May 24, 1960 M. E. BRUCKMANN 2,937,740

REED CASE

Filed Nov. 29, 1957 2 Sheets-Sheet 1

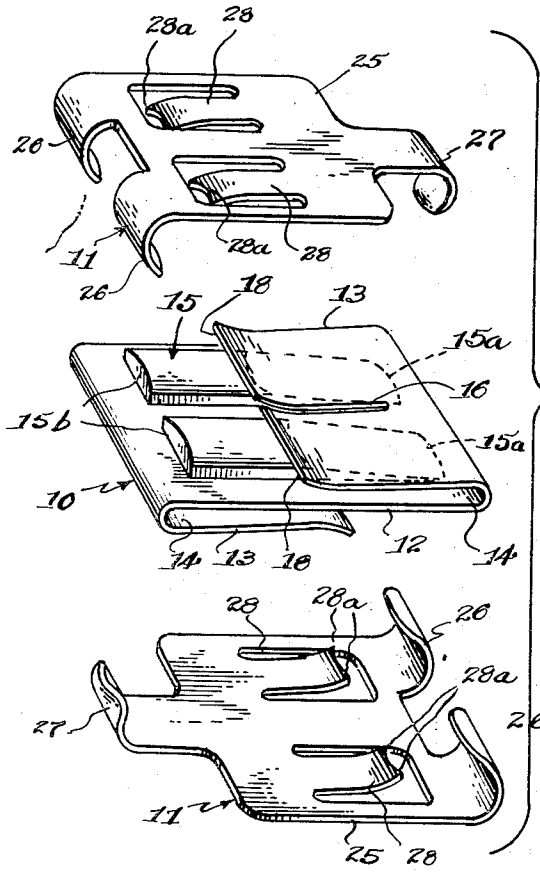


Fig. 1

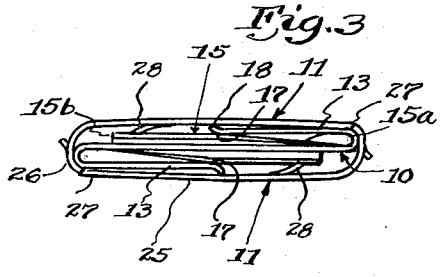


Fig. 3

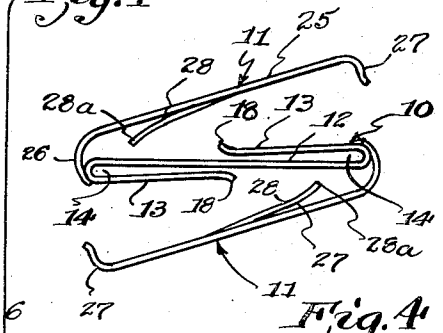


Fig. 4

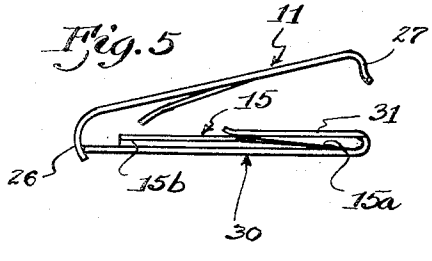


Fig. 5

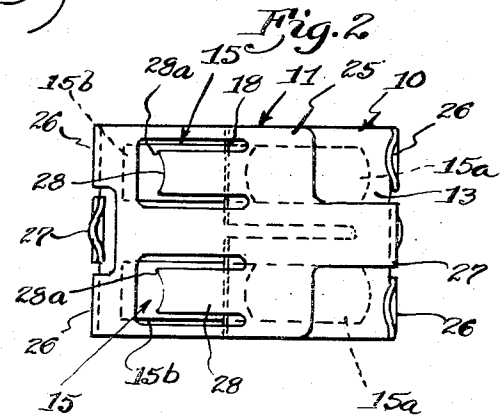


Fig. 2

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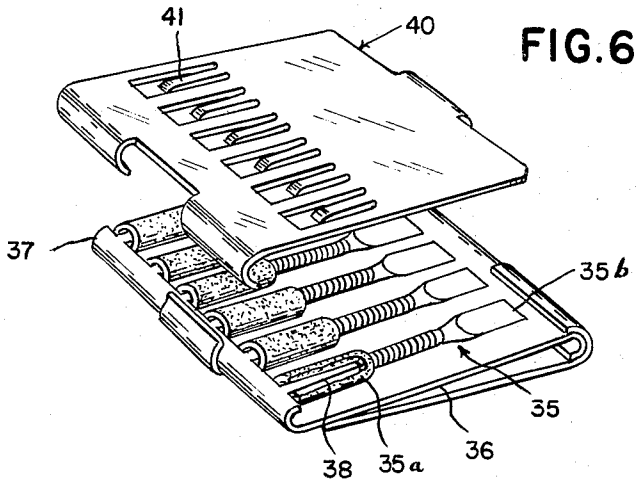


FIG.6.

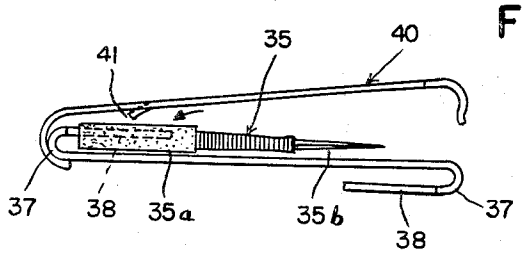


FIG.7.

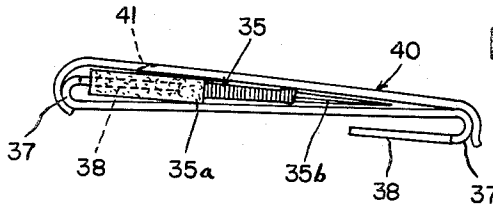


FIG.8.

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United States Patent Office 2,937,740 Patented May 24, 1960

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REED CASE

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Filed Nov. 29, 1957, Ser. No. 699,768

20 Claims. (Cl. 206—13)

My invention relates to carrying cases for musicians' woodwind reeds and more particularly to a reed carrying case constructed to retain and protect reeds when not in use.

Heretofore, carrying cases for woodwind reeds have not been very satisfactory, primarily because they provide little actual protection for reeds, whose thin ends are readily split, crushed and warped, making them useless. Some cases to be found on the market enclose the reed completely, preventing satisfactory drying. Others do not retain the reeds securely, so that when carried about, the reeds become dislodged and damaged.

An object of the present invention is to facilitate carrying woodwind reeds by constructing a carrying case of simplified construction capable of providing complete protection.

Another object of the invention is to protect woodwind reeds when not in use by providing a carrying case constructed to retain reeds securely while yet making them readily accessible.

