No. 889,380. PATENTED JUNE 2, 1908.

R. E. L. LAMPSON.

BATTERY SCREEN FRAME FOR QUARTZ MILLS.

APPLICATION FILED SEPT. 3, 1907.

Fig. 1

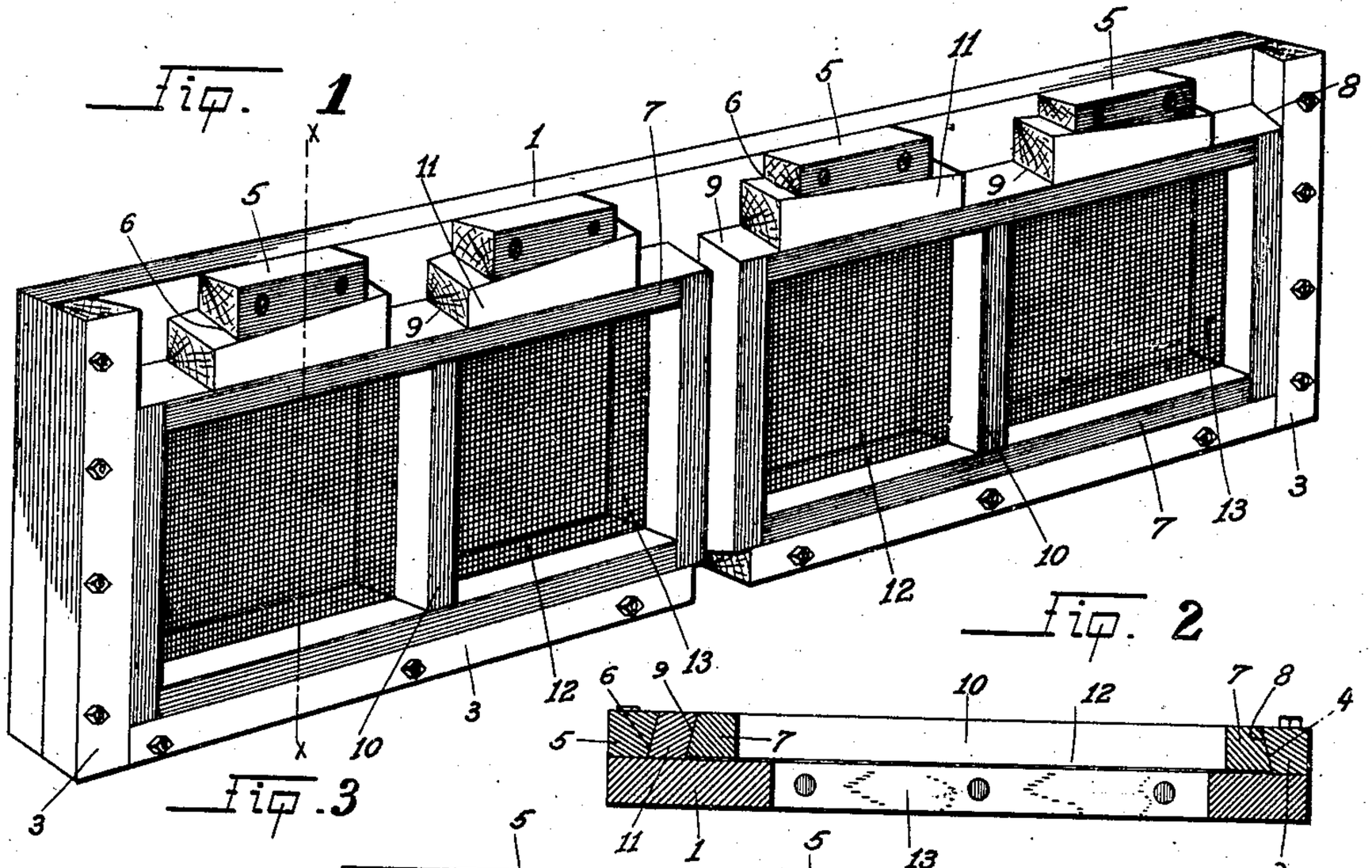


Fig. 2

Fig. 3

