

Binder and its Fastening Member

[Technical Field]

[0001]

The present invention relates to a technology relating to a binder including a fastening member for removably fixing a base plate portion of a binding implement for binding a document or the like on an inner surface side of a shelfback.

[Background Art]

[0002]

In a binder and the like, a binding implement is fixed on an inner surface side of a shelfback of a cover member. There have conventionally been known various types of such binding implements. Above all, in a thick binder capable of binding a document composed of a large number of sheets or the like, a binding implement provided with, for example, a base plate portion, a pair of binding plates disposed on both lateral sides of the base plate portion, and a binding rod inserted to extend between the binding plates has been in widespread use.

[0003]

In fixing the base plate portion of the binding implement on the inner surface side of the shelfback, there is generally adopted a method in which a plurality of mutually coincident holes are formed through the shelfback and the base plate, and the binding implement is fixed on the cover member by rivets utilizing these holes.

[0004]

In this method of fixation in which the rivets are used, once the binding implement has been fixed on the cover member, they cannot be easily separated from each other. In general, while the cover member is a combustible material made of a cardboard sheet, a synthetic resin sheet, or the like, the main body of the binding implement is made of an incombustible material of metal. Therefore, there

has been a problem which is difficult to cope with in terms of segregated disposition of wastes, which has been demanded in view of wastes disposal issues in recent years and protection of the natural environment. In addition, there has also been a problem that a durable binding implement made of metal cannot be re-used.

[0005]

An art taking into consideration the above-mentioned points is disclosed in Patent Document 1. A binder disclosed in Patent Document 1 is provided with a binding implement which is removably fixed on an inner surface side of a shelfback via a base fixture (a fastening member). The base fixture, which is made of a resin, entirely is provided with a penetration member penetrating through the shelfback and a base, insertion shaft portions which can be inserted into and pulled out from holes formed through the penetration member, and hook portions provided at positions adjacent to the insertion shaft portions respectively. The base is fixed onto the shelfback when the insertion shaft portions are inserted into the holes of the penetration member respectively.

[Patent Document 1] JP 2003-276375 A

[Disclosure of the Invention]

[Problems to be solved by the Invention]

[0006]

However, the binder provided with the removable binding implement as described above has the following problems to be solved.

(1) The hook portions, which are made to protrude from a body of a wedge member constituting the base fixture, are provided at the positions adjacent to the insertion shaft portions, respectively, and locate close to the body of the wedge member. Therefore, the hook portions exhibit high resistance. As a result, a large force is required when the wedge member is removed from or mounted to the penetration member by bending the hook portions. Especially, it is difficult to remove the wedge member from the penetration member.

[0007]

(2) The two insertion shaft portions are each open on the outside, so they tend to come into contact with the outside and be deformed or damaged when they are assembled in a production process or removed from the penetration member. The same can be said for causing deformation and damage even if the hook portions are provided on the outer sex. With a structure in which the insertion shaft portions are provided and the hook portions are provided at the positions adjacent to the insertion shaft portions, respectively, the number of shafts needs to be increased in order to maintain strength when an attempt is made to make the base fixture compact by reducing the diameter of the shafts. When the diameter of the shafts is reduced, an inconvenience is caused in that the insertion shaft portions become liable to be deformed or damaged, easily.

[0008]

Therefore an object of the present invention is to provide a technology relating to a binder and a fastening member used for the binder, in which a structure is made compact as a whole by reducing thickness of the fastening member, corresponding to a conventional base fixture, and yet it exhibits robustness, can perform excellent functions in terms of strength, and allows mounting/removing operations to be performed with ease.

[Means for solving the Problems]

[0009]

To solve the problems described above, the present invention adopts the following means.

The present invention provides a fastening member for removably fixing a base plate portion of a binding implement on an inner surface side of a shelfback, comprising: a base member; and a plate-shaped slide member mounted to the base member, wherein the base member has protruding portions penetrating the shelfback and a base plate of the binding implement to protrude above the base plate, and a plurality of engaging portions provided on both sides of each of the protruding portions, respectively, and the slide member has a

plurality of engaging pieces for engaging the engaging portions, respectively, when the slide member is mounted to the base member.

