July 23, 1968 A. ERESMAN 3,393,793

REED CASES

Filed April 20, 1967

FIG-1

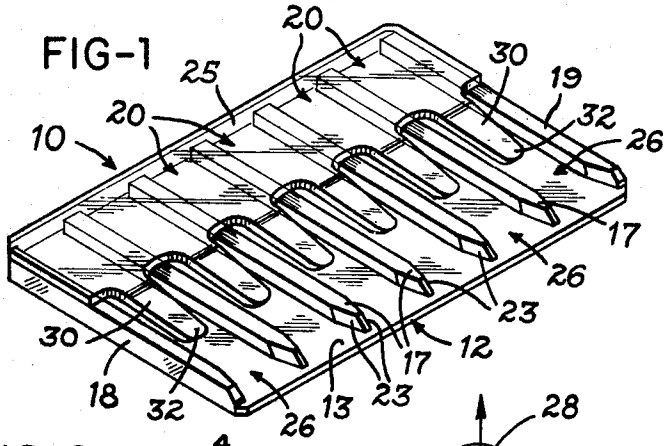


FIG-4

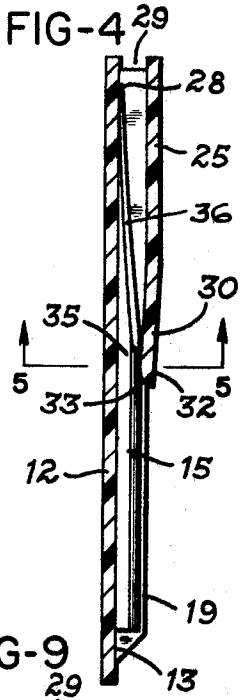


FIG-2

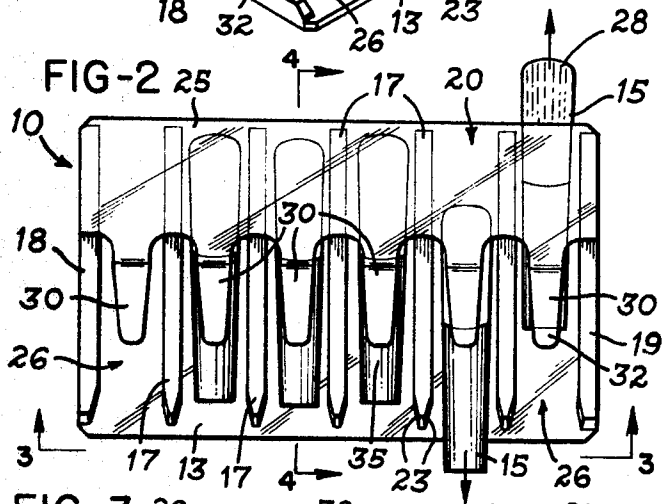


FIG-9



FIG-5

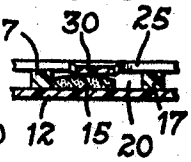


FIG-3

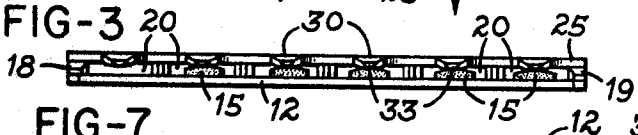


FIG-7

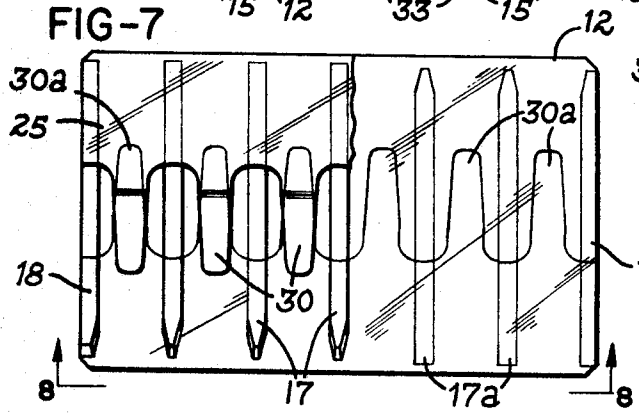


FIG-6

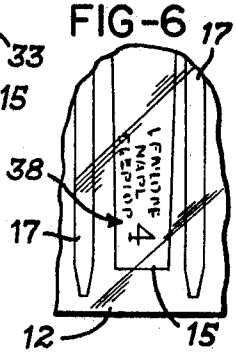
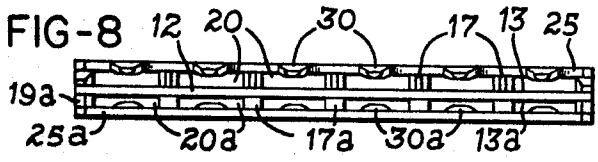


FIG-8



INVENTOR

ARTHUR ERESMAN

BY

Marechal, Biebel, French & Bugg

ATTORNEYS

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REED CASES

Arthur Eresman, 1201 Larriwood Road, Kettering, Ohio 45429

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7 Claims. (Cl. 206—13)

ABSTRACT OF THE DISCLOSURE

Cases or holders are described for retaining and protecting woodwind reeds when they are not in use, in which a flat base plate is divided into longitudinal recesses which are open at each end for ease of cleaning and for promoting drying of the reeds, and a partial cover plate encloses the recesses to protect the vulnerable portions of the reeds while fingers engage the reed bodies at their thick sections and hold them flat against the base plate for restoring their shape during drying and providing ease of insertion and withdrawal through either end of the recesses.

Background of the invention

This invention relates to musicians' reed holders and cases, and more particularly to improved cases for storing and retaining woodwind reeds when they are not in use.

Reed cases have been known for storing woodwind reeds. However, these cases have generally been characterized by one or more deficiencies which decrease their utility. Commonly, reed cases have been made of paper, but do not adequate protect the reeds nor promote proper drying. Reed cases which provide adequate mechanical protection against damage have been complicated and expensive to make, have been formed with dead ends or pockets for collecting lint or dirt and were difficult to clean and keep clean, and generally failed to promote adequate ventilation and drying. Additionally, many such reed cases incorporated springs, clips, and the like which engaged the reed at the thin or tapered section, frequently causing damage to the reed when not carefully used, and inducing warping of the vibrating portion of the reed.

