This invention relates to musical instruments, and more particularly to a stringed instrument having a unique pick retention means and pick therefor.

Players of stringed instruments are often troubled by not having picks readily available to play portions of certain musical compositions. Picks are customarily carried in one's pocket, and are difficult to retrieve easily when needed, if one has remembered to place them in his pocket in the first place. Further, when the pick is not needed for a short period of time, it is often laid in some convenient place and promptly forgotten. Heretofore, various types of containers and spring retainers have been devised to secure the pick to the instrument in efforts to overcome this difficulty. These devices have generally been limited to a location on the tail piece of the stringed instrument, or to particular types of instruments such as banjos which have special metallic elements to which the retainer can be attached. Moreover, this type of holder often necessitates permanent disfiguration of the instrument. Such holders also include delicate parts which readily become bent and/or get into the way of the player. Consequently, none of these types have ever been widely accepted, as far as is known.

It is therefore an object of this invention to provide a pick retention means applicable to any type of stringed instrument. It may also be applied to used or new instruments.

It is another object of this invention to provide a pick retention means that can be located anywhere on the instrument, including the main body. This enables optimum location for rapid and convenient removal and replacement of the pick. Moreover, pick removal and replacement may even be effected smoothly while playing the instrument.

It is another object of this invention to provide a pick retention means which does not detract aesthetically from the instrument, and in fact adds aesthetic appeal as well as usefulness.

It is still another object of this invention to provide an effective, appealing, convenient pick retention means on a stringed instrument, which neither utilizes nor requires any delicate spring elements which may get into the way of the player, or become bent and useless.

These and many other objects of this invention will be apparent upon studying the following specification in conjunction with the drawings in which:

FIG. 1 is a perspective view of a stringed instrument showing the novel pick retention means and a novel pick held thereon;

FIG. 2 is an enlarged fragmentary, side elevational, sectional view of one form of the pick retaining means;

FIG. 3 is a side elevational sectional view of a second form of the pick retaining means;

FIG. 4 is a side elevational sectional view showing a third form of the pick retaining means;

FIG. 5 is a side elevational, sectional view of a fourth form of the pick retaining means;

FIG. 6 is a plain view of one form of the novel pick used in this combination;

FIG. 7 is a side elevational view of a second form of novel pick used in this invention;

FIG. 8 is a plan view of a third form of pick usable in this invention;

FIG. 9 is a perspective view of a fifth form of novel pick retention means; and

FIG. 10 is an end elevational view of the apparatus in FIG. 9.

Basically, the invention comprises a combination of stringed instrument and pick retention means including a metallic element secured to the instrument, a pick having metallic portions, and at least one of said metallic element and metallic portions being magnetic so that the pick can be retained on the instrument by attraction to the element. The metallic element may be mounted on the outer surface of the housing of the instrument, on the inner surface of the housing of the instrument, or under a conventional guard adjacent the strings of the instrument. The pick includes metallic portions which may comprise a layer on the surface of at least a portion of the pick, or embedded therein. It may also comprise a plurality of tiny magnetically responsive metallic particles embedded in the pick. The pick retention means preferably forms a platform projecting above the surface of the instrument housing to allow rapid, simple sliding removal of the pick. The retention means also preferably has an upper surface of lubricious plastic material which serves to provide aesthetic appeal, easy sliding removal of the pick from the platform, preservation of the instrument finish, and physical separation of the pick from immediate contact with the magnetic metallic element secured to the instrument. Various other specific features of the different forms of the inventive pick, retention means, and total combination will be apparent upon studying the detailed description to follow.

Referring to FIG. 1, in the form of the inventive combination there illustrated, the stringed instrument comprises a housing 12 which includes a tail portion and a main body portion. A pick retention means 14, retaining pick 16 is shown in combination with the housing.

