Device for holding together a stack of sheets

TECHNICAL FIELD OF THE INVENTION

The invention relates to a device for holding together an end of a stack of sheets. The invention further relates to an intermediate product for the manufacturing of such a device. The invention also relates to a method for holding together an end of a stack of sheets.

BACKGROUND OF THE INVENTION

The first paperclip was patented in 1867 by Samuel B. Fay. Following this in quite a few new paperclips were patented, wherein the Gem paper clip (the wire clip with three curved parts) is the best known. Where this patent refers to the "traditional paperclip", this means the wire paperclip including all variants which are based on the same function principle. Almost all paperclips acquire their binding power by exerting with the paperclip a clamping force on the stack of sheets, whereby they are joined together. This clamping force is achieved by a combination of the stiffness of the material (metal or plastic) and the shape of the paperclip. Benefits of traditional paperclips are the low costs and intuitive function of the clips. Disadvantages of traditional paperclips are the moderate binding quality (stacks of sheets can fall out from between the stack of connected sheets of paper) and the chance of damaging the paper by the protruding ends of the wire of the paperclips. Another disadvantage of the traditional paperclip is the use of material. Paperclips are made of metal or plastic. These are not sustainable materials, whereby the paperclips have a negative effect on the well-being of the environment. This also applies to the recycling process, wherein the material used for paperclips must be separated from the paper. In addition, traditional paperclips have a single functionality, namely the binding of paper. Traditional paperclips do not have the possibility of combining promotional or illustrative expressions with the binding functionality. The final disadvantage of the traditional paperclips is that, when paperclips are applied to a larger quantity of paper sheets, the paperclip can spring off, whereby the clip itself may cause injury to the user (for example to the eye). Also a paperclip based on clamping force may damage the nails of the user when the clip is attached.

In the past, many improvements have been made to the traditional paperclip to increase the clamping force and prevent damage to the paper (for example US D623.229 S, US 2009/0165260 A1, US 2009/0151129 A1). However the improved designs are usually based on the same connecting principle, namely

are not intuitive. To remove the paperclip from the stack of sheets, all actions must be carried out in reverse order.

Another paperclip is disclosed in NL1011086. This document discloses a compact corner device for holding together a stack of sheets. The holding method of the corner device is characterised by a foldable lever arm with a recess therein, a rigid support which is created on the first folding action of the corner device, an open ridge between a rear surface in which a foldable clamping hook is integrated and a foldable front surface in which the closing corner is integrated. By using a punch form, the corner device can be attached to and removed from the stack of sheets in a number of actions.

One problem with existing solutions is that these are not user-friendly. The existing solutions require many actions from the user, of which a number of actions are not intuitive. The paperclip in NL1011086 is described as flat sheet. The attachment of the paperclip, like the paperclip in patent no. NL1011526, consists of six actions. First the paperclip must be rotated as the paper must be attached to the back side of the clip. Then a retaining arm must be attached behind a front surface by means of folding movement, by pushing this retaining arm into a small recess. Then the stack of sheets must be pushed between this retaining arm and the rear surface. The next step consists of folding the stack of sheets over the retaining arm. This takes place including a clamping corner which is integrated with the rear surface. The penultimate step is folding the front surface over 180° to the front. To attach the paperclip as a final step the closure must be pushed into a recess in the retaining arm. The paperclip is now attached and binds a stack of sheets. The disadvantage is that the paperclip needs six actions to attach it, that the fixing is not intuitive because the clip must be attached on the back side, and the fixing of the retaining arm takes place by partly deforming the retaining arm before this can be pushed into the recess in the rear surface.

Another disadvantage of this paperclip is that there is a protrusion on the side of the paperclip (visible from the front). This is the end of the retaining arm. Because of this protrusion, the paperclip with the stack of sheets cannot or not easily be placed in an envelope as the protrusion catches the back side of the envelope.

SUMMARY OF THE INVENTION

The first object of the invention is to create a device for holding together an end of a stack of sheets, which is user-friendly. The second object of the invention is to create an intermediate product which is necessary for manufacturing of the device according to the invention. The third object of the invention is to create

a method for holding together an end of a stack of sheets.

The invention is defined by the independent claims. The dependent claims define advantageous embodiments.

In a first aspect, in accordance with the object of the invention, the invention relates to a device according to claim 1.

