Feb. 14, 1933. C. B. ARCHER 1,897,225

GRIP ATTACHMENT FOR VIOLIN BOWS

Original Filed Nov. 10, 1930

Fig. 1.

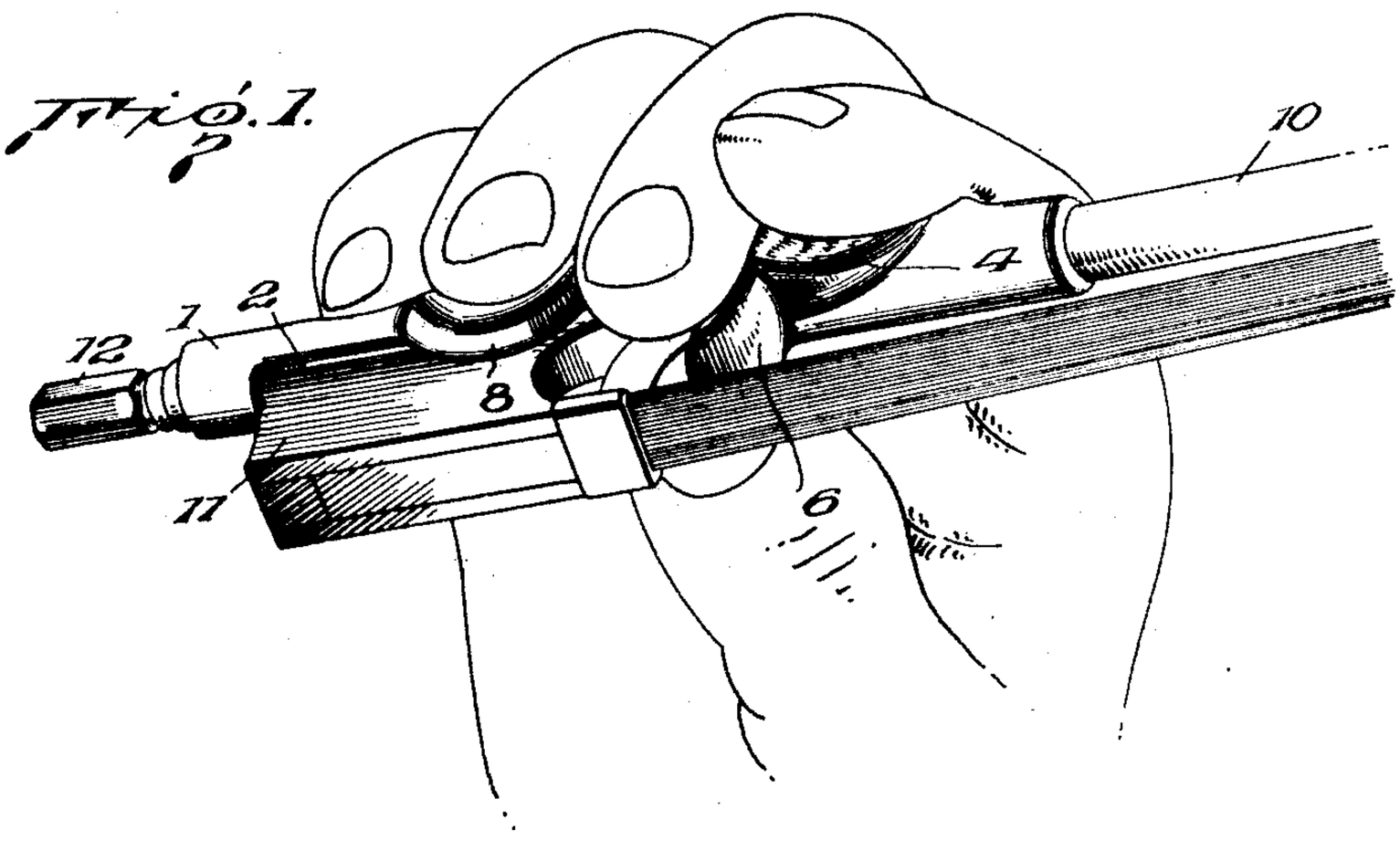


Fig. 2.

