(No Model.)

C. HAGGENMACHER

SIFTING MACHINE.

No. 428,909. Patented May 27, 1890.

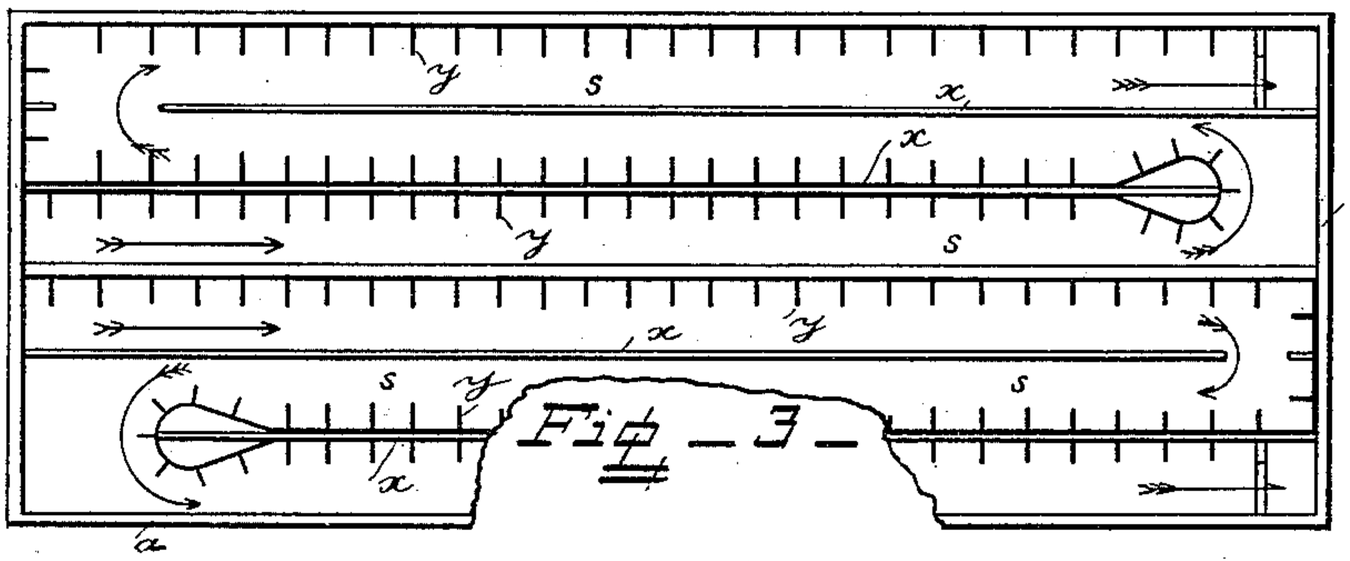


Fig. 3.

Fig. 1.

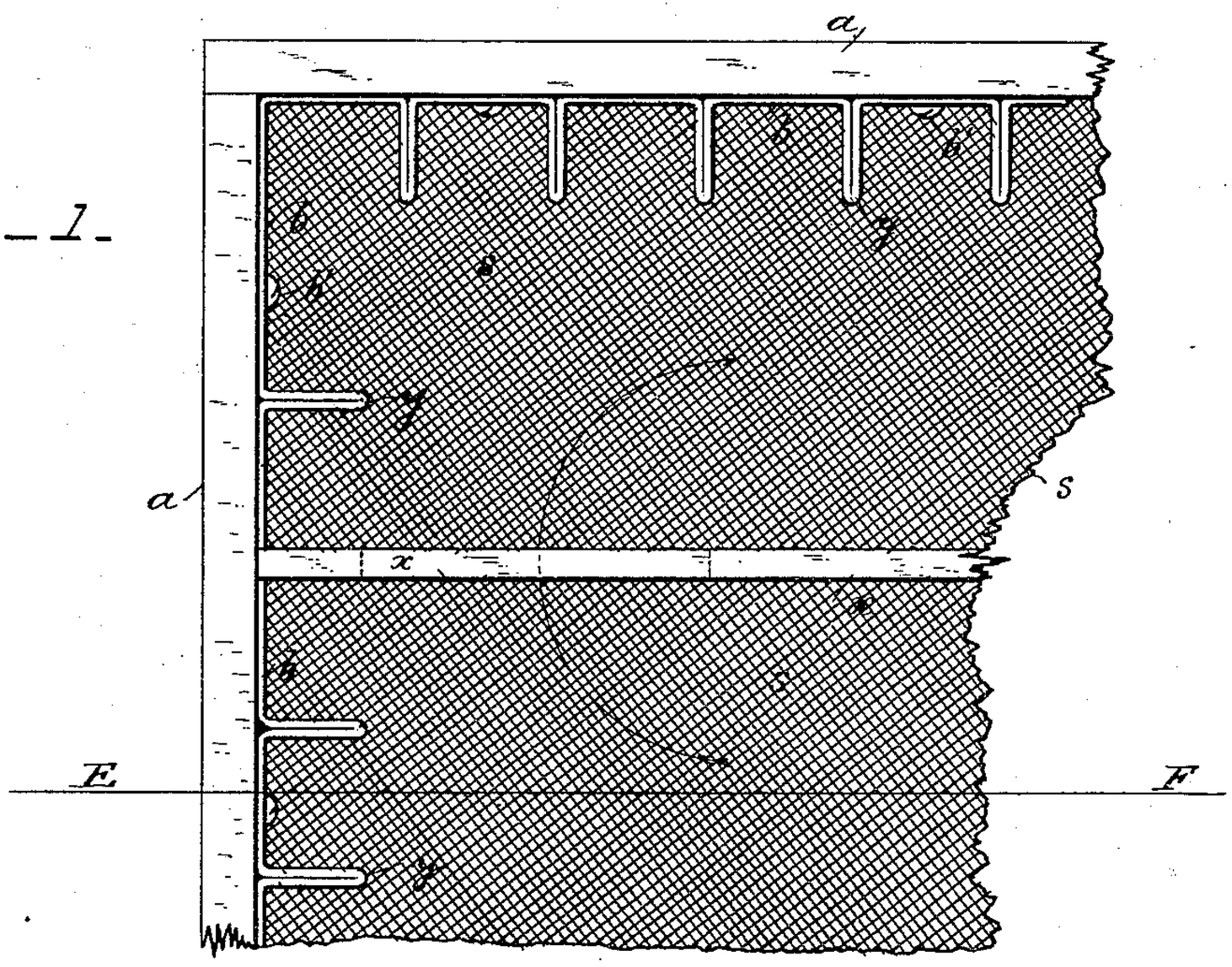
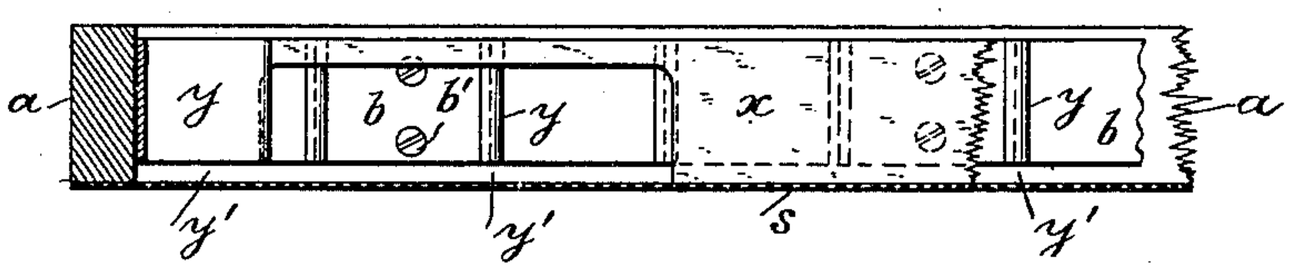