[0010]

According to the present invention, the engaging portions are provided respectively on the both sides of each of the protruding portions penetrating the shelfback and the base plate to protrude above the base plate, and the plurality of the engaging pieces for engaging the engaging portions, respectively, are provided on the slide member. Therefore, the entire fastening member can be constructed with a reduced thickness. In particular, there are two engaging portions for one protruding portion and at least two of the engaging pieces correspond thereto, so a required strength of the engaging pieces as a whole can be maintained even if the individual engaging pieces are reduced in thickness. Further, the engaging pieces have an L-shaped structure in section, so they are more resistant to deformation or damage in comparison with a shaft structure. Thus, the fastening member can be reduced in thickness.

[0011]

In the present invention, it is preferable that the engaging portions be each formed with a substantially T-shaped section, that on surfaces of the engaging pieces, protruding strips extending in a direction in which the engaging pieces are inserted, respectively, be formed, and that in the engaging portions, guide grooves allowing entrance of the protruding strips, respectively, be formed. Both a function of reinforcing the engaging pieces themselves and a function of guiding them can be performed when they are provided with the protruding strips extending in a longitudinal direction thereof. In addition, the protruding strips of the engaging pieces engage the engaging portions, respectively, so the binding implement can be prevented from moving to drop out box deformation of the engaging pieces of the slide member outwardly when an excessive load of document is applied thereto.

[0012]

Regarding of the protruding portions only one (1) may be sufficient when the shelfback has a small width (e.g., smaller than 5 cm). In this case, the slide member is provided with the two (2) engaging pieces corresponding to the engaging portions of the protruding portions, respectively. It is desirable that a pair of the protruding portions be provided apart from each other in the width direction of the shelfback, and that the slide member be provided with four (4) engaging pieces corresponding to the engaging portions of the protruding portions, respectively, when the shelfback has a greater width (e.g., equal to or greater than 5 cm). In the case where the four (4) engaging pieces are provided as described above, a design with a sufficient strength can be realized as a whole even if the engaging pieces are each formed in the shape of a thin plate.

[0013]

Locking means, which is designed to include a convex portion provided on one of the opposed faces of the slide member and the base plate and a concave portion provided in the other surface to allow the convex portion to be fitted thereinto, can be provided between the slide member and the base plate. By fitting the convex portion into the concave portion as described above, the locking means can be simplified in construction and made unsusceptible to deformation or damage in comparison with the case in which hook members are provided.

[0014]

The slide member may be provided with an elastically deformable support piece, which may be provided with a convex portion. The bulge/retreat amount of the convex portion can be changed through an elastic deformation effect of the elastically deformable support piece when the support piece is provided with the convex portion. Thus, the function of the locking means can be improved while an improvement in operability is achieved when the slide member is mounted to or separated from the base member.

[0015]

The present invention provides a binder which includes a fastening member for removably fixing a base plate portion of a binding implement on an inner surface side of a shelfback. The fastening member includes: a base member; and a plate-shaped slide member mounted to the base member. The base member has protruding portions penetrating through the shelfback and a base plate of the binding implement to protrude above the base plate, and engaging portions provided on both sides of each of the protruding portions, respectively. The slide member has a plurality of engaging pieces for engaging the engaging portions, respectively when the slide member is mounted to the base member.

[0016]

The fastening member according to the present invention makes it possible to achieve a compact structure as a whole through a reduction in thickness in comparison with the conventional base fixture, and further, is provided with no hook member. Thus, advantages such as simplicity in construction, excellent productivity, and a small degree of deformation after molding, are obtained.

[0017]

Here, only one (1) protruding portions may be sufficient when the shelfback has a small width (e.g., smaller than 5 cm). In this case, the slide member is provided with two (2) engaging pieces corresponding to the engaging portions of the protruding portion, respectively. It is desirable that a pair of the protruding portions be provided apart from each other in the width direction of the shelfback, and that the slide member be provided with four (4) engaging pieces corresponding to the engaging portions of the protruding portions, respectively, when the shelfback has a greater width (e.g., equal to or greater than 5 cm).

