

(No Model.)

C. HAGGENMACHER.  
BOLTING OR SIFTING MACHINE.

No. 483,286.

Patented Sept. 27, 1892.

Fig. 3.

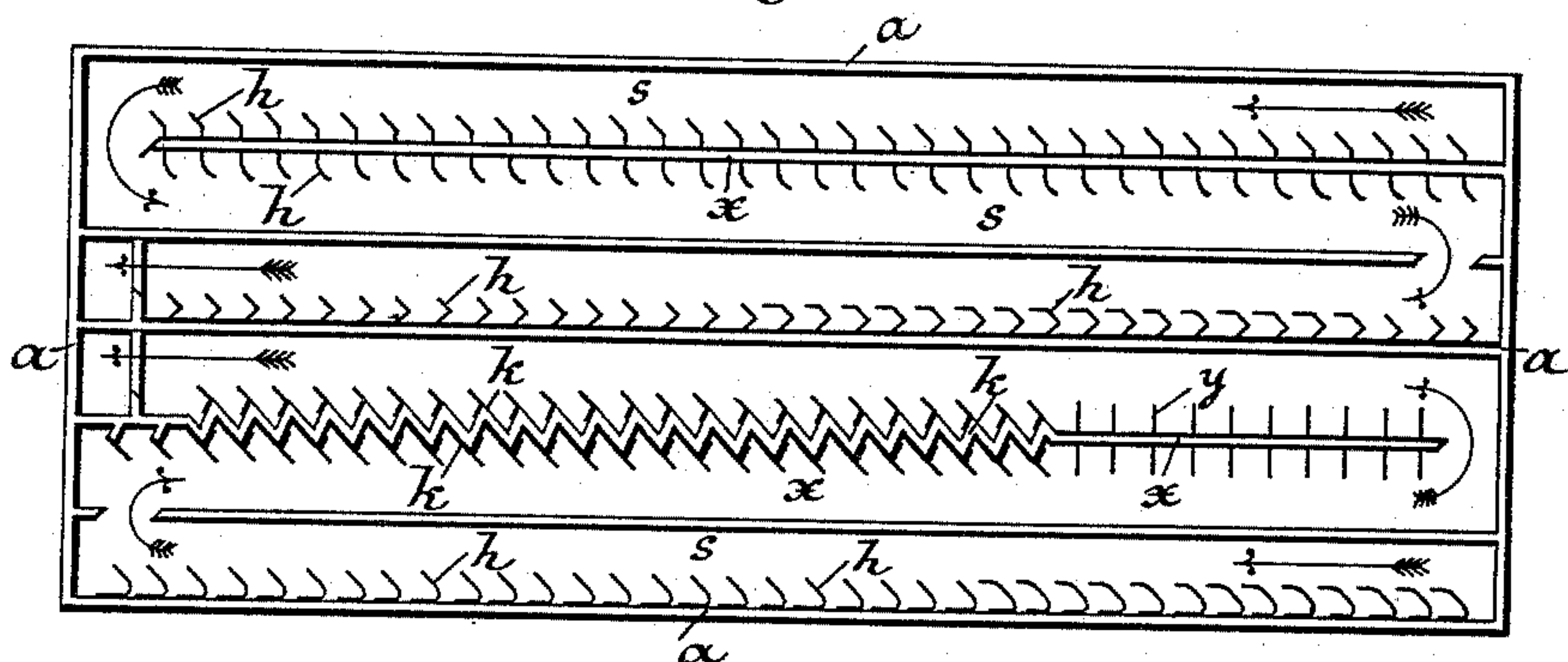
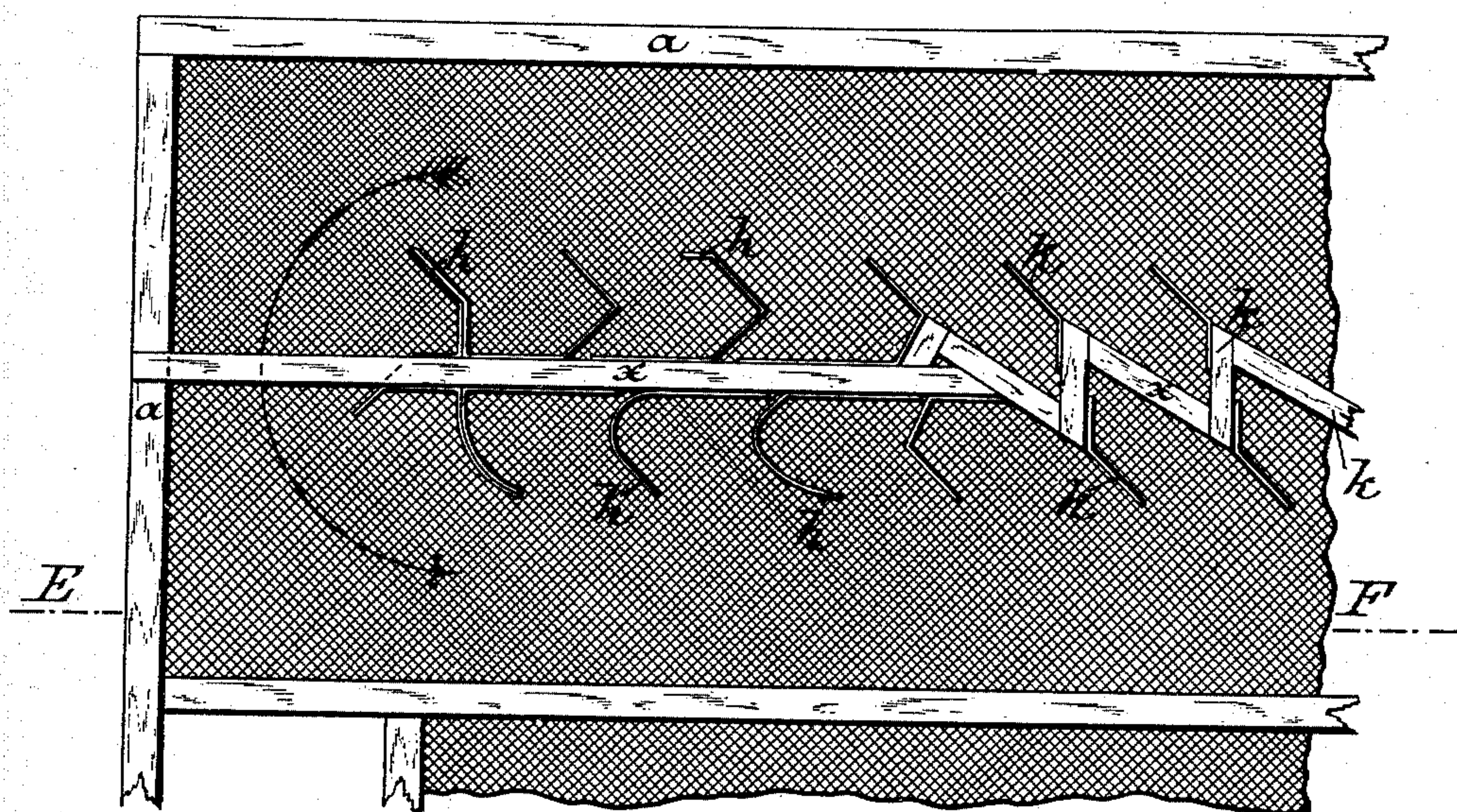


