July 18, 1933. W. C. WEEKS 1,918,506

PAD FOR MUSICAL WIND INSTRUMENTS

Filed Nov. 27, 1929

Fig. 1

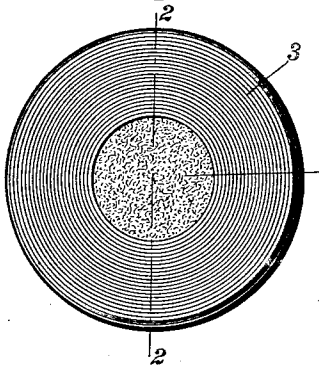


Fig. 2

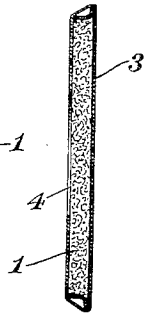


Fig. 3

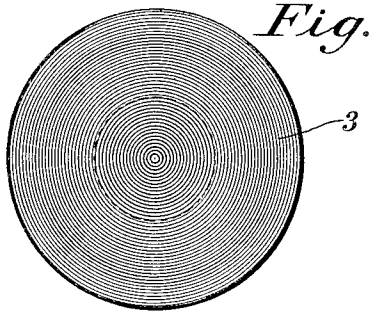


Fig. 4

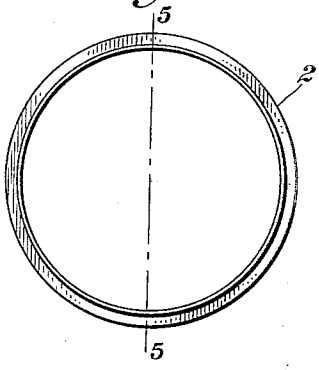


Fig. 5



Fig. 6

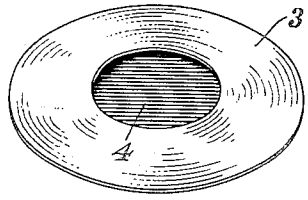


Fig. 7

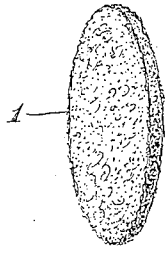


Fig. 8

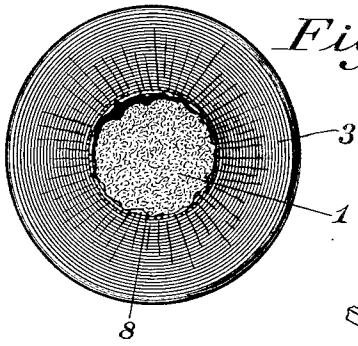
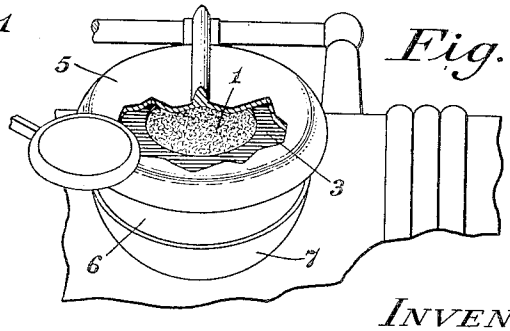


Fig. 9



INVENTOR,

William Compton Weeks.

Patented July 18, 1933 1,918,506

UNITED STATES PATENT OFFICE

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PAD FOR MUSICAL WIND INSTRUMENTS

Application filed November 27, 1929. Serial No. 410,137.

The invention relates to improvements in pads for musical wind instruments as described in the present specification and shown in the accompanying drawing that forms a part of the same.

The main object of the invention is to provide a pad having a thoroughly waterproof exterior capable of resisting the moisture caused by the breath in the playing of the instrument.

A further object is to insure perfect seating of the pads on the respective sockets when brought into engagement with same so as to effectually prevent the escape of air.

Another object is to provide a pad which will not warp or crease from the effects of moisture, or from contact with the socket.

A still further object is to provide a pad having an elastic covering formed of rubber, or rubber composition, which may be easily slipped on to the pad, or removed therefrom.

And generally the objects of the invention are to provide a simple and efficient pad for musical wind instruments which may be produced at small cost.

The invention consists in the novel features of construction, arrangement and combinations described in the present specification and more particularly pointed out in the claim for novelty following.

In the drawing Figure 1 is a plan view of the inner side of the pad.

Figure 2 is a cross sectional view taken on the line 2—2 of Figure 1.

Figure 3 is a plan view of the outer side of the pad.

Figure 4 is a detail of a ring adapted to hold a felt insert.

Figure 5 is a cross sectional view taken on the line 5—5 of Figure 4.

Figure 6 is a perspective view of the rubber covering.

Figure 7 is a perspective view of the felt insert.

Figure 8 is a plan view of the inner side of a pad showing a modified form of covering.

Figure 9 is a perspective view of a portion of the key mechanism of an instrument showing the pad incorporated therewith.

Like numerals of reference indicate corresponding parts in the various figures.

Referring to the drawing the pad, or insert, 1 which is preferably made from felt, or other similar material, is circular in form and is held in shape by means of a metal ring 2 fitting thereover, there being a number of such inserts and their retaining rings on each instrument and varying in dimensions to correspond to the requirements of the key mechanism.

A covering 3, manufactured of rubber, or of a suitable rubber composition, adapted to provide the desired elasticity and being thoroughly waterproof, is fitted over the ring 2 and the insert 1, one side of said cover preferably being open, as at 4, to permit of the insertion of the insert and its ring, and the whole is then inserted in the member 5 with the open side of the cover innermost so as to present a perfectly smooth waterproof exterior adapted to seat on the opening 6 in the socket 7.

In Figure 8 the modified form of cover is stamped out of calendered rubber, or rubber composition, and the edges of the central opening are gathered, or drawn together with thread, as at 8, after the pad, or insert, 1 and the ring 2 have been placed therein.

While the cover 3 has hereinbefore been described as a separate element it must be understood that same may be provided by assembling the pad 1 within the ring 2 and dipping the whole in rubber, or a suitable rubber composition, so as to coat same on both sides.

The present invention insures enhancement of the tone and volume of the instrument owing to the fact that the surface of the pad will not warp or crease and will always seat perfectly on the sockets and will not be affected by moisture.

What I claim is:—

In a pad for musical wind instruments, the combination with an annular member of inflexible material and a disc of compressible material mounted in said annular member, of a rubber envelope of circular formation having a relatively small opening centrally of one wall thereof for the reception of said disc and said annular member, and means for drawing up the edges of said opening.

WILLIAM CAMPBELL WEEKS.