[0018]

It is desirable that the slide member be provided with the convex portion for being fitted into the concave portion provided in the base plate of the binding implement to position the slide member

at a mounting position thereof when the slide member is mounted to the base member. In the case where the slide member is provided with the convex portion as described above, a molding operation of ensuring the convex portion of a required protruding amount is facilitated, and further, the concave portion can be simply drilled through the base plate of the binding implement. Thus, the locking means can be simplified in construction with a reduced thickness using a small amount of material.

[0019]

The slide member may be provided with an elastically deformable support piece, which may be provided with a convex portion. The bulge/retreat amount of the convex portion can be changed through an elastic deformation effect of the elastically deformable support piece when the support piece is provided with the convex portion. Thus, the function of the locking means can be improved while an improvement in operability is achieved when the slide member is mounted to or separated from the base member.

[Effects of the Invention]

[0020]

The present invention makes it possible to obtain a binder and a fastening member used for the binder which achieve a compact structure as a whole through a reduction in thickness of the fastening member, exhibit robustness, can perform excellent functions in terms of strength, and allow mounting/removing operations to be performed with ease.

[Best Modes for carrying out the Invention]

[0021]

Preferred embodiments of the present invention will be described hereinafter with reference to the drawings.

FIG. 1 is a perspective view of a binder provided with a fastening member according to an embodiment of the present invention. FIGS. 2 and 3 are perspective views each showing the fastening member. FIG. 4 is a plan view of the fastening member. FIGS. 5(a) and 5(b)

are enlarged sectional views each showing a state in which a binding implement is removably fixed to a shelfback by means of the fastening member.

[0022]

(First Embodiment)

A binder B according to this embodiment is provided with a fastening member 3 made of synthetic resin, which is designed to removably fix a base plate 21 portion of a binding implement 2 made of a metal on an inner surface side of a shelfback 11 of a cover member 1. The cover member 1 is formed of a cardboard sheet, a synthetic resin sheet, or the like.

[0023]

The binder 2 includes the base plate 21, fixed to the shelfback 11 by means of the fastening member 3, a pair of operating members 22 and 22, which are disposed on both lateral sides (in a width direction of the shelfback 11) of the base plate 21 and capable of performing an outwardly spreading operation, and a binding member 23 removably fitted to extend between the operating members 22 and 22.

[0024]

The base plate 21 is formed by working a metallic plate. As shown in FIG. 5(a), rising portions 24 and 24 are provided on both lateral sides of the base plate 21, respectively. The rising portions 24 and 24 are provided, at upper ends thereof, with bearings 25 and 25, respectively. The pair of operating members 22 and 22 are hinged on the bearing portions 25 and 25, respectively, via hinge pins (not shown).

[0025]

The binding member 23 is provided with any insertion rod 23b formed of a metallic rod extending from a support plate 23a fitted to one of the operating members 22, and a receiving rod 23d formed of a metallic pipe extending from a support plate 23c fitted to the other operating member 22. In taking out or binding a document or the

like, the operating members 22 and 22 are operated to be spread outward, so the binding member 23 can thereby be opened.

[0026]

The base plate 21 and the shelfback 11 are provided with square planar holes 21a and square planar draw holes 11a coaxially which are to be penetrated by protruding portions 62 of a base member 6, which will be described later, of the fastening member 3. The holes 21a of the base plate 21 and the draw holes 11a of the shelfback 11 each constitute a pair in the width direction of the shelfback 11 and a pair in a height direction of the shelfback 11, thus constituting two pairs in total (i.e., four holes) (see FIGS. 1 and 5(a)).

