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(54) Multifunctional element for binding, in an adjoining and vertical position, sheet bundles and documents in general.

(57) There is disclosed a multifunctional element for binding one or more sheet bundles or documents, comprising a triangular cross-section structure which is open at a vertex thereof and having the vertex opposite base and the free edges of the sides defining it suitably shaped, the base being suitably stiffened and the two sides extending thereof being flexible.

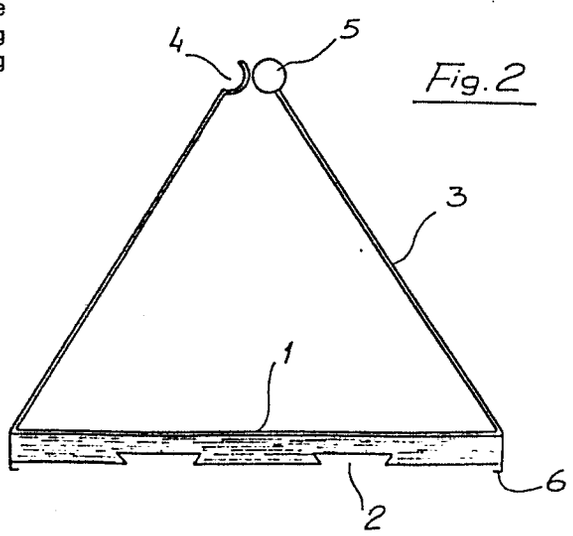

Fig. 2

EP 0 256 992 A2

BACKGROUND OF THE INVENTION

The present invention relates to a multifunctional element for binding, in an adjoining and vertical position, sheet bundles and documents in general.

As is known documents are conventionally stored in bundles, within suitable storing devices or files.

This storing devices or files, however, do not include means for firmly binding, on edge, the single sheet bundles and, in the case in which they comprise binding means, these means are rather complex to be operated.

SUMMARY OF THE INVENTION

Accordingly, the task of the present invention is that of providing a multifunctional element for binding sheet bundles in general, which is able of holding in a stable way one or more sheet bundles, and which is operatively very simple.

Within that task, it is a main object of the present invention to provide such a multifunctional element for binding sheet bundles in general, which is structurally simple and reliable.

Another object of the present invention is to provide such a multifunctional element for binding sheet bundles, which comprises means for facilitating the introduction of the sheet bundles in an adjoining

relationship.

According to the present invention, the above task and object, as well as yet other objects which will become more apparent thereinafter are achieved by a multifunctional element for binding sheet bundles or documents, characterized in that it substantially comprises a triangular cross-section structure, of given length, open at a vertex thereof and in which the base of said structure opposite said vertex, as well as the free edges of the sides defining said edges are suitably shaped, said base being suitably stiffened and the two sides extending therefrom being of flexible nature.

BRIEF DESCRIPTION OF THE DRAWINGS

Further characteristics and advantages of the multifunctional element according to the present invention will become more apparent thereinafter from the following description of a preferred embodiment of said element being illustrated, by way of an indicative but not limitative example, in the figures of the accompanying drawings, where:

Figure 1 is a perspective schematic view illustrating the multifunctional element according to the invention;

Figure 2 is a cross-section view illustrating that same element;

Figure 3 is a top view illustrating the binding element according to the invention binding a plurality of sheet bundles and arranged adjoining

like elements;

Figure 4 illustrates a possible procedure for edge binding that same element to a bookcase shelf.

DESCRIPTION OF THE PREFERRED EMBODIMENT

With reference to the figures of the accompanying drawings, the multifunctional element for binding a plurality of sheet bundles, or documents, according to the invention, substantially comprises a base flat structure 1 having suitable width and length and thickness, to provide it with a suitable stiffness, with dovetail notches 2 being formed longitudinally of said structure.

On the two longitudinal sides of said base, there are firmly coupled the end portions of corresponding small plates 3, having a corresponding length, which are bent, at their attaching portions, toward the inside and which converge so as to contact the respective free edges.

The mentioned free edges have respectively an outwardly concave profile 4 and a round profile 5 which can be inserted into the concave profile of an adjoining element.

The mentioned small plates, moreover, which are made of a suitable resilient material, extend, with a short bent portion 6 beyond said base.