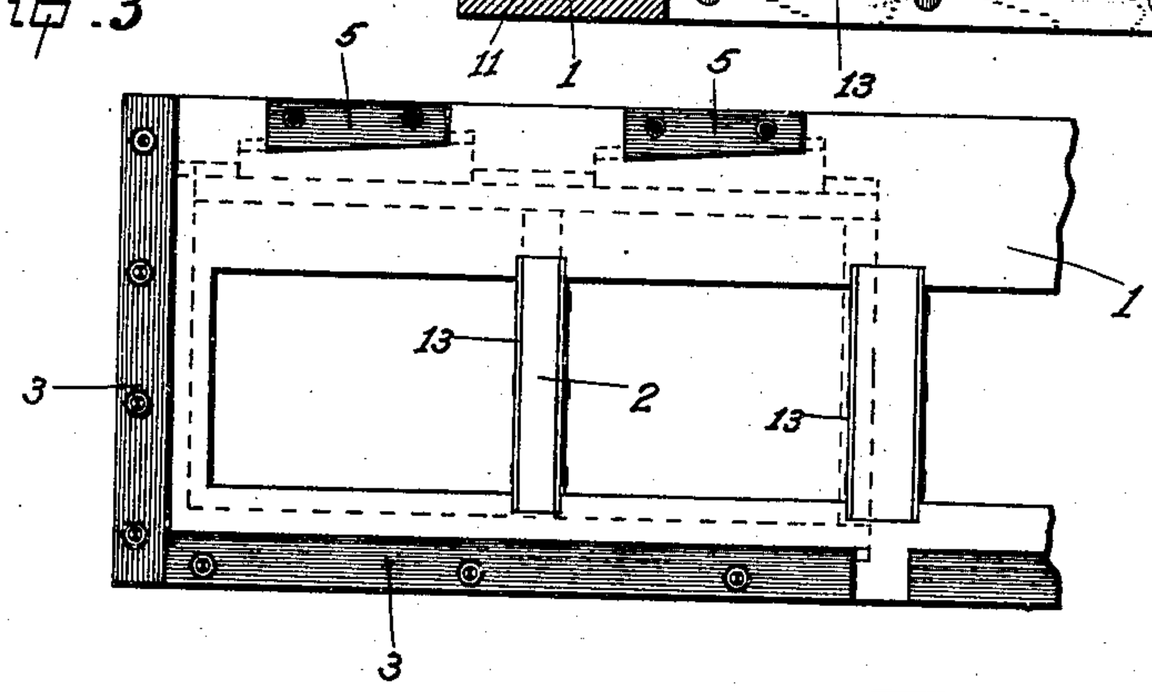
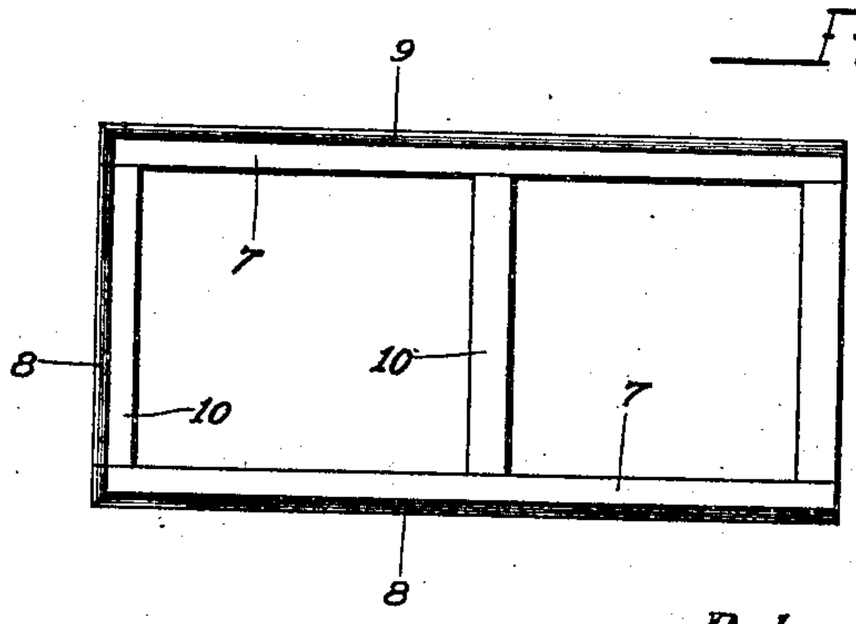


Fig. 4



Witnesses

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BATTERY SCREEN-FRAME FOR QUARTZ-MILLS.