[0027]

As shown in FIGS. 6 and 7, a plurality of positioning pieces 21b are provided on the back surface of the base plate 21 for positioning the draw holes 11a of the shelfback 11 and the holes 21a of the base plate 21 in a coaxially coincident manner so as to prevent the binding implement 2 from being displaced in a direction perpendicular to a mounting/removing direction. In the example shown in FIGS. 6 and 7, the positioning pieces 21b are each formed of a raised piece that has been cut up toward the back surface side of the base plate 21 from edge portions of a corresponding one of the draw holes 21a of the base plate 21. The cut-up angle of each of the positioning pieces 21b is set to about 90° with respect to the back surface of the base plate 21. The height of each of the positioning pieces 21b is so set as not to exceed the thickness of the shelfback 11. A tip of each of the positioning pieces 21b is rounded like a tongue piece and adapted to be inserted into a corresponding one of the draw holes 11a of the shelfback 11. The number of the positioning pieces 21b provided for each of the holes 21a of the base plate 21 is four. The four positioning pieces 21b, which are disposed close to four corners of each of the holes 21a, respectively, are fitted to an inner edge of a corresponding one of the draw holes 11a of the shelfback

11 (see FIG. 7). Thus, with each of the positioning pieces 21b having been inserted into a corresponding one of the draw holes 11a of the shelfback 11, the base plate 21 is so positioned as not to be displaced longitudinally or laterally with respect to the shelfback 11 (in the width direction or the height direction of the shelfback).

[0028]

As shown in FIGS. 2 to 5(a), the fastening member 3 includes the base member 6 and a plate-shaped slide member 7 to be fitted to the base member 6. The base member 6 has a thin plate-shaped dropout preventing portion 61, a pair of protruding portions 62 and 62, and engaging portions 63 and 63. The dropout preventing portion 61 is disposed outside the shelfback 11. The protruding portions 62 and 62 protrude from the dropout preventing portion 61 and above the base plate 21 through the shelfback 11 and the base plate 21. The engaging portions 63 and 63 are provided on both sides of each of the protruding portions 62, respectively. The slide member 7 is provided with four engaging pieces 71 and a recess 72 for performing a sliding operation. Each of the engaging pieces 71 engages a corresponding one of the engaging portions 63 when the slide member 7 is mounted to the base member 6.

[0029]

Locking means 8 for positioning the slide member 7 at a mounting position thereof through mutual engagement when the slide member 7 is mounted to the base member 6, is provided between the base plate 21 of the binding implement 2 and the slide member 7. The locking means 8 may be designed to include a convex portion 81 provided on one of opposed faces of the slide member 7 and the base plate 21 and a concave portion 82 provided on the other surface such that the convex portion 81 is fitted thereinto. In this embodiment, the convex portion 81 is provided on the slide member 7 and the concave portion 82 is provided in the base plate 21, thereby to constitute the locking means 8. By fitting the convex portion to the concave portion as described above, the locking means can be simplified in

construction and made unsusceptible to deformation or damage in comparison with the conventional case in which the hook members are provided.

[0030]

Especially when the convex portion 81 is provided on the slide member 7, a required protruding amount can be easily ensured in molding the convex portion 81, and the concave portion 82 can be simply drilled through the base plate 21 of the binding implement 2 as shown in FIG. 1. Thus, the locking means 8 can be easily constructed with a reduced thickness.

[0031]

It may also be structured such that a portion of the slide member 7 corresponding to the recess 72 with an elastically deformable support piece 83, and provide this support piece 83 with the convex portion 81, taking advantage of the fact that the portion of the slide member 7 corresponding to the recess 72 is formed with a reduced thickness. The support piece 83 is made elastically deformable by forming a U-shaped planar notch 84 in the portion corresponding to the recess 72. When the elastically deformable support piece 83 is thus provided with the convex portion 81, the bulge/retreat amount of the convex portion 81 can be changed through an elastic deformation effect of the support piece 83. Thus, the function of the locking means can further be improved while an improvement in operability is achieved when the slide member 7 is mounted to or separated from the base member 6.