A further object of the invention is to improve woodwind reed carrying cases by constructing a support having return bent ends forming pockets in which reeds may be inserted, and providing covers therefor and means securely clamping the reeds to the support.

Yet another object of the invention is to provide a new means for carrying woodwind reeds by constructing a support having a readily removable cover cooperating therewith to retain reeds rigidly against displacement and being sufficiently open to permit the reeds to dry readily.

A still further object of the invention is to provide protection for woodwind reeds not being used by constructing cooperating support and cover elements adapted to clamp reeds securely and shield same from possible damage.

For a more complete understanding of my invention, reference may be had to the accompanying drawing illustrating a preferred embodiment of the invention in which like reference characters refer to like parts throughout the several views and in which

Fig. 1 is a perspective view of a preferred carrying case embodying the invention and illustrating the support and removed covers.

Fig. 2 is a plan view of the assembled carrying case parts of Fig. 1.

Fig. 3 is a side elevational view of the assembled carrying case.

Fig. 4 is another side elevational view of the carrying case illustrating the separable hinge concept of the covers.

Fig. 5 is a side elevational view of a modified construction.

Fig. 6 is a perspective view of a further modification for carrying double reeds.

Fig. 7 is a side elevational view of the modification of Fig. 6 with the cover slightly open, and

Fig. 8 is a side elevational view of the modification of Fig. 7 with the cover closed.