Fig. 2.



Fig. 1.



WITNESSES

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# UNITED STATES PATENT OFFICE.

CARL HAGGENMACHER, OF BUDA-PESTH, AUSTRIA-HUNGARY.

## BOLTING OR SIFTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 483,286, dated September 27, 1892.

Application filed May 11, 1892. Serial No. 432,691. (No model.)

*To all whom it may concern:*

Be it known that I, CARL HAGGENMACHER, director of flour-mills, a citizen of Switzerland, residing at Buda-Pesth, in the Empire of Austria-Hungary, have invented certain new and useful Improvements in Bolting or Sifting Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in bolting or sifting machines provided with flat sieves adapted to swing in horizontal planes. According to previous plans there is arranged across the sifting-surfaces proper a number of bars or ribs, which are for conveying or directing the material back from one end of the sieve to the other, and, with a view to better sifting, to cause it to take in so returning the longest possible course. These bars are in their turn provided with cross pieces or guides arranged transversely to the said bars—i. e., to the main direction of motion of the material—which serve the purpose of insuring the rapid movement and energetic sifting of the material over the sifting-surface. These cross-guides, although answering their purpose very well, have the slight disadvantage of partly throwing back the material moving in contact with them in the direction opposite to that in which it is desired that the material should move.

The object of this invention is to remedy this inconvenience to a great extent; and it consists in arranging the guides in question not straight and at right angles to the long ribs, but in a more or less curved, irregularly-bent, or angular shape and so that their convex sides are directed against the desired direction of motion of the material, while their concave surfaces extend in the same direction in which the material is to move.

In the accompanying drawings, Figure 1 shows part of a sifting-surface provided with curved guides constructed according to this invention. Fig. 2 is a vertical section of the sieve on line E F in Fig. 1; and Fig. 3, drawn on a smaller scale, is a plan of a complete sieve.

In the drawings,  $\alpha$  are the longitudinal guide-ribs mentioned above, which conduct the material over the sifting-surface in the direction of the arrows, while the sieve itself

moves on the racks horizontally, and irregularly.

$s$  is the sifting-surface proper, and  $h$  are the curved or bent guides or guiding-surfaces mentioned before, intended to push the material over the sifting-surface with increased speed. As clearly shown in Fig. 1, these guides may considerably vary in form. They may be either angular or form any suitable curve and may be conveniently attached to the ribs  $\alpha$ ; or, as shown at the right-hand end of Fig. 1, these ribs themselves may be bent in zigzag shape. In the latter case, to render the sharp angles more effective, they may be provided with small extensions  $k$  of sheet metal. As shown in Fig. 2, these curved or bent guides are each preferably arranged in such a manner that its lower edge does not directly touch the sifting-surface, whereby the material is afforded still more liberty of motion over the sifting-surface, which latter is therefore more fully taken advantage of than it would be if the ribs or arms  $h$  were in direct contact with the sifting-surface.

The arrows in Figs. 1 and 3 indicate that in whatever direction the ribs or arms  $h$  may be bent or curved their convex or projecting sides are always turned opposite to the direction of motion of the material, while their concave sides face in the same direction in which the material moves.

What I claim is—

1. The combination, with a frame constructed to swing in a substantially-horizontal plane, of guides arranged in the main direction of the travel of the material over the frame and inclined ribs connected to the said guides and arranged with their free ends foremost in the main path of the material, substantially as and for the purpose set forth.

2. The combination, with a frame constructed to swing in a substantially-horizontal plane, of guides arranged in the main direction of the travel of the material over the frame, the said guides consisting of ribs arranged zigzag and provided with end pieces projecting forwardly into the main path of the material, substantially as set forth.

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

CARL HAGGENMACHER.

Witnesses:

FRANZ CZIZEKFF,  
FRITZ DUNCKEL.