Summary of the invention

The reed cases of this invention eliminate many of the problems which characterize prior reed cases. It is important for a musician to be able to carry a supply of reeds in a protective case which maintains the reeds in a flat condition, and which permits the reeds to dry quickly and adequately after use. It has been found that when a reed is used every day, it will wear out and become useless in about two to three weeks of use. However, if a number of such reeds are rotated so that each is allowed to rest, it has been found that a substantial improvement in the actual life of each reed may be obtained and this may be in the order of four or five times additional life as compared to a reed used continuously. In other words, if a musician uses six reeds, for example, in rotation, and stores the remaining five reeds in a reed case made according to this invention, it has been found that the individual reeds will last several times longer than if they were in constant use.

The importance of properly drying, protecting and conserving reeds may be further appreciated when it is considered that a musician will commonly buy reeds in bulk, and through a process of careful selection will select about one-fourth of these reeds as being suitable. Frequently, he may treat these reeds, such as by touching them up with a file, to obtain the desired results. Further, a musician frequently wishes to have available several different reeds of differing strengths or stiffness from which he may

select according to the music or the instrument to be played.

It is accordingly an important object of this invention to provide a reed case which is of simple construction, which adequately protects the reeds when they are not in use, and which promotes rapid drying of the reeds after use. This is accomplished in this invention by a reed case which is divided into a plurality of longitudinally extending recesses open at each end, to permit insertion and removal of the reeds in either direction through the recesses, and to facilitate the circulation of air for drying. Thus, the reed cases made according to this invention are free of dead ends and stagnant pockets which collect dirt and which make cleaning of the case difficult.