The preferred carrying case comprises a support structure **10** and a pair of substantially identical but oppositely positioned covers **11** adapted to be removably secured to the support **10**. For convenience, only one of the covers **11** is described in detail.

The support structure **10** is seen to comprise a substantially flat member **12** having oppositely return bent portions **13**, each constructed to provide a pocket **14** into which thin end of a reed **15** is inserted. The thin reed end is designated by the reference character **15***a* and the half-round base end is designated **15***b* in the drawing.

The support structure **10** illustrated in Figs. 1–4 is adapted to carry four reeds, the return bent portions **13** being split longitudinally as at **16** to provide individual ends, each of which is shaped to provide engagement as at **17** in Fig. 3 with the base end **15***b* of the reed **15**. It is apparent that provision for individually holding more or less reeds may readily be made. The base end **15***b* being half-round on the uppermost face, it is seen that the aforesaid engagement is made at a single small central area. The end edge **18** of the return bent portion **13** is upturned to facilitate insertion of the reed **15**, and the return bent portion **13** itself is constructed of resilient material and the portion **17** is closely spaced from the flat member **12** to clamp the reed **15** thereto.

The cover **11** comprises a substantially flat portion **25** having a pair of spaced subtantially C-shaped flanges **26** at the other end. The flanges **26** and **27** are adapted to grip respective ends of the support structure **10**. The flanges **26**, being C-shaped, act as a separable hinge on one end of the support structure **10** as indicated in Fig. 4 and the flange **27**, being S-shaped, snaps over the other end of the support structure **10**, holding the cover **11** securely in place. It will be seen that in the embodiment of the invention illustrated in Figs. 1–4, the single flange **27** of one cover **11** is adapted to be disposed in the space between the pair of flanges **26** of the other cover, providing for a compact assembly as illustrated in Figs. 2 and 3.

The cover **11** is provided with clamping elements **28** preferably formed integrally with the flat portion **25** as illustrated particularly in Figs. 1 and 2. Each clamping element **28** is inwardly bent as shown and is preferably formed to have a pair of spaced prongs **28***a*, the prongs **28***a* thus being adapted to engage with small laterally spaced areas of the reed base end **15***b* when the cover **11** is clamped to the support structure **10**. The cover **11** is constructed of resilient material so that the clamping element **28** will resiliently engage with the reed **15**, thus further clamping the reed **15** to the support structure flat member **12**.

The flat portion **25** of the cover **11** also resiliently engages the end edge **18** of the support structure portion **13**, thus applying additional clamping pressure on the reed at the area **17**.

It is seen that the present carrying case construction provides individual protection for the thin ends **15***a* of a plurality of reeds **15**, clamping pressure being applied individually on the base portion **15***b* only at several small spaced areas to prevent lateral and longitudinal displacement of the reed **15** relative to the support structure **10**. The major part of the clamping pressure is supplied by the cover **11** when clamped on the support structure **10**. The cover **11** is readily removed to release most of the clamping pressure so that the reed **15** may then be readily removed from the pocket **14**.

Fig. 5 illustrates a modified construction comprising a support structure **30** having only one return bent end portion **31**. The cover **11** is substantially similar in both construction and function, but it will be seen that only one C-shaped flange **26** will be required.

Figs. 6–8 illustrate a further modification of the invention used for holding double reeds **35** such as are re-

quired on oboes, English horns, bassoons, and the like, and constructed with a cylindrical base portion 35*a* and a reed portion 35*b*. The carrier case preferably comprises a support structure 36 having return bent portions 37 each provided with a plurality of tines or prongs 38 on which the double reeds 35 are placed as shown, so that the reed portion 35*a* is spaced from the support structure 36. A cover 40, constructed similar to the cover 11 of Figs. 1–5, is provided with clamping elements 41 similar to the clamping elements 28 of Figs. 1–5. Upon clamping the cover 40 to the support structure 36, the clamping elements 41 thrust the double reeds 35 inward and down, as indicated by the arrow in Fig. 7, thus clamping the reed against the tine 38 and the support structure 36 substantially as illustrated in Fig. 8. For convenience, only one cover 40 is shown in Figs. 7 and 8, and it will be apparent that either one or two return bent portions 37 may be provided.