[0032]

The locking means may be provided by forming the U-shaped planar notch 84 in the slide member 7 from an outside thereof toward an inside thereof, or by forming the U-shaped planar notch 84 in the slide member 7 from the inside thereof toward the outside thereof as shown in FIG. 8. Alternatively, the locking means may be provided by forming a plurality of U-shaped planar notches 84 as shown in FIG. 16.

[0033]

In this embodiment, the engaging portions 63 protrude on both sides of the protruding portion 62 to form a T-shaped sectional shape, and the engaging pieces 71 are each formed in the shape of a thin plate inserted between the base plate 21 and the engaging portion 63. Accordingly, a clearance α between the engaging pieces 71 and 71 provided adjacent to each other is slightly larger than the thickness of the protruding portion 62 in a width direction thereof (in the width direction of the shelfback 11).

[0034]

Since the engaging pieces 71 each have an L-shaped structure in section, a design having a sufficient strength is realized as a whole.

[0035]

A protruding strip 73 extending in a direction in which each of the engaging pieces 71 is inserted (in a length direction of the engaging pieces) is formed on a surface of the engaging piece 71. In correspondence with this construction, a guide groove 64 for allowing the protruding strip 73 to enter therein is formed in a lower surface of each of the engaging portions 63. The protruding strip 73 is provided on each of the engaging pieces 71 along the length direction thereof so as to perform both a function of reinforcing the engaging strip itself and a function of preventing the binding implement from dropping out due to outward deformation of the engaging pieces 71 of the slide member upon application of an excessive load from the document.

[0036]

The aforementioned functions can be performed by providing the protruding strip 73 and the guide groove 64. However, from the standpoint of performing an essential function of the fastening member, it may be structured to flatten the lower surface of each of the engaging portions 63 and also an upper surface of each of the engaging pieces 71 correspondingly as shown in FIG. 5(b).

[0037]

By erecting a pair of wall portions 65 from the plate-shaped dropout preventing portion 61 toward the engaging portions 63 parallel to the protruding portion 62 and bending tip sides of the wall portions 65 away from the protruding portion 62 to provide claw portions 66, the base member 6 can be tentatively stuck in the draw hole 11a of the shelfback 11.

[0038]

A positioning portion 67 for regulating a longitudinal position of a short side of a cover of the base member 6 when the base member 6 is set in the draw hole 11a of the cover is provided on a short-side lateral surface of each of the protruding portions 62.

[0039]

In order to removably fix the binding implement 2 to the shelfback 11 of the cover 1 with the aid of the fastening member 3, it is appropriate to perform, for example, the following operations. As shown in FIG. 6, first of all, each of the positioning pieces 21b provided on the base plate 21 of the binding implement 2 is inserted from an inside of the shelfback 11 into a corresponding one of the drawholes 11a made through the shelfback 11, so the binding implement 2 is set on the shelfback 11. Then, each of the protruding portions 62 of the base member 6 is inserted from an outside of the shelfback 11 through a corresponding one of the draw holes 11a made through the shelfback 11 and a corresponding one of the holes 21a of the base plate 21. Finally, both slide members 7 are fitted to the base member 6 through insertion (see FIG. 1).

[0040]

In separating the binding implement 2 from the cover member 1, it is sufficient to pull out both the slide members 7 utilizing the recess 72 formed in each of them.

[0041]

(Second Embodiment)

Next, a second embodiment of the present invention will be described with reference to FIGS. 8 to 12. In this second embodiment, the

description of the constituting elements which are basically identical with those of the first embodiment will be simplified by assigning the same reference numerals thereto, respectively.

[0042]

The second embodiment is characterized in that the protruding strip 73 provided on each of the engaging pieces 71 of the slide member 7 and the guide groove 64 formed in the lower surface of each of the engaging portions 63 have been changed in sectional shape. That is, corner portions of the protruding strip 73, which assumes a convex sectional shape, are partially trimmed and formed into smooth curved surfaces. Corner portions of the guide groove 64 are also partially trimmed and formed into smooth curved surfaces such that the guide groove 64 corresponds in sectional shape to the protruding strip 73. Owing to these shapes of the protruding strip 73 and the guide groove 64, the binding implement can be prevented from moving to drop out due to outward deformation of each of the engaging pieces 71 of the slide member 7 upon application of an excessive load from the document. Also, facilitation of molding and an improvement in the function as guide can be achieved.