A further object of this invention is to provide a reed case, as outlined above, in which the stored reeds are gently held against a flat surface, to help restore the flat surface of the reed. Preferably, this is accomplished by the provision of resilient clips which engage the reed only at the thick body sections rather than at the thin tapered ends, leaving the tapered reed surfaces untouched by the case. In this manner, the retaining springs or clips exert pressure only on the hard external shell of the reed and not on the soft tapered surface, to prevent warping and distortion of this delicate portion of the reed.

A further object of this invention is the provision of a reed case in which at least a portion, and preferably all, of the case is formed of a clear plastic resin, such as acrylic, to facilitate identification of the stored reeds and the reading of the markings on the flat surfaces of the reeds through the transparent base plate without the necessity of first removing the reeds from the case.

A further object of this invention is the provision of a reed case in which the reeds may be deposited and withdrawn without undue care or risk of damage of the reeds.

A still further object of the invention is the provision of a reed case in which a plurality of reed-receiving recesses are provided which are open at each end so that the case may be easily flushed out by merely holding it under a faucet. Also, the open ends of the case assure that the reed cannot be damaged if it is inserted too far into the case.

These and other objects and advantages of the present invention will be apparent from the following description, the accompanying drawings and the appended claims.

Brief description of the drawings

FIG. 1 is a perspective view of a reed case constructed according to this invention;

FIG. 2 is a plan view of the case of FIG. 1 showing reeds in some of the recesses and further showing the manner in which reeds may be inserted or withdrawn;

FIG. 3 is an end view of the case of FIG. 2 looking generally along the line 3—3 of FIG. 2, with one of the reeds removed;

FIG. 4 is an enlarged longitudinal section taken generally along the line 4—4 of FIG. 2;

FIG. 5 is an enlarged fragmentary transverse section through one of the reeds in a reed-receiving recess taken generally along the line 5—5 of FIG. 4;

FIG. 6 is a fragmentary plan view looking at the back side of the reed case of FIGS. 1 and 2, showing a reed in a recess and the manner in which the identifying information on the reed can be observed through the transparent base plate;

Fig. 7 is a plan view of a modified reed case constructed according to this invention;

FIG. 8 is an elevational view of the case of FIG. 7 taken generally along the lines 8—8 of FIG. 7; and

FIG. 9 is an enlarged longitudinal section of the modified case showing two of the reeds in position.

Description of preferred embodiments

Referring to the drawings which illustrate preferred embodiments of this invention, a reed case constructed according to this invention is shown at **10** in FIG. 1 as having a base plate **12** which forms an essentially flat reed-supporting surface **13** on an upper side thereof. The base plate **10** is preferably formed of a clear acrylic sheet plastic material, although opaque plastics and metals may also be used. It is generally rectangular in shape and has a length in one direction which is somewhat greater than the corresponding longitudinal length of a woodwind reed **15** to be stored and retained by this invention. The width of the plate **10** may be any suitable dimension to accommodate one or more of the reeds **15**, and is shown in FIGS. 1 and 2 as being sufficient to provide support for six of the reeds **15**.

The base plate **10** is divided transversely of its width into a plurality of reed-receiving regions by a plurality of longitudinally extending divider strips **17**. The strips **17** may be formed of the same material as the base plate **12** and are suitably plastic welded, bonded or otherwise formed in place longitudinally extending relation on the upper surface **13**, and extend substantially the full longitudinal length of the base **12**. In addition, the base is formed with a pair of end strips **18** and **19** which extend along the opposite left and right edges of the base **12** and correspond generally in length and function to the individual divider strips **17**.

The strips **17** cooperate with each other and with the end strips **18** and **19** to form a plurality of longitudinally extending, reed-receiving recesses **20** on the base plate **12**.

The spacing of the intermediate strips **17** on the plate **12** is such as to define recesses **20** of a width suitable for receiving woodwind reeds, such as saxophone or clarinet reeds, and are each formed with tapered front edges **23** to facilitate the insertion and withdrawal of the reeds **15** within these recesses. As shown in this embodiment, there are provided five of the divider strips **17** defining therebetween and with the end strips **18** and **19** six of the recesses **20**, although more or less strips may obviously be used within the scope of this invention.