I prefer to fabricate the carrying case from any suitable transparent plastic material having the desired resilience while yet being sufficiently strong to prevent bending as breaking under the relatively small stresses applied. Being transparent permits visual inspection of the reeds. Also, it is noted that the carrying case is provided with sufficient openings to permit rapid drying of reeds while yet providing adequate protection from damage while being carried about.

Although I have described only two preferred embodiments of my invention, it will be apparent to one skilled in the art to which the invention pertains that various changes and modifications may be made therein without departing from the spirit of the invention or the scope of the appended claims.

I claim:

1. A woodwind reed carrying case, a woodwind reed supported thereby, said case comprising a reed supporting member having a return bent portion constructed to secure a reed to said supporting member and a cover overlying said reed, means securing said cover to said supporting member, said cover having a resilient clamping means operable on securing said cover to said supporting member to engage said reed and clamp same to said supporting member.

2. A woodwind reed carrying case, a woodwind reed supported thereby, said case comprising a reed supporting member having a return bent portion constructed to secure said reed to said supporting member, and a cover overlying said reed, opposite ends of said cover each having a flange, said flanges being constructed and arranged to removably resiliently clamp on opposite ends of said supporting member, and said cover having a resilient clamping means operable on clamping said cover to said supporting member to engage said reed and to clamp same to said supporting member.

3. A carrying case for woodwind reeds of the type comprising a relatively thick base and a relatively thin tip, said case comprising a support member having a return bent portion constructed to secure a reed to said support, and a cover adapted to overlie said reed, opposite ends of said cover each having a flange, said flanges being constructed and arranged to removably resiliently clamp on opposite ends of said support member, and said cover having a resilient clamping means operable on clamping said cover to said support member to engage said reed and to clamp same to said support member, one of said flanges being substantially C-shaped and operable to partially overlie the return bent portion of said support member and to act as a separable hinge while said cover is being clamped on and disengaged from said support.

4. A carrying case for woodwind reeds of the type comprising a relatively thick base and a relatively thin tip, said case comprising a support member having a return bent portion constructed to secure a reed to said support, and a cover adapted to overlie said reed, opposite ends of said cover each having a flange, said flanges being constructed and arranged to removably resiliently clamp on opposite ends of said support member, and said cover having a resilient clamping means operable on clamping said cover to said support member to engage said reed and to clamp same to said support member, one of said flanges being substantially C-shaped and operable to partially overlie the return bent portion of said support member and to act as a separable hinge while said cover is being clamped on and disengaged from said support, the other flange being substantially S-shaped and operable to be removably snapped in place over the end of said support member opposite said return bent portion.

5. A carrying case for woodwind reeds of the type comprising a relatively thick base and a relatively thin tip, said case comprising a support member having a return bent portion constructed to secure a reed to said support, and a cover adapted to overlie said reed, opposite ends of said cover each having a flange, said flanges being constructed and arranged to removably resiliently clamp on opposite ends of said support member, and said cover having a resilient clamping means operable on clamping said cover to said support member to engage said reed and to clamp same to said support member, said flanges being operable upon clamping said cover to said support member to resiliently urge said clamping means into engagement with said reed.

6. A carrying case for woodwind reeds of the type comprising a relatively thick base and a relatively thin tip, said case comprising a support member having oppositely return bent portions forming a substantially S-shaped structure, said return bent portions constructed to secure reeds to opposite sides of said support member, and a cover for each side of said support member and adapted to overlie the reeds secured thereto, means securing each cover to said support member, and each cover having a resilient clamping means operable on securing said cover to said support member to engage said reed and to clamp same to said support member.

7. A woodwind reed carrying case a woodwind reed supported thereby, said case comprising a reed supporting member having a return bent portion constructed to secure a reed to said support, and a cover overlying said reed, said cover having resilient elements operable to selectively grip said supporting member and a resilient clamping means operable when said resilient elements grip said supporting member to engage said reed and to clamp same to said supporting member.

