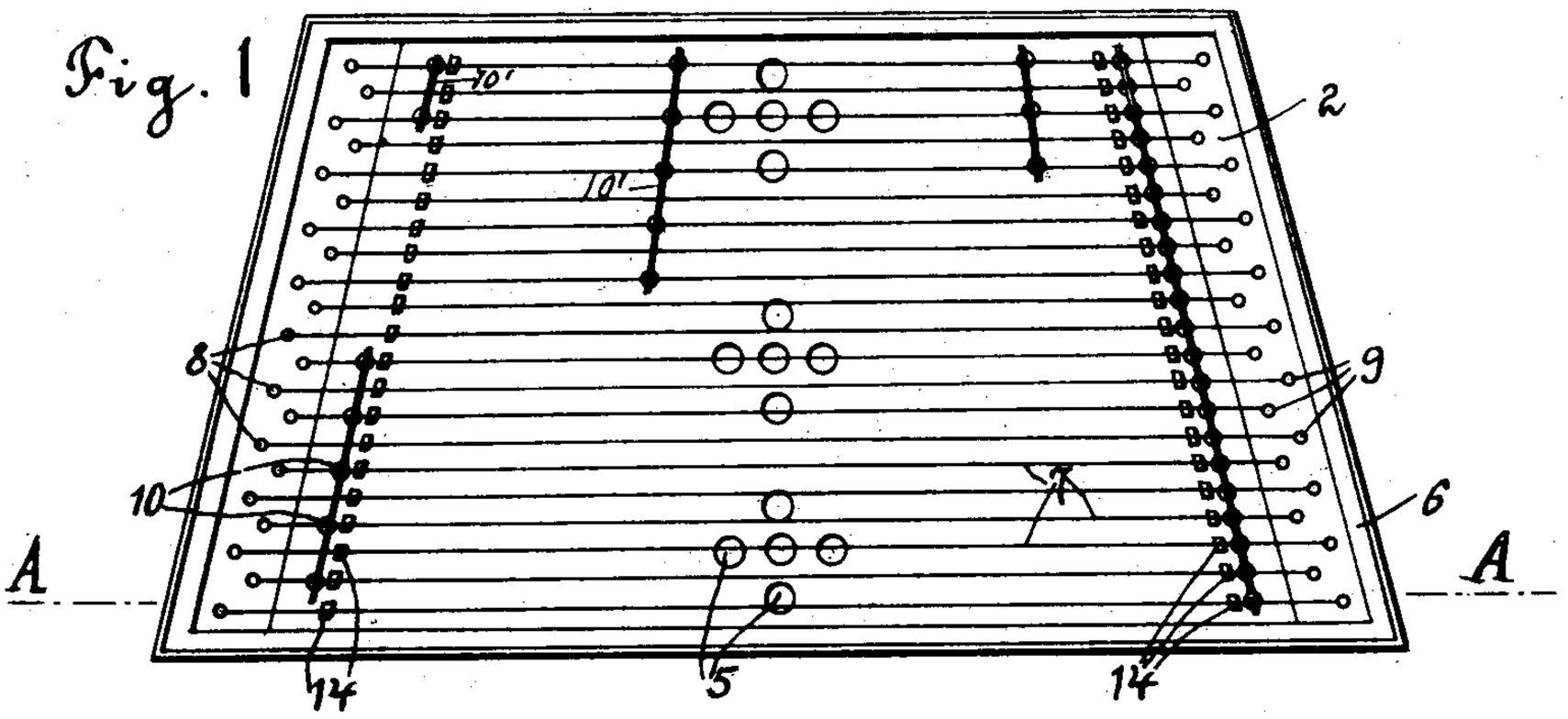
No. 871,463. PATENTED NOV. 19, 1907.

F. WAGNER.

MUSICAL INSTRUMENT.

APPLICATION FILED MAR. 4, 1907.