The effect of the properties of the invention is as follows. The first wall and the second wall jointly define the space in which the end of the stack of sheets must be placed. The first wall and second wall are joined such that in operational use these need merely be pushed over an end of the stack of sheets, which is a first great advantage for the user who does not need to perform any complex non-intuitive actions. The pivotable auxiliary piece cooperates with the first folding edge which is formed by the first wall in the second opening. The auxiliary piece and the first folding edge are configured and positioned so as to be suitable, in operational use, via a lever arm action on the end of the stack of sheets, for folding over the end of the stack of sheets about the first folding edge in the direction of the first wall. Furthermore, the auxiliary piece is configured such that, in operational use, in unfolded state of the stack of sheets, this protrudes at least at one location further than the end of the stack of sheets so that in folded state of the stack of sheets it can make physical contact with the first wall. Furthermore, the stack of sheets is folded over the entire predetermined distance (with a corner device, this is up to the corner and against the closed edges). The fact that the auxiliary piece protrudes beyond the edge of the sheets has two very great advantages. Firstly this amplifies the lever arm effect (only very little force need be exerted) during bending of the end of the sheets. Secondly the protruding part makes the action for use very intuitive. In fact the user need perform only two steps in fitting the device to the end of the stack of sheets. The first step concerns a step described above of introducing the end in the space so that this protrudes from the second opening. The second step concerns bending the end of the stack of sheets by means of the protruding auxiliary piece. The invention thus creates a very user- friendly and intuitive solution.

It should be noted that NL1011086 describes one of the folding arms as a lever arm. According to the definition of a lever arm, this is not a lever arm. This should rather be described as a retaining arm. In the device according to the invention, however, there is a lever arm effect because the auxiliary piece protrudes beyond the stack of sheets.

In one embodiment of the device according to the invention the auxiliary piece (B) is pivotably attached to the second wall (W2) close to the second opening (O2) via a pivot axis (D1). The pivot axis facilitates the user-friendliness and

closed edges (C1, C2) of the corner device. The range given in this embodiment forms the most practical, whereby an angle of 45° is most advantageous in view of the most common paper formats wherein all corners are 90°. An angle of 45° results in the easiest folding of the sheets.

In one embodiment of the device according to the invention a size of the second opening (O2) is configured such that it establishes the predetermined distance (DST1). This applies in particular to the corner device.

In one embodiment of the device according to the invention the length of the second opening (O2) lies in the range of 10 to 60 mm. The range given in this embodiment forms the most practical in view of the formats of the most common paper, which are A3, A4 or A5.

In one embodiment of the device according to the invention the material for each of the first wall (W1), second wall (W2) and auxiliary piece (B) is selected from the group comprising: paper, plastic, wood, metal, biological materials, mixtures of these materials, and other similar materials. The materials listed here can all well be used for the device according to the invention. However the use of paper is very advantageous as the material can be shredded without problems in a shredder.

In one embodiment of the device according to the invention the first wall (W1), second wall (W2) and auxiliary piece (B) are made of one piece. This embodiment is very advantageous because it is very cheap and quick to manufacture. This embodiment is extremely advantageous when the device is made of paper.

In another embodiment of the device according to the invention one or more of the first wall (W1), second wall (W2) and auxiliary piece (B) are attached to the device as separate components. This can for example be achieved by means of gluing, riveting, and other comparable techniques. Within these variants of the invention for example the auxiliary piece (B) can be attached to the device as a separate component. In the light of the invention in any case it is important that the auxiliary piece (B) is attached to be pivotable about at least one pivot point (or pivot axis) and whereby the pivot point, in relation to the folding edge (E1), is positioned, and wherein the auxiliary piece is configured such that this at least at one point protrudes beyond the stack of sheets when, in operational use, these are inserted in the device to the maximum pre-specified distance.

In a second aspect the invention relates to an intermediate product for manufacturing of the device according to the invention. It must be noted that also the

intermediate product from which the device is manufactutred enjoys an important advantage of the invention, namely that of user-friendliness, due to the lever arm principle of the auxiliary piece. Such an intermediate product should therefore in the future also be able to be sold as an independent product.

An embodiment of the intermediate product according to the invention corresponds with regards to shape to one of Figures 7, 8 and 9, 20, 24 and 28.

A further improved embodiment of the intermediate product is made of one piece, which is advantageous for the manufacturing of the intermediate product. This can be produced by means of cutting out from the flat sheet and punching the folding lines.

In a third aspect the invention relates to a method according to claim 22. The basic principle of the invention can be applied in many ways, also in ways which are not explicitly mentioned in this description. However, all these variants fall under the scope of protection of the claims. In addition all these variants use the method according to the invention which actually comprises two steps. The first step concerns the insertion of the stack of sheets to beyond a folding edge over the entire predetermined distance (for a corner device, this is up to the corner and against the closed edges). The second step concerns folding of the end of the stack of sheets using an auxiliary piece which has a lever arm effect on the end of the stack of sheets. It should be noted that the invention actually connects the stack of sheets together with only one movement, namely that of bending the corners of the sheets using the auxiliary piece. This in itself is a unique feature, which distinguishes the invention from existing paperclips which also work on the folding principle, but in which many actions are required before the sheets in the stack are attached to each other.