It should moreover be pointed out that on the back of the multifunctional element a hook shaped

member 7 may be provided, which may be coupled to a corresponding structure 8 upwardly projecting and effective to be affixed to the shelf 9 of a bookcase or the like.

Thus, it should be apparent that the mentioned small plates are able of binding one or more sheet bundles 10 so as to assume mutually parallel arrangements, as is shown in Figure 3.

Under this condition, it is possible to engage adjoining elements by housing or engaging the round cross-section edge 5 of one element in the concave edge 4 of the other.

More specifically, the concave edge is advantageously effective to also act as a lead-in portion thereby facilitating the insertion of the sheet bundles into said multifunctional elements.

It should moreover be pointed out that the mentioned bent portion 6, projecting on the two sides of the base, is effective to bind a small cardboard piece bearing words for indicating the contents of the binding elements as they are used frontally.

The dovetail coupling formations 2, formed in the base, in turn, may be used for coupling fixtures or for removably coupling a plurality of multifunctional elements to a plurality of corresponding profiles, formed on a suitable vertical supporting member (not specifically shown).

It should finally be pointed out that the

thus made multifunctional element, though it has been mainly provided for binding sheet bundles and for use in a vertical position, may also be used horizontally, that is resting on the base, for holding tickets, note sheets and the like.

While the invention has been disclosed with reference to a preferred embodiment thereof it should be apparent that it is susceptible to many modifications and variations all of which enter within the scope of the appended claims.

CLAIMS

1. A multifunctional element for binding sheet bundles or documents, characterized in that it substantially comprises a triangular cross-section structure, of given length, open at a vertex thereof and in which the base of said structure opposite said vertex, as well as the free edges of the sides defining said edge are suitably shaped, said base being suitably stiffened and the two sides extending therefrom being of flexible nature.

2. A multifunctional element, for binding sheet bundles or documents, according to the preceding claim, characterized in that it comprises a base flat structure, having suitable width, length and thickness, dovetail coupling formations being formed longitudinally of said structure, on the two longitudinal sides of said base being firmly coupled the end portions of small plates of corresponding length which are bent, at their attaching portions, towards the inside and converge so as to contact the respective free edge.

3. A multifunctional element for binding sheet bundles or documents, according to the preceding claims, characterized in that the free edges of said small plates have, respectively, an outwardly concave profile and a round profile to be inserted into the concave profile of an adjoining element.

4. A multifunctional element for binding sheet bundles, according to one or more of the pre-

ceding claims, characterized in that said small plates are made of a suitable resilient and mechanically resistant material, said small plates extending with a short bent portion beyond said base.

5. A multifunctional element for binding sheet bundles or documents, according to one or more of the preceding claims, characterized in that on said base structure, or back, there is provided a hook-shaped member effective to be coupled to a corresponding structure projecting upwardly and to be affixed to a shelf of a bookcase and the like.

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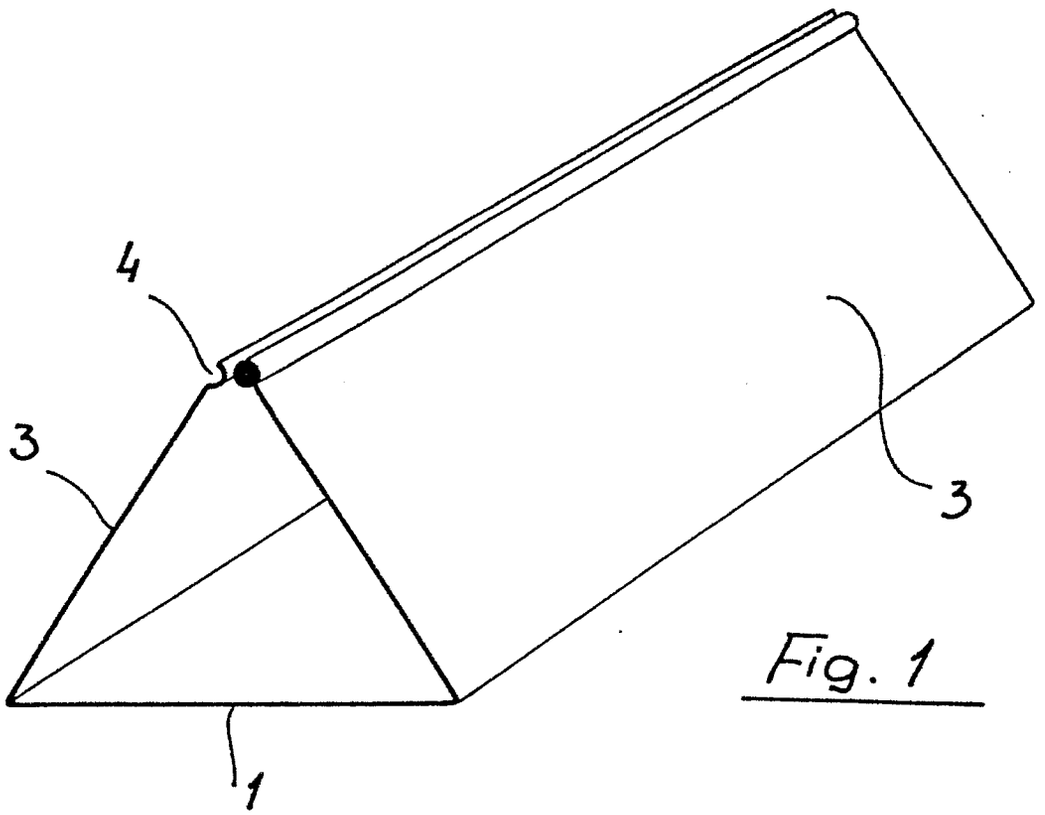


