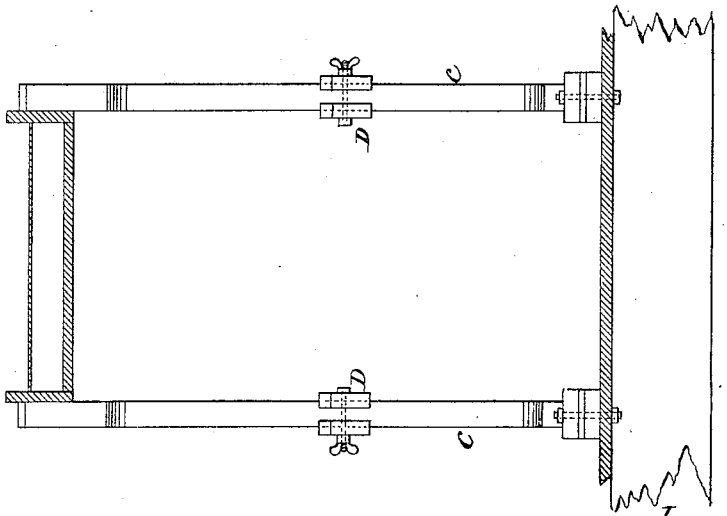


FIG. 2



Witnesses
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UNITED STATES PATENT OFFICE.

THOMAS M. WILSON, OF INDIANAPOLIS, INDIANA.

SPRING FOR MIDDLINGS-SHAKERS.

SPECIFICATION forming part of Letters Patent No. 263,375, dated August 29, 1882.

Application filed March 13, 1882. (No model.)

To all whom it may concern:

Be it known that I, THOMAS M. WILSON, of Indianapolis, Indiana, have invented an Improvement in Springs for Middlings-Shakers, of which the following is a specification.

My invention has for its object the stiffening and shortening of the wooden springs used to give a rocking motion to middlings graders or shakers, and to effect thereby the even feeding or delivery of the middlings to the hoppers of the gravity-separators.

As shakers are ordinarily constructed the material ropes itself along the bed or bottom of the shaker and is not evenly spread over its surface. To avoid this I have devised the arrangement shown in the drawings hereto annexed.

Figure 1 is a side elevation, in which A B is the body of the shaker. C C are wooden springs attached to it and bolted to the floor or foundation-frame below. This lower attachment has been usually made single to a block, G; but another and improved method devised by me is shown at G and F, whereby the spring can be raised or lowered to accommodate unevenness of surface in foundation or floor. E E are guides or stays, which are bolted through the spring and fastened with it to the foundation-block G. D is a clamp composed of two parts, connected by a screw which has grooves, as shown in Fig. 3, and is fitted upon the spring and guide, as shown in Fig. 1.

Fig. 2 is an end view, showing the clamp D in place clutching the spring. By loosening the set-screw this clamp D may be raised or lowered along the spring and guide, and by tightening the screw may be readily secured at any point along the spring and guide, holding them firmly, and thus creating greater resistance, and practically shortening the length and increasing the stiffness of the spring. It will be easy to change the arrangement of these parts and bring the guide down from above instead of attaching it below; but this would be no departure from my plan in principle.

I have found by practical experience with my device that it breaks up the ropy formation, causes the middlings to spread out evenly and uniformly over the bottom of the shaker and to travel steadily forward to the opening of the separator without collecting in ropes or bunches.

My device is of course applicable not only to be used in shakers for grading middlings, but as well to springs in wheat-cleaning machines, middlings-purifiers, and all other machines where shakers are used, and I do not limit myself to any one or class of these machines.

What I claim, and desire to secure by Letters Patent, is—

1. The combination of a middlings-shaker, a supporting-spring, a base or support to which said spring is rigidly secured, a rigidly-supported guide for the spring, and means for connecting the guide and spring at any desired point, substantially as described.

2. The guide E, in combination with the spring C, a rigid base or support, and clamp D, for the purposes herein described.

3. The guide E and spring C, in combination with the adjustable blocks G F of the base.

4. The combination of a shaker, a spring connected thereto, and a base connected to the spring, the base composed of sections, one adjustable upon the other, for varying the length of the support for the shaker, substantially as described.

THOS. M. WILSON.

Witnesses:
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