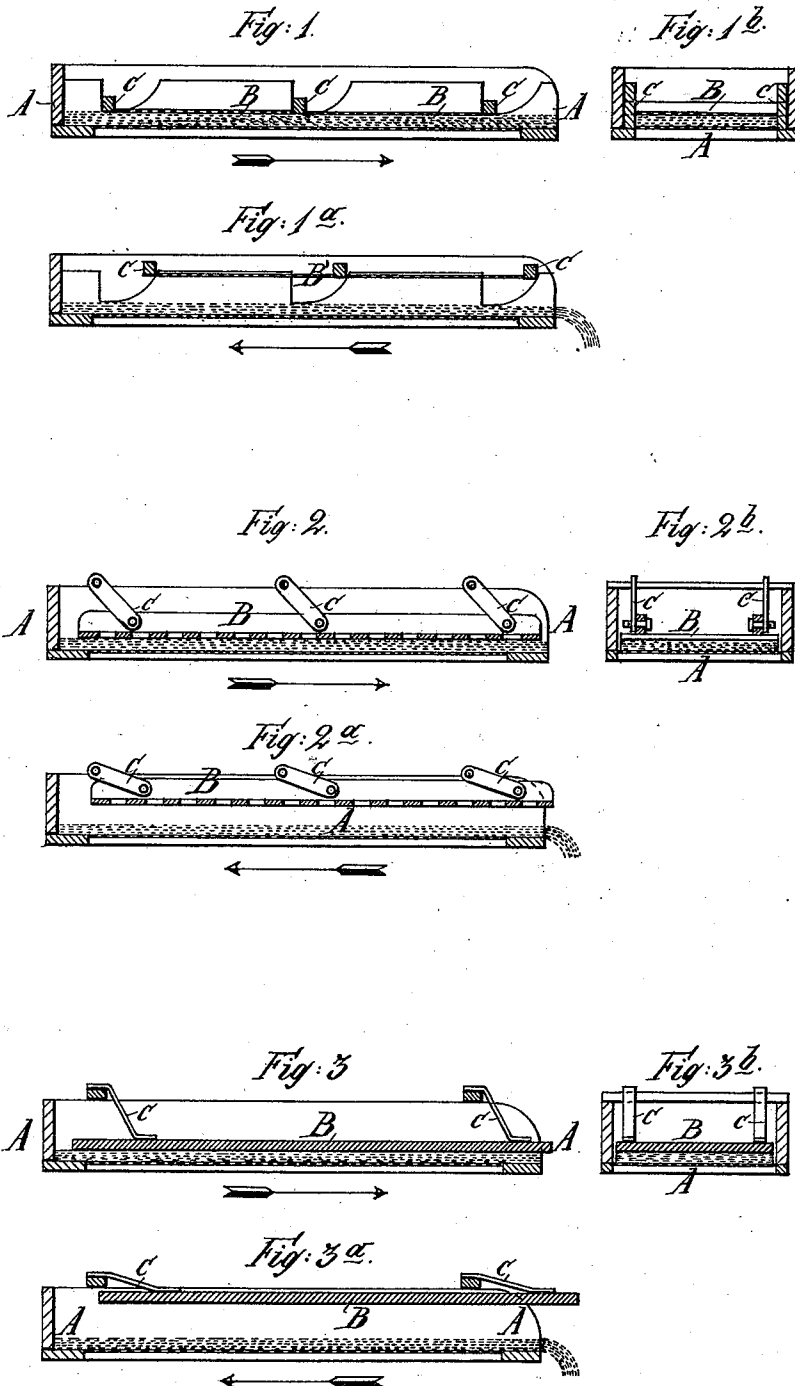


(No Model.)

H. BITTINGER.
TRANSPORTER FOR FLAT SIEVES.

No. 512,796.

Patented Jan. 16, 1894.



Witnesses:
Carl Oglsbæk
R. Herpich.

Inventor:
Hans Bittinger
by A. A. A. A. A.
Attorneys.

UNITED STATES PATENT OFFICE.

HANS BITTINGER, OF DARMSTADT, GERMANY.

TRANSPORTER FOR FLAT SIEVES.

SPECIFICATION forming part of Letters Patent No. 512,796, dated January 16, 1894.

Application filed March 1, 1893. Serial No. 464,289. (No model.)

To all whom it may concern:

Be it known that I, HANS BITTINGER, a subject of the Grand Duke of Hesse, and a resident of Darmstadt, in the Grand Duchy of Hesse, German Empire, have invented a certain new and useful Transporter for Flat Sieves, of which the following is an exact specification.

My invention relates to transporters for flat sieves and rests upon the observation, that horizontal or inclined sieves transport much more quickly, if a cover lies loosely upon the sifting product or stock, sliding over the sieve, in such a manner, that it is raised at the pushing forward of the sieve, thus freeing the sifting product, while it falls back on the latter at the going backward of the sieve, thereby preventing the sifting-product from the backward movement.

I will now proceed to describe my invention with reference to the accompanying sheet of drawings, in which—

Figures 1, 2, and 3 show longitudinal sections of sieves with the transporter lying thereupon. Figs. 1^a, 2^a, and 3^a show longitudinal sections of sieves with the raised transporter. Figs. 1^b, 2^b, and 3^b show transverse sections of these sieves.

Similar letters indicate similar parts throughout the different views.

A designates the complete sieving-apparatus, which is brought into a rotary or shaking motion by means of eccentrics or crank-pins and in which the transporters B are arranged at the frame in such a manner, that they may be raised at pushing the sieve in the transporting direction, in order to let pass the sifting-product, on which the transporters rest firmly at the backward movement of the sieve. The transporters B may be massive, perforated, grated, ribbed and therefore consist of a solid cover, a grate, a sieve-like cover or a wire-gauze.

In Figs. 1, 1^a and 1^b the transporter B rests with its lateral pins C in the toothed-formed slots, arranged at the lateral frame of the sieve.

Figs. 2, 2^a and 2^b show the transporter hinged in joints C which may be replaced by chains or straps.

Figs. 3, 3^a and 3^b show the transporter hanging in springs C, attached to the upper-side, as shown in Fig. 3, or to the under-side of the transporter, so that the latter hangs or stands in springs.

If the sieve is moved in the running-off direction, the sifting-product as well as the transporter moves in this direction by the received push. The transporter is raised at the synchronous going forward by means of its pins, joints or springs and the sifting-product may pass below the transporter in consequence of the *vis inertiae*. At the backward-motion of the sieve the transporter falls quickly back on the shifting-product on account of its gravity and of the push imparted by the backward movement, thus shutting and preventing the sifting-product from going backward. Several of these sieves may be connected below or beside one another to a common sifting-apparatus.

Having thus fully described the nature of my invention, what I desire to secure by Letters Patent of the United States is—

In a sifting-machine with shaking or oscillatory motion, the combination with the movable frame A holding the sieve, of a transporter B normally pressing on the material resting on the sieve, and loose guiding connections between the sieve and the transporter, whereby the latter is lifted in the transporting direction by the shocks imparted to frame A, and lowered, while maintained parallel to said sieve, for the purpose described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

HANS BITTINGER.

Witnesses:

R. HERPICH,
E. SCHULTZE.