Fig. 1

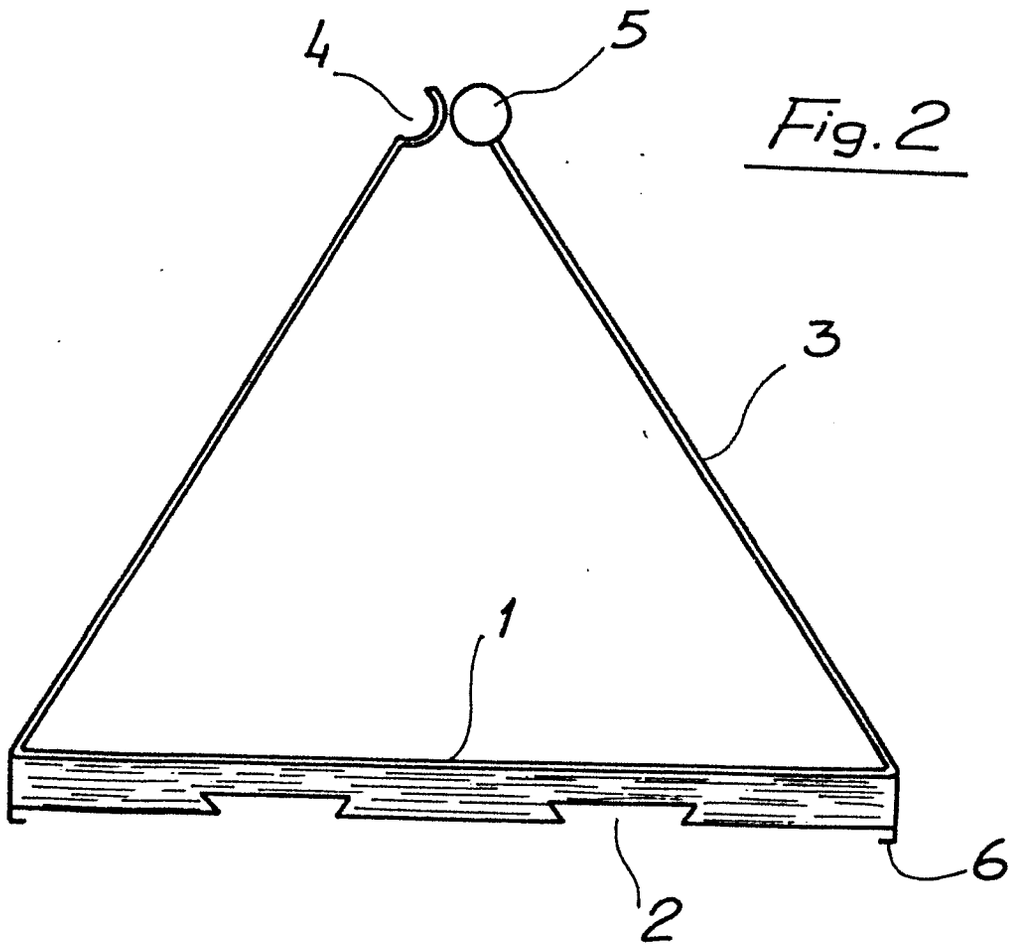
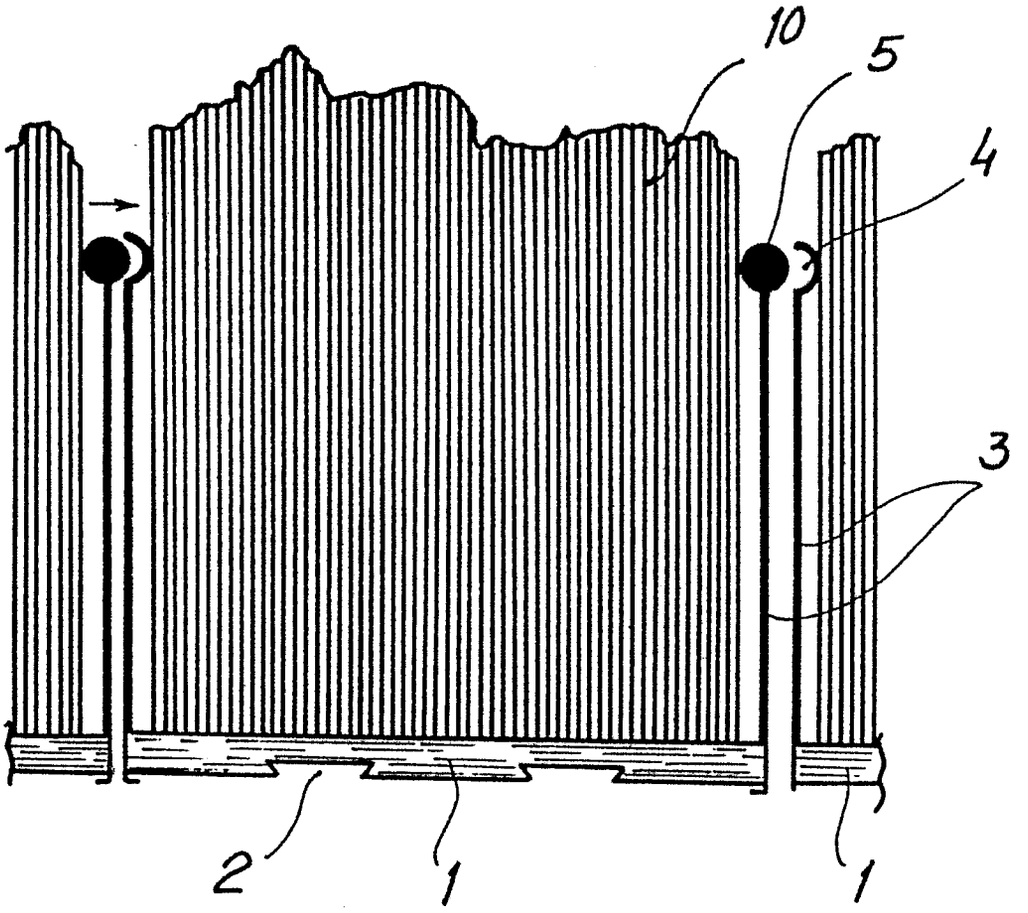


Fig. 2

Fig.3



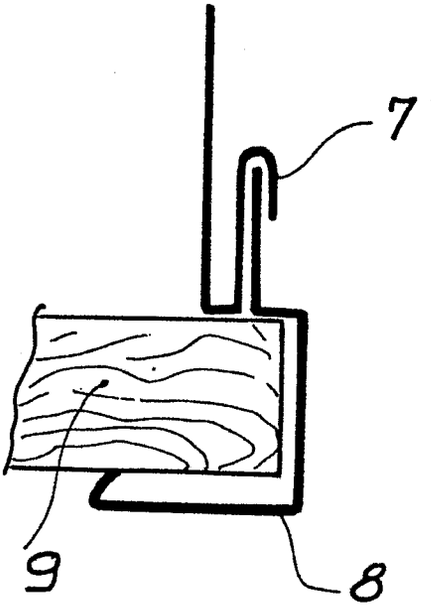


Fig.4