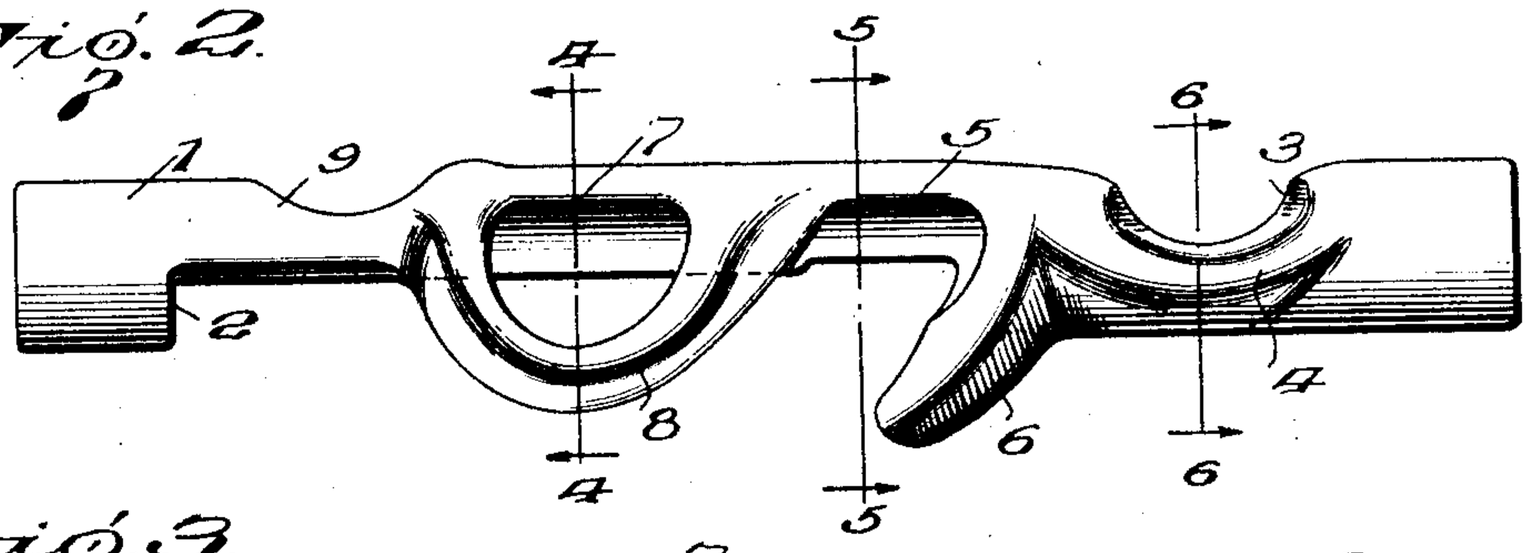


Fig. 3.

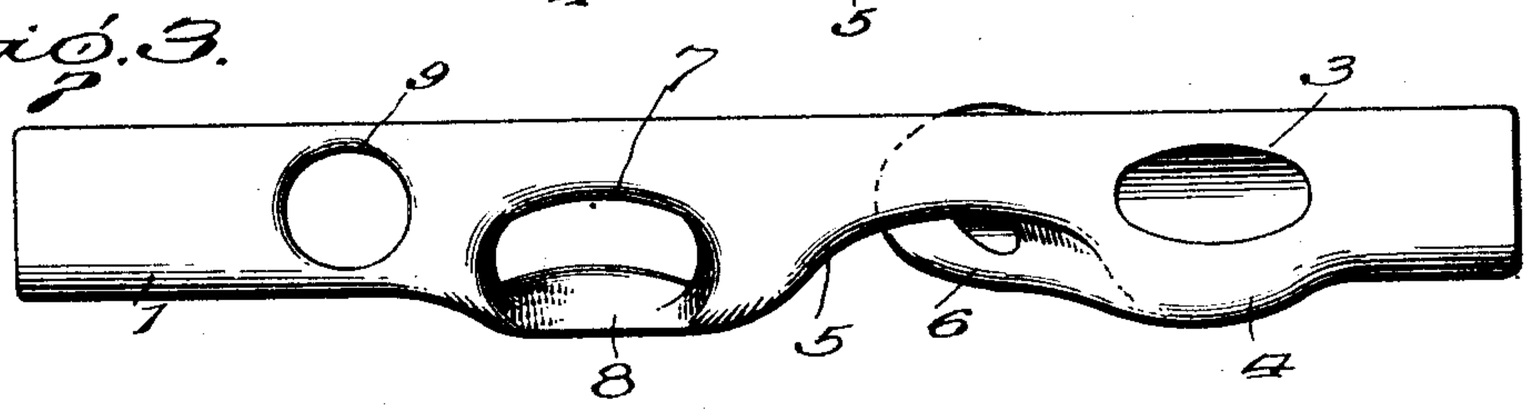


Fig. 4.

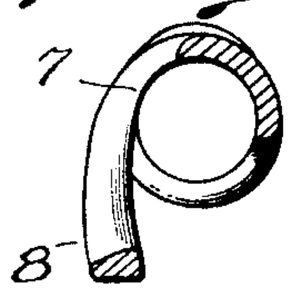


Fig. 5.