In the enlarged sectional view of the form of the retention means illustrated in FIG. 2, the pick 16 is shown in contact with a plastic surface 18. Surface 18 may be of a suitable plastic such as e.g. nylon, Teflon, or polyethylene. The plastic layer must be thin enough to permit penetration of magnetic flux lines therethrough. It must also be sufficiently lubricious to enable the pick 16 to be readily slid therethrough. It also should provide an aesthetically appealing surface. The peripheral edges of the plastic layer 28 are preferably beveled to enable the pick to be easily slid therefrom in a sweeping motion of the hand and arm. However, sharper edges as in FIG. 5 may be utilized if desired. The plastic should be thick enough to decrease the magnetic flux sufficiently to enable the pick to be readily removed from the platform in spite of the magnetic attraction. This, of course, will depend upon the magnetic power of the magnet used.

Under plastic layer 18 is a metallic element or layer 22. Either the metallic pick portions or element 22 must be magnetic, preferably the element. Element 22 is shown secured to the outer surface of the instrument wall 20 by an adhesive layer 24. A felt layer may be placed between the metallic layer and the instrument to safeguard the finish of the instrument, and also deaden any vibratory effects which the metal might have when the instrument is played. Thus, layer 24 may comprise a felt layer saturated with adhesive. Any suitable adhesive may be used for this purpose. Suitable examples are polymers of epoxy, acrylic, melamine, polyvinyl, and many others as is well-known to those in the art.

The retention means may be mounted anywhere on the
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instrument that is convenient. This includes the upper surface of the body, the side edge as shown in FIG. 1, or in some other desirable location. It is not limited to any particular structural components of the stringed instrument and thus can be readily mounted where desired.

In order for the pick 16 to be magnetically attracted to layer 22, it must include metallic, magnetically responsive portions. Three forms of such a pick are illustrated in FIGS. 6, 7 and 8. In FIG. 6, the pick 16 has a metallic, magnetically responsive piece 26 embedded therein. This may be formed in a plastic pick when mold it, for example. Alternatively, the pick may be formed in layers with the metallic piece or layer being laminated in place. The pick may be formed of any suitable material consistent with the nature of the metallic portion embodied therewith. Thus, for example, the pick may be plastic as explained with respect to FIG. 6. The pick may also be completely metallic, provided it has the required resilience and slight flexibility needed for playing the instrument.

As still another alternative, the pick may include a layer or coating 28 of metal (FIG. 7) covering at least a portion of the outer surface. As a still further embodiment, the pick may comprise a plastic material into which are embedded a great number of tiny metallic particles 30 that are magnetically responsive. These would not detract from the playing qualities of the pick, and would still achieve the magnetic retention qualities needed.

Instead of the retention means illustrated in FIG. 2, a modified form as illustrated in FIG. 5 may be utilized. In this form, a metallic element 32 is mounted to the underside of the housing wall 20. It is retained by a suitable adhesive layer 23. Removably held to the upper surface of the wall 20, is a second metallic element 34 which is magnetic in nature. The interaction of element 34 and element 32 retain element 34 in place. In fact both elements can be magnetic if desired. Between the outside wall of housing 20 and element 34 is a layer 36 having a very high coefficient of friction to prevent slippage of element 34 across the surface of the housing. A suitable material for layer 36 is a partially cured, soft rubber. Here again, a thin, lubricious plastic coating 40 is preferably applied to the upper surface of element 34 so that pick 16 can be readily slid off. This form of the invention enables one to remove the pick retention means from the exterior of the instrument when desired.

In another form of the invention, pick 16 is retained directly on the outer surface of wall 20 instead of on a platform means 16. In this case, magnet 22 is mounted to the underside of the housing wall as by a suitable adhesive 23, and pick 16 is placed directly on the upper surface. This structure has a disadvantage, in that constant removal and replacement of the pick tends to mar the finish on the instrument. However, it is a simpler, less expensive form of the invention.