No. 889,380. Specification of Letters Patent. Patented June 2, 1908.

Application filed September 3, 1907. Serial No. 391,037.

To all whom it may concern:

Be it known that I, ROBERT E. L. LAMPSON, a citizen of the United States, residing at Jamestown, in the county of Tuolumne, State of California, have invented certain new and useful Improvements in Battery-Screen Frames for Quartz-Mills; and I do declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this application.

This invention relates to improvements in mining machinery and particularly to battery screen frames for quartz mills, my object being to produce such a screen as will be simple and inexpensive in construction and one in which the screens may be taken out and replaced without the necessity of tacking them as is now the case. Also one in which it will not be necessary to take the frame out of battery when changing screens. Also one in which a large quantity of time will be saved in the handling thereof, which is now wasted. These objects I accomplish by means of removable screens having removable adjusting and holding frames; also by such other and further construction as will appear by a perusal of the following specification and claims.

In the drawing similar characters of reference indicate corresponding parts in the several views.

Figure 1 is a perspective view of my improved screen frame. Fig. 2 is a sectional view taken on a line *x x* of Fig. 1. Fig. 3 is a fragmentary end view of one end of the main frame of the screen. Fig. 4 is a front view of an auxiliary adjusting frame.

Referring more particularly to the characters of reference on the drawings 1 designates the main frame of the screen provided with suitable cross pieces 2 in desired positions.

Along one edge and the ends of the face of the frame 1 are secured strips 3 the same having their inner edges 4 beveled inward for the purpose as will appear. Disposed along the other edge of the face of the frame 1 are a plurality of blocks 5 the same being wedge shaped and having their inner edges 6 beveled inward for the purpose as will appear.

7 are auxiliary frames provided with outwardly beveled edges 8 adapted to fit into the edges 4 and on its other edge with an outward bevel 9 for the purpose as will appear. Said frames 7 are provided with cross members 10 adapted to coincide with the members 2.

11 are wedge keys adapted to engage between the blocks 5 and frame 7 and are beveled to conform to the bevels 6 and 9.

12 are the screens which are in practice placed between the frames 7 and 1 and locked therein by means of the keys 5 the various beveled portions described preventing the same from loosening or becoming dislodged. Iron strips 13 are secured on the members 2 to prevent wear.

The construction above described I find to be extremely advantageous in that by having the screens held in position without being tacked increases the life of the screen from fifty to seventy-five per cent. for the reason that when tacked they are rigid and the vibration causes them to break more readily. Also a saving of time is acquired since to renew the screens the main frames need not be renewed.

Thus it will be seen that I have produced a battery screen frame for quartz mills which substantially fulfils all the objects of the invention as set forth herein.

While this specification sets forth in detail the present and preferred construction of my device still in practice many deviations therefrom may be resorted to within the scope of my claims without departing from the spirit of the invention.

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

1. In a device of the character described a main frame, strips along one edge and both ends of the face of said main frame, the inner edge of said strips being beveled inward, auxiliary frames having outwardly beveled edges adapted to be inserted under said first named beveled edges, means locking them in such position and screens disposed between said main and auxiliary frames as described.

2. A main frame, an auxiliary frame, means removably locking one end and side of said auxiliary frame to said main frame, blocks on said main frame, said blocks being

wedge shaped and having their inner edges beveled inward, keys disposed intermediate said blocks and one side of said auxiliary frame, said keys being wedge shaped and beveled to conform to and lock under said blocks, and a screen disposed intermediate said main and auxiliary frames, as described.

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

ROBERT E. L. LAMPSON.

Witnesses:
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