The recesses **20** are partially enclosed by a cover plate **25** which is positioned in overlying relation to the surface **13** of the base plate **12**. The cover plate **25** may conveniently be formed of the same material as that of the base plate **12**, and thus formed with a width which corresponds to the width of the base plate and with a longitudinal depth in the direction of the recesses **20** which is preferably less than that of the base plate **12**. It is secured in spaced relation to the plate **12** by fastening, such as screws, rivets or the like, or by cementing or securely bonding or welding to the upper surfaces of the divider strips **17** and the end strips **18** and **19**, and defines opening spaces **26** at the forward ends of the recesses **20**, to permit access for gripping and sliding the individual reeds into and out of storage within the recesses.

The cover **25** is accordingly positioned in closing relation to the reed-receiving recesses **20** at a position which generally overlies and forms a protective enclosure for the tapered tips or working ends **28** of the reeds **15** when they are positioned within their respective recesses. Accordingly, at least in this section of the reed case **10**, the reeds are fully enclosed on each of the four sides of the recess, while the recesses are open and unrestricted at each longitudinal end, including the access open space **26**, previously defined, and the opposite open end **29** between the cover plate **25** and the base plate **12**, as shown in FIG. 4.

The cover **25** is further formed with a plurality of reed-engaging, spring-like fingers **30**, which may be integrally formed with the cover plate **25**, or which may be otherwise separately formed and conveniently attached by bonding to this plate. The fingers **30** are tapered in width so that they occupy a space somewhat less than the transverse width of the individual recesses **20**, and are deflected or bent downwardly toward the surface **13** of the base **12**, and extend from the cover **25** longitudinally forwardly and partially into the access spaces **26**. The ends **32** of the fingers **30** are smoothly curved or tapered, as shown at **33** in FIG. 4, to engage the thick shell or body portion **35** of the reed **15**.

Each of the fingers **30** gently urge the reed **15** into engagement with the flat supporting surface **13** of the base plate **12** and retain the reed in stored position where it may dry properly and reform the flatness of the reed. Since the width of the fingers **30** is less than the width of the recesses **20**, and the width of each recess is proportioned somewhat greater than the width of the reed, as shown in FIG. 5, open air passageways are provided for the convection and flow of drying air throughout the longitudinal length of the recesses **20** even when the reeds **15** are in position, to facilitate curing and drying. The tapered end **32** of the fingers **30** are proportioned always to engage the thickened or uncut body portion **35** of the reeds **15**, as distinguished from the tapered or cut portion **36**, even though the individual reed may be positioned at one or the other extreme side position within the recess, as shown in FIG. 5.

The reeds **15** commonly are formed with identification marks **38** on the bottoms of the flat surfaces of the shell or body portions **35**. These identification marks are readily observed through the transparent base plate **12** without the necessity for removing the reeds, to facilitate rapid selection of a desired reed, as illustrated in FIG. 6.

FIGS. 7–9 illustrate a modified form of the reed case in which reed-receiving recesses are formed on each side of the base **12**, and in which like reference numerals are used to designate like parts. This embodiment thus comprises a construction in which pairs of reed receiving recesses **20** and **20*a*** are formed in back-to-back relation on either side of the base plate **12**, providing a capability of storing twice as many reeds with safety while promoting their drying. The upper portion of the reed case of this embodiment is configured substantially identically with that which has been described with the embodiment of FIGS. 1–6. A similar set of dividers **17*a***, end strips **18*a*** and **19*a***, and a cover plate **25*a*** with reed-retaining fingers **30*a*** are positioned on the reverse side of the plate. However, the plate **25*a*** is positioned longitudinally opposite and reversed with respect to its corresponding plate on the other side, so that the reeds which are inserted within opposite recesses are inserted from the opposite direction, primarily as a matter of convenience, and to provide symmetry to the case. However, the parts of the case on the reverse side of this embodiment may be positioned with respect to the common base plate **12** so that the reeds are inserted in the same direction as those on the other side.