8. A woodwind reed carrying case a plurality of woodwind reeds supported thereby, said case comprising a reed supporting member having a return bent portion having a plurality of substantially similar elements each constructed to secure a reed to said supporting member, and a cover overlying said reeds, means securing said cover to said supporting member, and said cover having a clamping means comprising a plurality of resilient elements operable on securing said cover to said supporting member to individually respectively engage said reeds and to clamp same individually to said support member.

9. A carrying case for woodwind reeds of the type comprising a relatively thick base and a relatively thin tip, said case comprising a support member having oppositely return bent portions forming a substantially S-shaped structure, said return bent portions constructed to secure reeds to opposite sides of said support member, and a cover for each side of said support member and adapted to overlie the reeds secured thereto, each cover having a single flange at one end and a pair of laterally spaced flanges at the opposite end, the flanges of each cover being operable to resiliently clamp on opposite ends of said support member, the single flange of one cover being disposed to lie intermediate the pair of spaced flanges of the other cover.

10. A woodwind reed carrying case, a woodwind reed supported thereby, said case comprising a reed supporting

member having a return bent portion constructed to secure said reed to said supporting member, and a cover overlying said reed, means securing said cover to said supporting member, and said cover having a resilient clamping means operable on securing said cover to said supporting member to engage said reed and clamp same to said supporting member, said supporting member having a substantially flat supporting face, said reed having a substantially flat side, said supporting member return bent portion and said clamping means cooperating to hold the flat side of said reed flat against said flat supporting face.

11. A woodwind reed carrying case, a woodwind reed supported thereby and comprising a relatively thick base and a relatively thin tip, said case comprising a supporting member having a return bent portion constructed to secure said reed to said supporting member, and a cover overlying said reed, means securing said cover to said supporting member, and said cover having a resilient clamping means operable on securing said cover to said supporting member to engage said reed and clamp same to said supporting member, said supporting member having a substantially flat supporting face, said reed having a substantially flat side, said supporting member return bent portion and said clamping means cooperating to hold the flat side of said reed flat against said flat supporting face, said return bent portion and said clamping means being constructed and arranged to engage only the relatively thick base of said reed.

12. A woodwind reed carrying case, a woodwind reed supported thereby, said case comprising a reed supporting member having a return bent portion constructed to provide a pocket for receiving a portion of said reed, said return bent portion being operable upon insertion of a reed into said pocket to resiliently clamp said reed to said supporting member, and a cover overlying said reed, means securing said cover to said supporting member, and said cover having a resilient clamping means operable on securing said cover to said supporting member to engage said reed and to further clamp same to said supporting member.

13. A carrying case for woodwind reeds of the type comprising a relatively thick base and a relatively thin tip, said case comprising a support member having a return bent portion constructed to provide a pocket for receiving a portion of said reed, said return bent portion being operable upon insertion of a reed into said pocket to resiliently clamp said reed to said support member, and a cover adapted to overlie said reed, means securing said cover to said support member, and said cover having a resilient clamping means operable on securing said cover to said support member to engage said reed and to further clamp same to said support member, said return bent portion being operable to engage only a single relatively small surface area of said reed, and said clamping means being operable to engage two other relatively small surface areas of said reed, whereby to provide a three-point clamp on said reed.

14. A carrying case for woodwind reeds of the type comprising a relatively thick base and a relatively thin tip, said case comprising a support member having a return bent portion constructed to provide a pocket for receiving a portion of said reed, said return bent portion being operable upon insertion of a reed into said pocket to resiliently clamp said reed to said support member, and a cover adapted to overlie said reed, means securing said cover to said support member, and said cover having a resilient clamping means operable on securing said cover to said support member to engage said reed and to further clamp same to said support member, the base of said reed having a partially rounded portion opposite the part of the reed contacting said support member, said return bent portion of said support member being operable to engage only a single relatively small substantially centrally located surface area of said rounded reed portion, and said clamping means comprising an element having two laterally spaced portions operable to engage two laterally spaced relatively small surface areas of said rounded reed portion at a location longitudinally spaced from the aforesaid single surface area, whereby said cover clamping means and said support member return bent portion cooperate to substantially prevent displacement of said reed relative to said support member.