[0043]

(Third Embodiment)

Next, a third embodiment of the present invention will be described with reference to FIGS. 13 and 14. In this third embodiment, the description of constituting elements which are basically identical with those of the first and second embodiments will be simplified by assigning the same reference symbols thereto, respectively.

[0044]

The third embodiment is characterized in that a pair of locking means 8 are provided. That is, two elastically deformable support pieces 83 are provided on the region of the slide member 7 corresponding to the recess 72 at laterally (in the width direction of the shelf back) spaced positions of the recess 72, respectively, taking advantage of the fact that the region of the slide member 7 corresponding to

the recess 72 is formed with a reduced thickness, and convex portions 81 are provided on lower surfaces of both the support pieces 83, respectively. Each of both the support pieces 83 is also made elastically deformable by forming the U-shaped planar notch 84 in the region of the slide member 7 corresponding to the recess 72. Since the two support pieces 83 are provided, two concave portions 83, to which convex portions 81 are fitted, respectively, are also provided in the base plate 21 of the binding implement 2. When the pair of the locking means 8 are provided as described above, the function of the locking means 8 is improved correspondingly.

[0045]

(Fourth Embodiment)

Next, a fourth embodiment of the present invention will be described with reference to FIGS. 15 to 18. In the fourth embodiment, the description of the constituting elements which are basically identical with those of the above embodiments will be simplified by assigning the same reference symbols thereto, respectively.

[0046]

The fourth embodiment of the present invention is characterized in that the area of engagement of each of the engaging portions 63 with a corresponding one of the engaging pieces 71 is increased. That is, each of the protruding portions 62 includes a slit 62a, which is provided in a lateral surface thereof which is opposed to a direction in which a corresponding one of the engaging pieces 71 is inserted. An auxiliary engaging piece 71a to be fitted into the slit 62a when the slide member 7 is mounted to the base member 6, is provided between the engaging pieces 71 and 71 provided adjacent to each other of the slide member 7.

[0047]

The single slit 62a may be provided. In this embodiment, however, two slits 62a are provided in total, namely, in the lateral surface which is opposed to the direction in which a corresponding one of the engaging pieces 71 is inserted, and in the lateral surface on

the other side thereof, considering easy -to- use provision. Thus, the base member 6 can be passed through the holes of the shelfback without considering the orientations of the slits.

[0048]

The auxiliary engaging piece 71a is located at a front-side position in the direction in which the engaging pieces 71 are inserted, such that the auxiliary engaging piece 71a and the engaging pieces 71 and 71 provided adjacent to each other to assume a planar U-shape. Thus, the engaging pieces 71 are increased in strength as a whole. Further, the area of engagement is increased in accordance with the addition of the auxiliary engaging piece 71a, so the function of the fastening member is further improved.

[0049]

The foregoing embodiments show examples in which the pair of the protruding portions 62 are provided on the base member 6. However, more than two protruding portions 62 or only one protruding portion 62 may be provided in accordance with the width of the shelfback. When there is only one protruding portion 62, it is provided at the center of the dropout preventing portion 61. Even when there is only one protruding portion 62, the engaging portions 63 exist on the left and right thereof, and there are two engaging pieces 71 as well. Therefore, a sufficient strength is obtained in this case as well.

[Brief Description of the Drawings]

[0050]

[FIG. 1] A perspective view of a binder provided with a fastening member according to a first embodiment of the present invention.

[FIG. 2] An exploded perspective view of the fastening member according to the first embodiment of the present invention.

[FIG. 3] A perspective view of the fastening member according to the first embodiment of the present invention.

[FIG. 4] A plan view of the fastening member according to the first embodiment of the present invention.