Fig. 1



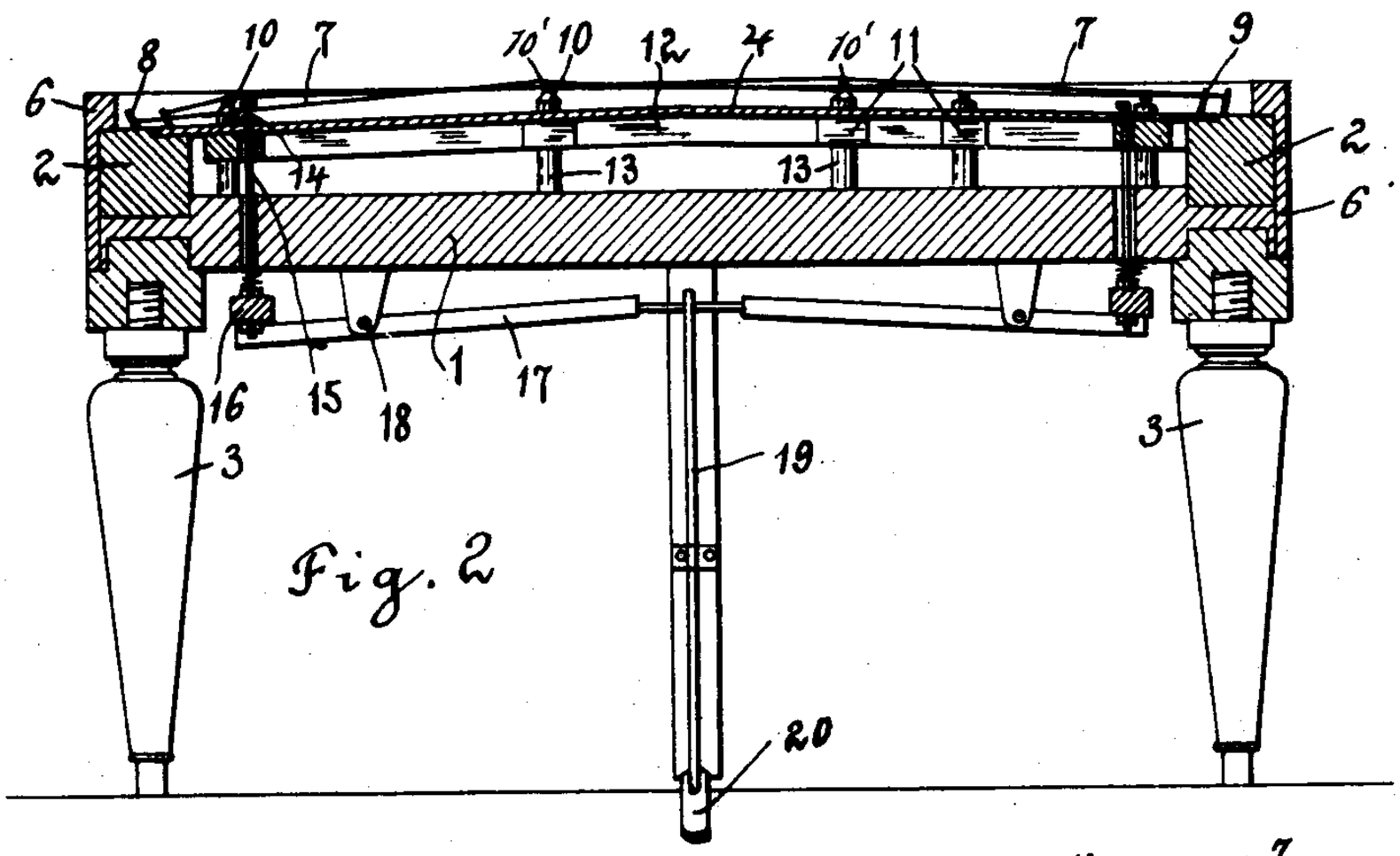


Fig. 2

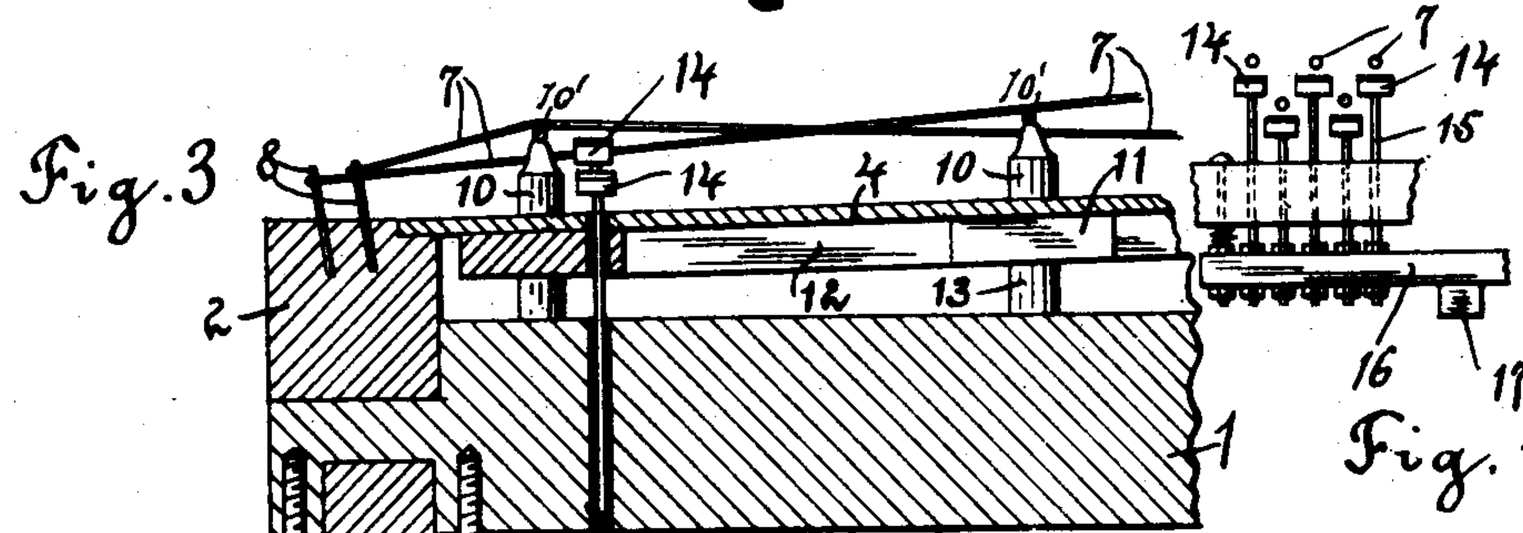


Fig. 3

Fig. 4

WITNESSES

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FERDINAND WAGNER, OF NEW YORK, N. Y.

MUSICAL INSTRUMENT.

No. 871,463. Specification of Letters Patent. Patented Nov. 19, 1907.

Application filed March 4, 1907. Serial No. 360,516.

To all whom it may concern:

Be it known that I, FERDINAND WAGNER, a citizen of the United States, and resident of the city of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Musical Instruments, of which the following is a specification.

This invention refers to improvements in stringed instruments, called the cymbalum, which, although originally an instrument of the Hungarian nation, has been universally received with favor by many other nations.

The instrument in its original form has no means for damping the vibrations of the strings, and, whenever this became necessary, the player had to use his own hands for the purpose. It is, therefore, desirable to provide the cymbalum with a device, whereby the normally free strings, when set into vibration, may be silenced by applying thereto a damper of the class as hereinafter described.

In the accompanying drawings, Figure 1 is a top view of the instrument, Fig. 2 a vertical cross-section in the line A—A of Fig. 1, Fig. 3 a similar section of a detail of construction, and Fig. 4 a detail of the damper heads.

The reference numeral 1 indicates a solid base plate of rather considerable thickness, to which are secured the end beams 2, the whole resting on legs 3. The top plate 4, having sound openings 5, is of fine grained wood, such as usually employed in sounding boards, it covers the top of the instrument and is surrounded by a frame 6. The strings 7 are secured to pegs 8 and 9, and one set of the pegs may be rotatable for the purpose of tuning the strings. Each string runs from its peg over a bridge 10′, supported by supports 10, which supports, as will be seen in Fig. 1, are arranged in sets, so that sets of strings of different lengths are provided, having, of course, different pitch.