15. A woodwind reed carrying case, a woodwind reed supported thereby, said case comprising a reed supporting member having a return bent portion constructed to provide a pocket for receiving a portion of said reed and having an upturned end to facilitate insertion of said reed in said pocket, said return bent portion being operable upon insertion of said reed to resiliently clamp said reed to said supporting member, and a cover overlying said reed, means securing said cover to said supporting member, and said cover operable upon being secured to said supporting member to resiliently engage the upturned end of said return bent portion and to apply pressure thereon to further urge said return bent portion into clamping engagement with said reed.

16. A woodwind reed carrying case, a woodwind reed supported thereby, said case comprising a reed supporting member having a return bent portion constructed to provide a pocket for receiving a portion of said reed, said return bent portion being operable upon insertion of a reed into said pocket to resiliently clamp said reed to said supporting member, and a cover overlying said reed, means securing said cover to said supporting member, and said cover having a resilent clamping means operable on securing said cover to said supporting member to engage a portion of said reed not inserted in said pocket and to further clamp said reed to said supporting member.

17. A woodwind reed carrying case, a woodwind reed supported thereby and of the type comprising a relatively thick base and a relatively thin tip, said case comprising a reed supporting member having a return bent portion constructed to secure a reed to said supporting member, and a cover overlying said reed, means securing said cover to said supporting member, and said cover having a resilient clamping means operable on securing said cover to said supporting member to engage said reed and to clamp same to said supporting member, the thick base of said reed comprising a tubular element, said supporting member return bent portion comprising a tine overlying said supporting member and adapted for insertion in said reed base tubular element.

18. A woodwind reed carrying case, a woodwind reed supported thereby and of the type comprising a relatively thick base and a relatively thin tip, said case comprising a reed supporting member having a return bent portion constructed to secure a reed to said supporting member and a cover overlying said reed, means securing said cover to said supporting member, and said cover having a resilient clamping means operable on securing said cover to said supporting member to engage said reed and to clamp same to said supporting member, the thick base of said reed comprising a tubular element, said supporting member return bent portion comprising a tine overlying said supporting member and adapted for insertion in said reed base tubular element, said clamping means being operable to engage the exterior of said reed base tubular element and to clamp same to said tine and to said supporting member.

19. A carrying case for woodwind reeds of the type comprising a relatively thick base and a relatively thin tip and having a relatively flat side, said case comprising a substantially flat support member having a return bent portion overlying approximately one-half of one face of said support member to provide a pocket at one end thereof for receiving and enclosing the thin tip of said reed, the end of said return bent portion being operable to resiliently engage only a portion of the thick base of

said reed and to clamp said reed to said support member with the flat side of said reed against the aforesaid face of said support member, and a substantially flat cover adapted to overlie said pocket and the portion of said reed not enclosed thereby, said cover having down-turned flanges at opposite ends, said flanges being operable to resiliently grip opposite ends of said support member to secure said cover thereto, and said cover having an integral downturned tongue operable on securing said cover to said support member to resiliently engage only a second portion of the thick base of said reed and to further clamp said reed to said support member.

20. A carrying case for woodwind reeds of the type comprising a relatively thick tubular base and a relatively thin tip, said case comprising a substantially flat support member having a return bent portion comprising a tine overlying one face of said support member and adapted for insertion into the tubular end of said reed to hold said reed against the aforesaid face of said support member, and a substantially flat cover adapted to overlie said reed, said cover having downturned flanges at opposite ends, said flanges being operable to resiliently grip opposite ends of said support member to secure said cover thereto, and said cover having an integral downturned tongue operable on securing said cover to said support member to resiliently engage only an exterior portion of said reed tubular base and to clamp said reed to said tine and to said support member.

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