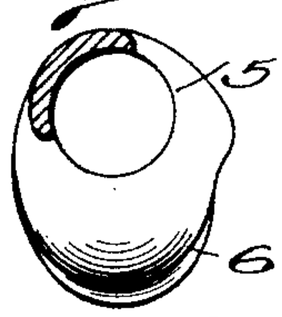
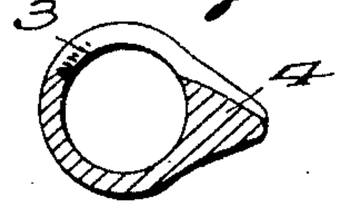


Fig. 6.



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UNITED STATES PATENT OFFICE

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GRIP ATTACHMENT FOR VIOLIN BOWS

Application filed November 10, 1930, Serial No. 494,753. Renewed July 30, 1932.

This invention relates to a new and useful improvement in a grip for violin bows.

The main object of the invention is to provide an attachment for violin bows that will cause a pupil to grip the bow in the correct manner and to automatically become accustomed to a position necessary for correct bowing.

A further object of the invention is to provide an attachment of this character that does not materially alter the balance of the bow when applied.

Still another object is to provide an attachment for this purpose that may be readily attached to or removed from a bow without any alteration to the conventional construction of the bow.

A further object is to provide an attachment having finger receiving sections so arranged that the fingers are only comfortably positioned therein when the bow is correctly gripped.

With the above and other objects and advantages in view, the invention consists in the detail of construction and arrangement of elements to be herein more fully described and claimed, and illustrated in the accompanying drawing, in which:

Figure 1 is a perspective view of the grip applied to a bow with the hand of a player placed thereon in correct bowing position.

Figure 2 is a side elevation of the attachment.

Figure 3 is a top plan view of the attachment.

Figure 4 is a vertical section on the line 4—4 of Figure 2.

Figure 5 is a vertical section on the line 5—5 of Figure 2.

Figure 6 is a vertical section on the line 6—6 of Figure 2.

In the beginning of violin study probably the most important thing is to teach the pupil a basically correct grip for the bow. Due to the fact that hands are differently shaped the physical characteristics of the pupil will predominate and there is a tendency to normally assume an incorrect bowing position. It is extremely difficult for the teacher to correct the pupil so that the bow can be controlled with the least amount of effort, particularly when teaching classes, and this attachment is designed in accordance with accepted principles to cause the pupil to correctly grip the bow. The use of this attachment will automatically enable the pupil to assume a correct bowing position and the use of a bow with this attachment in any other position than the correct one will be uncomfortable.

The authorities agree there is a scientifically correct principle in holding or gripping the bow. The rule for holding a violin bow correctly is that the thumb be placed one-third on the bow frog and two-thirds on the stick. Only the tip of the thumb must be used as the thumb must go through the bow half way to prevent locking the wrist or gripping the bow too tightly. The second finger must be placed directly opposite the thumb and engages the side of the bow stick at the first joint. The thumb and second finger must be perfectly in line, yet not touching. The third finger is placed around the stick and rests on the side of the bow stick between the tip and first joint. The fourth or little finger is placed directly on top of stick and touches only with the tip. The first or index finger merely rests on the top of the bow stick between the first and second joints.

This attachment is designed primarily with the end in view to force the pupil to grip the bow as above described. When the hand grips the bow with this attachment any other position than the correct one outlined will, due to the shape and configuration of the grip, be uncomfortable.

The attachment is in the form of a tubular sleeve 1 and is made very light. It can be made of various materials such as vulcanite, rubber, or aluminum and as much of the material as possible is eliminated so as to make the attachment in a skeleton form. The attachment is formed with an under-cut portion 2 from the bottom extending between the ends and placed closer to the rear end than the front portion.

The attachment is provided with a plurality of finger receiving sections adapted to receive the fingers and to position them cor-

rectly with respect to the bow. These sections are formed in different sizes and shapes as will be hereafter described and certain of them are offset with respect to others taken on a top longitudinal center line of the sleeve. The first of these sections is designated by the numeral 3 and is formed in the shape of a depressed aperture disposed substantially at the top of the sleeve and provided at one side with a shelf-like rest 4. This depression is adapted to receive the first or index finger in a manner to be hereinafter more fully described. The attachment is provided with a recess 5 disposed at one side of the upper center line of the sleeve and extending downwardly terminating with the under-cut portion of said sleeve. This recess is provided with a rest in the form of a depending integral lug 6 which forms a rest for one side of the second finger when positioned in said recess.

The depressed aperture for the third finger is indicated by the numeral 7 and this is located also to one side of the upper center line of the attachment as clearly indicated in Figures 2 and 3. This depressed aperture is provided with a shelf-like rest at its lower side indicated by the numeral 8 to be engaged by the finger. The section of the sleeve to receive the fourth or little finger is merely a depressed aperture indicated by the numeral 9 which is arranged in the top of the sleeve and is of sufficient size to merely receive the finger tip. It is differently shaped from the aperture 3 as the finger tip in this instance is designed to lie upon the bow stick through the aperture.