In FIG. 5 is illustrated a still further modification of the retention means. In this form, magnet 22 is again secured to the inner surface of the housing wall 20 with an adhesive 23. The upper plastic lubricous element 18 is here secured to the housing by a pair of tiny screws which act as an under-layer such as determined to serve as an under-layer such as determined from the top surface of the instrument. In a still further form of the invention illustrated in FIGS. 9 and 10, the novel pick retention means is adapted to a stringed instrument, such as an electrical guitar 10, having a guard 58 adjacent the strings. This guard provides a means for some of the forms of the invention as illustrated in FIG. 10. Between the guard and the upper surface is mounted a magnet 22 so that a pick 16 will be magnetically held directly on the guard when not in use.

It will thus be apparent that the novel retention means enables pick retention in any convenient location over the surface of the instrument. Further, this can be done without damaging the surface of the instrument. The plastic surface even adds to the aesthetic appearance of the instrument. It enables the player to easily remove and replace the pick. The player always knows where the pick is located. The pick may be readily slid off the retention means with one sweep of the hand. This may even be done during playing so that no time is lost between portions of the composition where a pick is required, and portions where it is not required.

Various additional obvious modifications to the several shown may occur to those in the art upon studying the foregoing forms of the invention and the principles therein. These obvious modifications are deemed part of this invention if within these principles, since this invention is not to be limited by the forms illustrated, but only by the scope of the appended claims and the reasonably equivalent structures to those defined therein.

I claim:

1. A stringed instrument having pick retention means, said means comprising: a magnetizable retention element secured to the instrument; a pick having magnetizable portions; at least one of said magnetizable element and portions being magnetized; and at least one magnetic circuit existing between said element and said portions wherein the latter are in a predetermined proximity to the former, said magnetic circuit serving to retain said pick in fixed relation to said instrument until manually detached therefrom.

2. The combination in claim 1 wherein the magnetizable portions of said pick are magnetized.

3. The combination of claim 1 wherein said magnetizable element is magnetized.

4. The combination in claim 1 wherein said magnetizable portions comprises a metallic layer extending over at least a part of said pick.

5. The combination of claim 1 wherein said magnetizable portions comprises a plurality of metallic particles embedded in said pick.

6. A stringed instrument having pick holding means, said means comprising: a magnetized element secured to the housing of said instrument and adapted to magnetically hold a pick having magnetically responsive portions; and a plastic surface on said element, said surface being adapted to readily allow sliding movement of said pick thereover for easy removal of the pick, and to provide an attractive appearance.

7. The combination in claim 6 wherein said plastic surface has beveled edges.

8. A stringed instrument having pick retention means, said means including: an instrument housing having at least one wall with inside and outside surfaces; a magnetic element secured to the inside surface of a wall of said housing and having sufficient magnetism to produce magnetic attraction on the outside of said wall; and a pick having magnetically responsive portions, said pick being held adjacent the outside surface of said wall by the magnetic attraction of said magnetic element.

9. The combination in claim 8 wherein a plastic layer is secured to the outside surface of said wall to serve as a bearing support for said pick.

10. A stringed instrument having pick retention means comprising: a first magnetizable element retained upon the inside surface of a wall of the instrument; a second magnetizable element having a coating of material with a high coefficient of friction, said second element being removable retained on the outside surface of said wall in general superposition with said first element; the determination of at least one of said elements being magnetized; a plastic surface on said second element; and a magnetically responsive pick, said pick being retained upon said plastic surface of said second element by the magnetic attraction of said one magnetized element.

11. A stringed instrument having pick retention means, said means comprising: an instrument having a housing and including a guard adjacent the strings; and a magnetic element inserted between said guard and housing.
whereby a pick having magnetically responsive portions can be retained on said guard until needed.

12. A pick retention means for a stringed instrument comprising: a platform including a magnetic element, said platform being adapted to be secured to an instrument; and a lubricious plastic surface on said platform enabling smooth sliding removal of a magnetically responsive pick retained thereupon by the attraction of said magnetic element.

13. Magnetic pick retention means for stringed instruments, comprising: a magnetic element adapted to be secured to such an instrument; at least one generally flat surface portion formed on said element; and a lubricious coating upon said surface portion, said coated surface portion enabling smooth sliding removal of a magnetically responsive pick retained thereupon by the attraction of said magnetic element.