

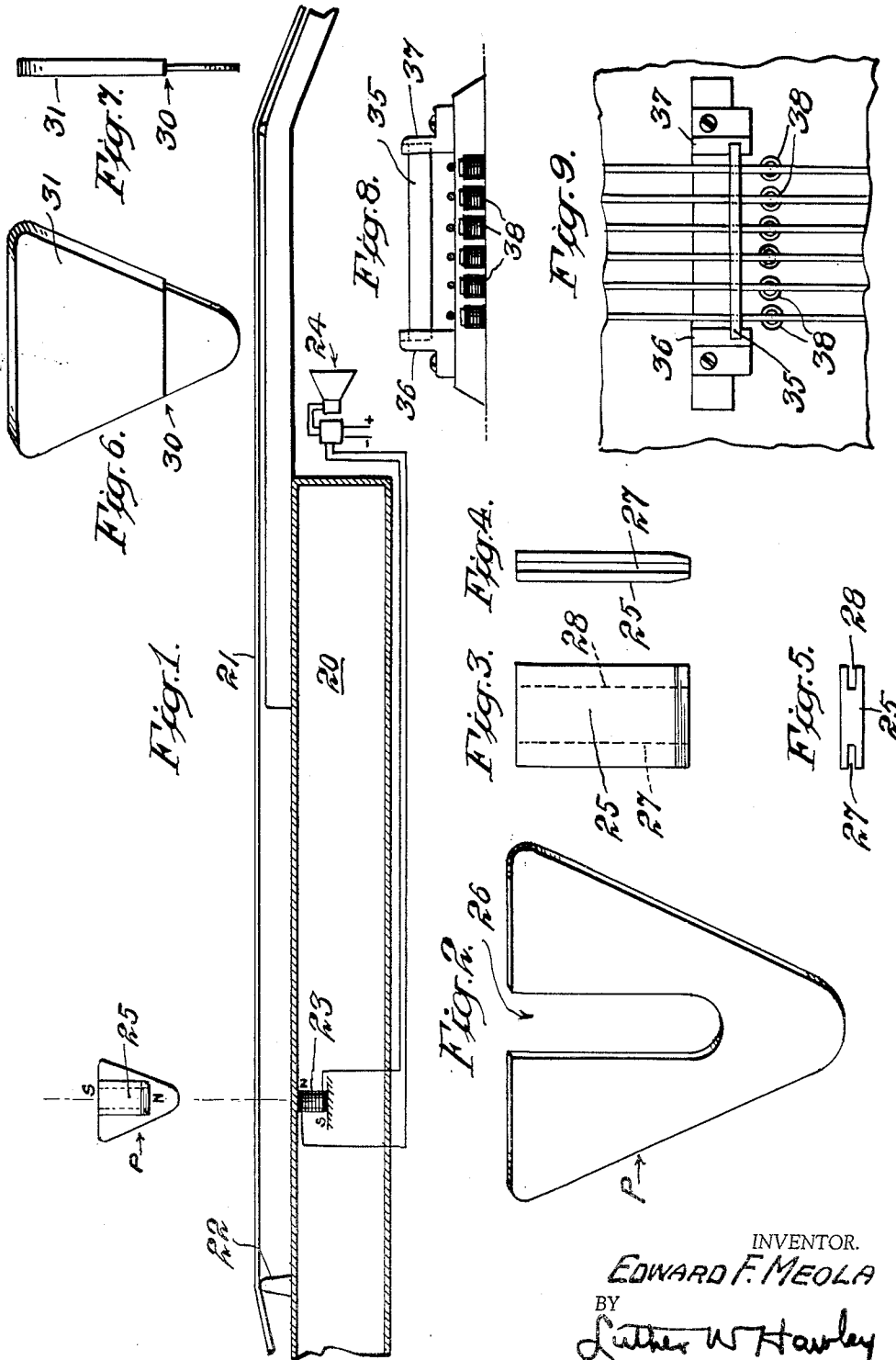
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PICK FOR METALLIC STRINGED INSTRUMENTS

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## PICK FOR METALLIC STRINGED INSTRUMENTS

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6 Claims. (Cl. 84-322)

This invention relates to musical instruments and particularly to stringed instruments and parts and accessories therefor.

The invention has for its salient object to improve, amplify and clarify the tone quality of stringed instruments having metallic strings.

Another object of the invention is to provide a pick for use with a stringed instrument having metallic strings, said pick having embodied therein a magnet for amplifying and clarifying the tone of the string when picked.