The attachment is arranged to be placed upon a conventional bow as indicated in Figure 1 of the drawing. In Figure 1 the numeral 1 indicates the attachment, 10 the bow stick, while the conventional frog is indicated by the numeral 11. The usual bow strings are connected with the frog and the frog is held in position by the usual screw 12. The attachment is placed on the bow by taking out the screw and removing the frog. The tubular sleeve of the grip is then slipped into position on the stick and the frog replaced in the conventional manner. The under-cut portion 2 of the grip attachment receives the frog at the rear end and enough room is still left at the front portion to receive the thumb.

With this attachment in position on a bow the pupil's hand must assume correct bowing position. This position is shown in Figure 1 of the drawing. The thumb is to be placed one-third on the bow frog and two-thirds on the stick. The thumb does not have any actual contact with the attachment. The second finger must be placed directly opposite the thumb at the first joint. By placing this finger in the cavity 5 it engages the side of the stick correctly at the first joint and it will naturally assume the position indicated in Figure 1 with the side of the finger tip engaging the depending rest lug 6 formed on the grip sleeve. The third finger is placed in the aperture 7 and naturally reaches around the stick and rests on the side of the frog piece through this aperture. This finger has a set position when placed in the aperture and rests on the bow stick between the tip and first joint. It is naturally guided and held in position by the lower shelf portion 8 of this aperture.

The fourth or little finger is placed through the aperture 9 directly on top of the stick. This aperture is so made that only the tip of the finger can be used which is the correct position for this finger. The first or index finger is positioned in the aperture 3 and this will cause the same to be placed on the bow stick between the first and second joints. As this finger is movable with movement of the bow, the aperture 6 is made large and substantially oval shaped to insure perfect freedom and relaxation of the first finger in any position of the bow. The shelf portion 4 will act as a guide or rest for the finger and assure its correct position.

In making this attachment a skeleton form is used so that the stick is bared as much as possible. When used the hand can almost hold the bow without touching the guide or grip and there is a direct individual finger engagement with the bow. This allows the pupil to feel the bow stick itself and at the same time the construction automatically positions the fingers correctly. After some use of this grip attachment the pupil can dispense with the same and the fingers will automatically assume correct position. This is the primary object of this attachment which really trains the various fingers to grip the bow itself correctly. It acts more as a guide than any positively corrective device and due to the fact the bow stick itself may be felt with the attachment in position it is obviously very beneficial in accomplishing the desired result. The attachment is very light and in position does not alter the balance of the bow.

While the object of this invention is to help beginners primarily, the attachment can also be used for corrective purposes by advanced pupils who have acquired a faulty grip. This attachment will prove of great value in training or urging the fingers to correct gripping position.

I claim:

1. A bow grip attachment comprising a skeleton sleeve having an under-cut portion and a plurality of depressed apertures appropriately sized to fit portions of the first, third and fourth fingers of the hand, and said sleeve having a recess at one side to receive a portion of the second finger.

2. A bow grip attachment comprising a

skeleton sleeve having an under-cut portion, the upper portion of said sleeve having a plurality of different sized and shaped apertures, a side recess in said sleeve, and a depending lug adjacent thereto to form a rest.

3. A bow grip attachment comprising a sleeve having an under-cut portion, the upper portion of said sleeve having a plurality of different sized and shaped apertures, shelved rest portions formed adjacent certain apertures, a recess in the side of the sleeve, and a depending lug adjacent thereto to form a rest.

4. A bow grip attachment comprising a skeleton sleeve adapted to be mounted on the gripping end of a violin bow, and a plurality of appropriately shaped finger receiving portions formed thereon adapted to only comfortably receive the adjacent portions of the individual fingers normally directly engageable with the bow when the same is correctly gripped.

5. A bow grip attachment comprising a skeleton sleeve adapted to be mounted on the gripping end of a violin bow and having certain openings therethrough to permit direct individual finger engagement with said bow, and finger positioning portions on the sleeve adjacent said openings to cause the individual fingers to naturally assume a correct position.

6. A bow grip attachment comprising a skeleton sleeve adapted to be mounted on the gripping end of a violin bow and having certain openings therethrough to permit direct individual finger engagement with said bow, finger positioning portions on the sleeve adjacent said openings, and each opening and adjacent positioning portion being appropriately sized and located for the individual finger received thereby.

7. A bow grip attachment comprising a unitary skeleton sleeve adapted to be mounted on the gripping end of a violin bow, said sleeve having certain openings through the upper portion thereof to permit individual finger engagement with the bow and an undercut portion to receive the frog and player's thumb, finger positioning portions on the sleeve adjacent said openings, each opening and positioning portion being appropriately formed for the individual finger received thereby, and said openings and positioning portions being offset with respect to each other.

In testimony whereof I affix my signature.

CHARLES B. ARCHER.