Each row of supports 10 is provided with a corresponding bar 11, connected by cross-bars 12, located beneath the sounding board 4 and the supports 10, and each supporting bar rests upon a series of supporting pegs 13, one for each of the supports 10, so that the vibration of the strings is transmitted through its support 10, the sounding board 4, the bar 11 and one of the pegs 13 to the base plate 1, causing thereby vibrations, as it were, of all these elements and producing that tone color which is characteristic of the cymbalum.

The damper of the cymbalum consists of an individual felt head 14, one for each of the strings, located at the end of a connecting rod 15, which may be spring-controlled, and rests on a connecting bar 16, common to all connecting rods 15, and secured to one end of the lever 17, having its pivot at 18. The dampers are normally arranged in rows, one on each side of the instrument, and in order to operate the dampers simultaneously the lever 17 may be operated by a pedal rod 19, controlled by the pedal 20.

It will be seen, as shown in Fig. 3, that adjacent strings are located in different planes and since the instrument is played by means of a felt covered hammer, loosely held in the hand of the player, who strikes the strings near their support, it becomes necessary for the heads 14 of the damper also to be in different planes, and, as stated before, normally removed from the strings. The instrument, therefore, may be played in the usual manner, and the damping of the tones, may be successfully brought about by the device herein described and claimed.

As new and useful is claimed and desired to be secured by Letters Patent of the United States:—

1. A musical instrument including a plurality of strings located in different planes, a corresponding number of dampers located in different planes and normally free of said strings, and operating means for said dampers.

2. A musical instrument including a plurality of strings located in different planes, a corresponding number of independently adjustable dampers located in different planes, and normally free of said strings, and operating means for said dampers.

3. A musical instrument including a plurality of strings located in different substantially horizontal planes, a rail transverse to said strings and carrying under each string a damper adjustable independently of the other dampers, and operating means for said dampers.

Signed at New York, in the county of New York, and State of New York, this 23rd day of February, A. D. 1907.

FERDINAND WAGNER.

Witnesses:

JOHN THEMACK,

EMANUEL HERZOG.