Another object of the invention is to provide means adapted for use with a musical instrument having metallic strings and having magnetic tone clarifying and amplifying means embodied therein for further amplifying and clarifying the tone of the instrument when the strings are picked.

Further objects of the invention will appear from the following specification taken in connection with the drawings which form a part of this application, and in which

Fig. 1 is a longitudinal sectional elevation, partly broken away, of a stringed instrument having embodied therein magnetic amplifying and clarifying mechanism and also showing a pick having magnetic properties embodied therein and designed for use with the instrument;

Fig. 2 is an elevational view showing the pick without the magnet mounted therein;

Fig. 3 is an elevational view of the magnet;

Fig. 4 is a side elevational view of the magnet;

Fig. 5 is a top plan view of the magnet;

Fig. 6 is an elevational view similar to Fig. 2 but showing another form of pick embodying the invention;

Fig. 7 is a vertical sectional elevation of the pick shown in Fig. 6;

Fig. 8 is a transverse elevation showing a permanent magnet mounted on the instrument top above the strings; and

Fig. 9 is a plan view of the structure shown in Fig. 8.

It has been found that the tone quality and volume of a metallic string can be clarified, amplified and improved by vibrating the string in a magnetic field and, more particularly, in a field between two magnets having similar poles opposed or facing each other.

Several embodiments of the invention have been illustrated but in each of the embodiments the essential feature which accomplishes the improved result and the clarification and amplification of the tone is present.

This feature consists of vibrating the metallic strings in a magnetic field and may or may not involve the use of magnets above and below the strings. Where magnets are so used they are so disposed that similar poles are opposite each other, or, in other words, the north poles of the magnets face each other and the south poles are remote from each other.

In the form of the invention illustrated in Fig. 1 there is shown at 20 a musical instrument having metallic strings 21 which are fingered in the usual manner and pass over a bridge 22. Within the instrument there may be provided beneath each string or beneath all of the strings, a magnet 23, which may be a permanent magnet or an electro-magnet.

The electro-magnet or magnet 23 is preferably connected to a well-known type of sound wave amplifier, as shown diagrammatically in Fig. 1 at 24.

In the form of the invention shown in Fig. 1, there is illustrated a pick P in which there is embodied or mounted a permanent magnet 25. The pick may be slotted, as

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shown at 26, and the magnet may have longitudinal grooves 27 and 28 which receive the edges of the pick formed by the slot 26. The pick P may be formed of a suitable resilient plastic material or, if desired, may be formed of a chrome plated spring bronze or of other suitable material.

The magnet or electro-magnet 23 mounted within the box of the instrument has its north pole indicated by N extending upwardly, and the magnet 25 embodied in the pick has its north pole extending downwardly, and thus the two north poles face each other and the two south poles are remote from each other.

The magnets create magnetic fields within which the strings 21 vibrate, and it has been found that the use of a pick constructed in the manner described or with a magnet embodied therein has a marked effect in clarifying, and amplifying the tone of the string picked, whether or not magnets or electro-magnets are mounted in the box of the instrument.

In Figs. 6 and 7 the pick 30 is formed of metal, such as spring steel, which is magnetized, and a coating 31 of plastic material is formed over the portion of the pick to be grasped by the fingers.

In Figs. 8 and 9 there is illustrated another modification in which a bar magnet 35 is mounted in saddle brackets 36 and 37 disposed and mounted on the top of the instrument body, preferably adjacent the bridge, so that it will not interfere with the fingering of the instrument. In Fig. 8 there are shown individual magnets 38 below the strings and these magnets may be permanent magnets or electro-magnets. The polarity of the magnets and the magnetic fields created thereby are illustrated diagrammatically in Fig. 8.

Although certain specific embodiments of the invention have been particularly shown and described, it will be understood that the invention is capable of modification and that changes in the construction and in the arrangement of the various cooperating parts may be made without departing from the spirit or scope of the invention as expressed in the following claims.

What I claim is:

1. A pick for use with a stringed instrument having metallic strings, said pick having a magnetized string engageable portion.

2. A pick for use with a stringed instrument having metallic strings, said pick having a magnet embodied therein.

3. A pick for use with a musical instrument having metallic strings, said pick having an opening and a magnet mounted in said opening.

4. A pick for use with a musical instrument having metallic strings, said pick having a slotted opening and a magnet mounted in said opening.

5. A plastic pick for use with a stringed instrument having metallic strings, said plastic pick having secured thereto a metallic, magnetized, string engaging portion.

6. A plastic pick for use with a musical instrument having metallic strings, said plastic pick having a slotted opening and a magnet mounted in said opening.

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