

No. 607,434.

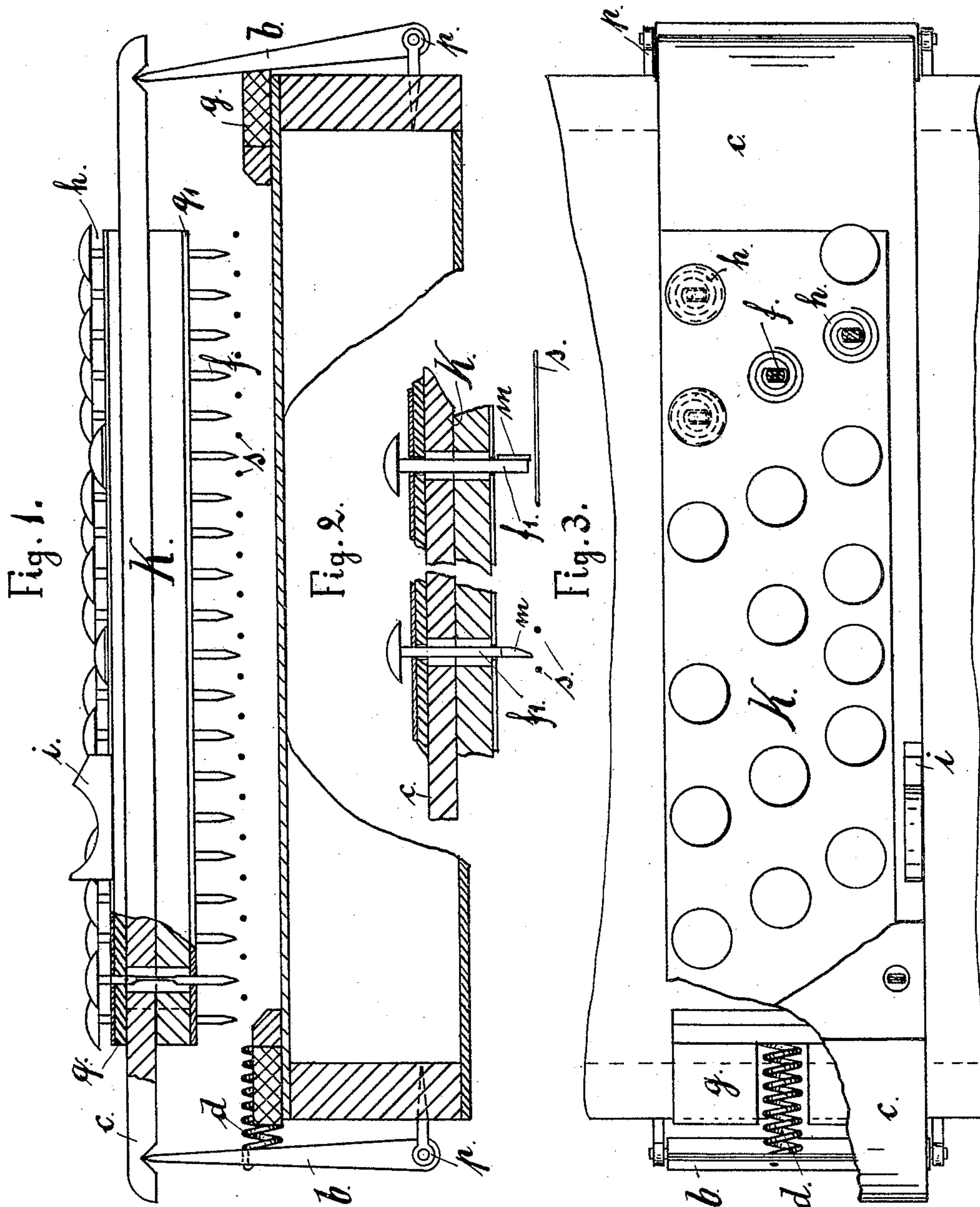
Patented July 19, 1898.

A. HEINE.

STRIKING APPARATUS FOR STRING INSTRUMENTS.

(Application filed Apr. 28, 1897.)

(No Model.)



WITNESSES.  
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# UNITED STATES PATENT OFFICE.

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## STRIKING APPARATUS FOR STRING INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 607,434, dated July 19, 1898.

Application filed April 28, 1897. Serial No. 634,305. (No model.)

*To all whom it may concern:*

Be it known that I, ARTHUR HEINE, a subject of the King of Saxony, and a resident of Gohlis, near Leipzig, Kingdom of Saxony, Empire of Germany, have invented a certain new and useful Striking Apparatus for String Instruments, of which the following is a specification.

The present invention relates to a striking apparatus for string instruments—for instance, citherns—enabling the performer to strike many strings at the same time.

In the accompanying drawings, Figure 1 is a view of the apparatus with a section of part of the box K, the instrument being drawn in cross-section. Fig. 2 is a striking-pin, shown in two views, and its position in the box K. Fig. 3 is an upper view of the apparatus with part of the section.

Across the strings a frame K is movably situated, which can easily be moved to and fro.

In Fig. 1 of the accompanying drawings the board *c*, projecting over the board, rests on two little boards *b*, pivoted at *p* to the sides of the apparatus. A spring *d* always presses the whole to one side. Felt buffers *g* noiselessly catch the shocks of the boards *b* when striking. In the box K are the striking-pins *f*. These have a large head with a conically-wound spring *h* underneath, which always presses the little pins upward, holding the same above the strings *s*. In their central part the pins *f* are thinner in order to gain elasticity or flexibility. Fig. 2 shows the

pins *f'* as non-flexible bodies. At their lower ends they are beveled and are provided with an india-rubber *m* to act as a sordine to avoid the hard striking of the strings. The pins *f* or *f'*, guided only in the upper and lower part *g g'*, are fixed in the frame K, and by a pressure upon their head exercised with the fingers of the player they can be brought within reach of the strings. When after pressing down the frame K is moved to the side, which is done by the thumb of the player placed into the holder *i*, those strings are touched of which the pins have been pressed down.

The arrangement of the movable pivotal supports *b* can be done laterally at the instrument or on the top of the same, as may be most convenient.

I claim—

Striking apparatus for string instruments consisting of a frame located across the strings and supported at its ends by pivoted arms *b*; with pressure-springs *d* and buffers *g* of felt or the like, and of the keyboard consisting of pins *f* which can be pressed down, with dampers *m*, with broad key-heads and spring *h* situated underneath the latter.

In witness whereof I have hereunto set my hand in presence of two witnesses.

ARTHUR HEINE.

Witnesses:

RUDOLPH FRICKE,  
OTTO DOEDERLEIN.