It will thus be seen that the reed cases which have been described above may be conveniently cleaned merely by holding under a faucet with the reeds removed, and the recesses **20** being open at either end permits substantially unrestricted flow of flushing water through the case. While the members or portions of the case including the base plate **12**, the dividers **17** and the cover **25** including the fingers **30**, have been described as separate elements or portions of the invention, it is obvious that one or more of the parts could be made of molded material or metal rather than the clear acrylic plastic sheet material.

While the forms of apparatus herein described constitute preferred embodiments of the invention, it is to be understood that the invention is not limited to these precise forms of apparatus, and that charges may be made therein without departing from the scope of the invention which is defined in the appended claims.

What is claimed is:

1. A reed case for containing and protecting a plurality of woodwind reeds, comprising a base plate forming an essentially flat reed-supporting surface on at least one side thereof and being formed with a longitudinal length

in at least one direction which is greater than that of a reed to be contained therein, means forming a plurality of generally parallel divider strips on said base plate surface extending longitudinally thereof and dividing said base plate into a plurality of reed-receiving portions, a cover plate positioned in overlying relation to said base plate surface on said divider strips forming a top closure for said portions defining with said strips corresponding reed-receiving recesses, said base between said strips being free of obstructions and defining with said cover at least one unrestricted reed insertion opening for each of said recesses permitting insertion and withdrawal of a reed therein without bending, means in said cover defining openings adjacent one end of said recesses providing access for gripping and sliding reeds into and out of said recesses, and reed-engaging resilient means supported on said cover and extending partially into said recesses proportioned to engage a reed positioned in the associated said recess at the uncut body portion of such reed frictionally retaining the reed in the recess and urging the reed against said reed supporting surface while leaving the thin, tapered end of such reed free of pressure contact thereon.

2. The case of claim 1 in which said recesses are open at each longitudinal end thereof permitting the insertion and withdrawal of reeds through either end thereof and the circulation of air therethrough.

3. The case of claim 1 in which said base is formed of transparent plastic sheet material permitting viewing of reed identification through said base plate.

4. The reed case of claim 1 in which said resilient means comprise fingers extending longitudinally from said cover plate into said recesses at said access openings and are deflected inwardly toward said base plate surface to engage such reeds in said recesses on such thickened body portion thereof.

5. The case of claim 4 in which said cover is formed of the same material as said base and in which said fingers are formed integrally with said cover.

6. The reed case of claim 1 in which said base plate has an essentially flat back surface, and further comprising a further said plurality of divider strips, and a further cover plate thereon defining a further set of longitudinal

reed-receiving recesses with respect to said back surface corresponding in number and transverse position to the corresponding parts on the other side of said base plate, and further reed-engaging resilient means supported on said further cover plate, said further divider strips, cover plate, and resilient means being configured with respect to said back surface essentially in the same manner and for the same purpose as are the corresponding parts with respect to the front surface.

7. A reed case for containing and supporting a plurality of woodwind reeds comprising a base plate forming an essentially flat reed supporting surface on at least one side thereof and having a longitudinal dimension in at least one direction which is greater than the length of a reed to be supported thereon, a cover plate having a longitudinal length substantially less than that of said base plate and having a width corresponding generally to that of said base plate, means mounting said cover plate in spaced relation to said base plate surface, a plurality of dividers extending longitudinally between said cover and base plates dividing the space therebetween into a plurality of longitudinal reed-receiving recesses with the spacing between said dividers being such as to receive a single such reed in each of said recesses while leaving thereabout an open space providing for air flow through said recesses with such reeds in place therein, each said recesses being open at either end thereof permitting reeds to be inserted straight into said recesses and withdrawn from either longitudinal end thereof without bending, and reed-engaging spring-like fingers on said cover and deflected slightly inwardly in said recesses toward said base plate surface and each being proportioned to engage the uncut body portion of a reed when the same is inserted into the associated said recess for retaining such reed therein and urging it against said base plate surface.

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WILLIAM T. DIXSON, JR., *Primary Examiner.*