Fig. 2.



WITNESSES

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

SIFTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 428,909, dated May 27, 1890.

Application filed March 3, 1890. Serial No. 342,507. (No model.) Patented in France October 1, 1889, No. 182,555; in Belgium October 2, 1889, No. 87,937; in Luxemburg October 2, 1889, No. 1,186; in Italy October 5, 1889, XIII, 26,250, LI, 390, and in Switzerland October 14, 1889, No. 39.

To all whom it may concern:

Be it known that I, CARL HAGGENMACHER, director of grinding-mills, a citizen of Switzerland, residing at Buda Pesth, in the Kingdom of Austria-Hungary, have invented certain new and useful Improvements in 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.

Letters Patent for this invention have been obtained as follows: in France, No. 182,555, dated October 1, 1889; in Belgium, No. 87,937, dated October 2, 1889; in Italy, Vols. XIII and LI, Nos. 26,250 and 390, dated October 5, 1889; in Luxemburg, No. 1,186, dated October 2, 1889, and in Switzerland, No. 39, dated October 14, 1889.

This invention relates to chop-graders of the class shown and described in my applications for Letters Patent, Serial No. 286,743, filed September 29, 1888, and Serial No. 336,535, filed January 10, 1890; and it consists in the novel construction of the cross-slats and their combination with the sieve-frame, as hereinafter fully described and claimed.

In the drawings, Figure 1 is a plan view of a portion of a sieve provided with cross-slats according to the present invention. Fig. 2 is a cross-section through the same taken on line E F in Fig. 1; and Fig. 3 is a plan view of a complete sieve, drawn to a smaller scale and partly broken away upon one side.

The frame is provided with sides *a* and a bottom *s*, of perforated material. The bottom or sifting-surface *s* of the sieve is divided into channels by means of the sides *a* and partitions *x*, the bottoms of which rest upon the sifting-surface *s*. The sides *a* and partitions *x* act as guides and compel the material to move along the sifting-surface in prearranged paths, and the material is caused to travel along the said paths by the gyrating motion of the frame and the cross-slats *y*, as fully described in the aforesaid applications.

According to the present invention, I do not let the lower edges of the cross-slats *y* touch the surface *s* of the sieve, but form narrow passages *y'* between them, and I secure the cross-slats firmly to some portion of the gyrating frame-work of the sieve. The passages *y'* under slats *y* permit the particles forming a shallow layer of material next to the surface *s* to move in continuous circular paths and to be very thoroughly brought into contact with the said surface. The larger and coarser particles, which naturally rise to the upper part of the material on the sieve, strike against the cross-slats *y* and are caused to travel over the sieve in semicircles, as fully described in the aforesaid applications.

The cross-slats are preferably made of long plates of thin sheet metal, bent double to form the slats *y*, and have their intermediate single thickness portions *b* secured to the sides *a* or to the guide-slats *x* by screws or nails *b'*.

What I claim is—

A sieve having a gyrating motion and provided with guides in line with the desired main direction of travel of the material, and cross-slats *y*, extending part way across the sieve between said guides at a short distance above its surface, whereby the upper portion of the layer of material resting on the sieve may be caused to travel over its surface, substantially as set forth.

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

CARL HAGGENMACHER.

Witnesses:

JOHN SCHVÉHLAR,

CHARLES DE ROGIANYI.