[FIG. 5] Views showing a state in which a binding implement is removably fixed on a shelfback by means of a fastening member according to an embodiment of the present invention, wherein FIG. 5(a) is an enlarged sectional view of the binding implement, and FIG. 5(b) is an enlarged sectional view of the binding implement showing an example in which a protruding portion assumes a different shape.

[FIG. 6] A partial perspective view showing a relationship between positioning pieces on a back surface of the binding implement and draw holes made through the shelfback according to the embodiment of the present invention.

[FIG. 7] A partial sectional view showing a relationship between the positioning pieces on the back surface of the binding implement and the draw hole made through the shelfback according to the embodiment of the present invention.

[FIG. 8] A perspective view of a binder provided with a fastening member according to a second embodiment of the present invention.

[FIG. 9] Views each showing a slide member according to the second embodiment of the present invention, wherein FIG. 9(a) is a front view of the slide member, FIG. 9(b) is a plan view of the slide member, and FIG. 9(c) is a side view of the slide member.

[FIG. 10] Views showing a base member according to the second embodiment of the present invention, wherein FIG. 10(a) is a front view of the base member, FIG. 10(b) is a plan view of the base member, and FIG. 10(c) is a side view of the base member.

[FIG. 11] A perspective view of the fastening member according to the second embodiment of the present invention.

[FIG. 12] A sectional view of the fastening member according to the second embodiment of the present invention.

[FIG. 13] A perspective view of a binder provided with a fastening member according to a third embodiment of the present invention.

[FIG. 14] A plan view of a slide member of the fastening member according to the third embodiment of the present invention.

[FIG. 15] A perspective view of a fastening member according to

a fourth embodiment of the present invention.

[FIG. 16] A perspective view of a fastening member according to the fourth embodiment of the present invention.

[FIG. 17] A partial sectional view of the fastening member according to the fourth embodiment of the present invention.

[FIG. 18] A plan view of a slide member of the fastening member according to the fourth embodiment of the present invention.

[Description of Reference Numerals]

[0051]

- 1 cover member
- 11 shelfback
- 11a draw hole of shelfback
- 2 binding implement
- 21 base plate
- 21a hole of base plate
- 3 fastening member
- 6 base member
- 61 dropout preventing portion
- 62 protruding portion
- 62a slit
- 63 engaging portion
- 7 slide member
- 71 engaging piece
- 71a auxiliary engaging piece
- 72 recess
- 73 protruding strip
- 8 locking means
- 81 convex portion
- 82 concave portion
- 83 support piece
- 84 notch

Claims

1. A fastening member for removably fixing a base plate portion of a binding implement on an inner surface side of a shelfback, comprising: a base member; and a plate-shaped slide member mounted to the base member, wherein:

the base member has protruding portions penetrating through the shelfback and a base plate of the binding implement to protrude above the base plate, and a plurality of engaging portions provided on the protruding portions, respectively;

the slide member has a plurality of engaging pieces for engaging the engaging portions, respectively when the slide member is mounted to the base member; and

the engaging pieces are formed in shapes of plates inserted between the base plate of the binding implement and the engaging portions, respectively.

2. A fastening member according to claim 1, wherein on surfaces of the engaging pieces, protruding strips extending in a direction in which the engaging pieces are inserted, respectively, are formed; and in the engaging portions, guide grooves allowing entrance of the protruding strips, respectively, are formed.

3. A fastening member according to claim 1, further comprising locking means provided for positioning the slide member at a mounting position thereof through mutual engagement when the slide member is mounted to the base member between the base plate of the binding implement and the slide member.

4. A fastening member according to claim 1, wherein the protruding portions each include a slit provided in a lateral surface thereof opposed to a direction in which the engaging pieces are inserted; and the slide member is provided, between the engaging pieces provided

adjacent to each other, with an auxiliary engaging piece for being fitted into the slit when the slide member is mounted to the base member.

5. A binder comprising: the fastening member according to any one of claims 1 to 4; and a binding implement removably fixed to an inner surface side of a shelfback with the fastening member.