In a fourth aspect the invention relates to a stack of devices according to claim 23. An advantageous embodiment of the stack is obtained with great value if at least the respective devices in the stack (at least one but preferably all) are provided with an adhesive layer as described in claim 18 and described in the description variant thereof with double function. Such a stack is illustrated in Figures 15 and 16.

BRIEF DESCRIPTION OF THE FIGURES

These and other details of the invention are described below with reference to the Figures, which serve to illustrate the invention, but are not to be considered as restrictive for the invention, wherein:

Figure 1 shows a front view of a paper paperclip in accordance with

solutions. Certain embodiments of the invention are cheap, sustainable, function well and offer numerous possibilities for application. The function of the invention is based on a number of basic principles, the most important of which are: visually clearly distinguished areas renders the use intuitive, by using a lever arm effect minimises the effort required for fixing, by using, in certain embodiments, an adhesive layer or a retaining system the fixing requires particularly few actions, whereby the invention is simple, intuitive and functions appropriately.

The invention can be used in various application areas. It can be used amongst others in office environments, but also certainly in all households.

Various variations of the invention and the embodiments described here are possible. However, these do not fall outside the scope of protection of the invention as defined in the claims.

It must be noted that the above embodiments illustrate the invention rather than limiting it and that the skilled person will be able to come up with many alternative embodiments without going outside the scope of protection of the attached claims.

The claims use reference Figures in brackets and these should not be interpreted as limiting the claims. The term "comprise" and its additions do not exclude the presence of elements or steps other than those cited in the claims. The word "a" which stands before an element does not exclude the possibility of several of the elements being able to be present. The invention can be implemented as a device but also as an intermediate product. In the device claims, various means can be named with which several of such means are performed in one and the same piece of hardware. All dependent claims can be combined unless explicitly stated or evidently impossible. In the Figures same or corresponding properties or elements are indicated with same reference numerals.

CLAIMS

1. A device for holding together an end of a stack of sheets (P), wherein the device has a front and a back side, the device comprising:

- a first wall (W1) on the back side of the device and a second wall (W2) on the front of the device, wherein the first wall (W1) and the second wall (W2) reside substantially facing each other and are joined to each other such that the first wall (W1) and the second wall (W2) together define a space with, at the first end (UE1) of the space, a first opening (O1) to receive the end of the stack of sheets (P), and wherein at the opposite end (UE2) of the space a second opening (O2) is present, which is adapted to allow the end of the stack of sheets (P) to protrude over a predetermined distance (DST1) in relation to the first folding edge (E1), when the stack of sheets (P) resides in the space in operational use;
- a first folding edge (E1) which is formed by the first wall (W1) in the second opening (O2), and
- an auxiliary piece (B) which is pivotably attached to the second wall (W2) near the second opening (O2) via a pivot point (D1) and wherein the auxiliary piece (B) and pivot point (D1) are configured and positioned in relation to the first folding edge (E1) such that, in operational use, the auxiliary piece (B) is able to fold, via a lever arm effect acting on the end of the stack of sheets (P), the end of the stack of sheets (P) about the first folding edge (E1) in the direction of the first wall (W1), wherein the auxiliary piece (B) is configured such that it protrudes, in operational use, in the unfolded state of the stack of sheets (P), at least at one location further than the end of the stack of sheets (P), so that it is able to make physical contact with the first wall (W1) in a folded state of the stack of sheets (P), wherein the auxiliary piece (B) is pivotably attached on the back side of the second wall (W2), such that after folding the stack of sheets (P) in the direction of the back side, the front of the device follows the rectangular form of the sheets.

2. The device according to claim 1, wherein the auxiliary piece (B) is attached to the second wall (W2) via an intermediate wall (H, K).

3. The device according to claim 1 or 2, wherein the first wall (W1) close to the first opening (O1) of the space extends further than the second wall (W2) in order to create a support to facilitate the insertion of the stack of sheets (P) in the space.

Device for holding

TECHNICAL FIELD OF THE INVENTION

The invention relates to a device for holding together an end of a stack of sheets. The invention further relates to an intermediate product for the manufacturing of such a device. The invention also relates to a method for holding together an end of a stack of sheets.

BACKGROUND OF THE INVENTION

The first paperclip was patented in 1867 by Samuel B. Fay. Following this in quite a few new paperclips were patented, wherein the Gem paper clip (the wire clip with three curved parts) is the best known. Where this patent refers to the "traditional paperclip", this means the wire paperclip including all variants which are based on the same function principle. Almost all paperclips acquire their binding power by exerting with the paperclip a clamping force on the stack of sheets, whereby they are joined together. This clamping force is achieved by a combination of the stiffness of the material (metal or plastic) and the shape of the paperclip. Benefits of traditional paperclips are the low costs and intuitive function of the clips. Disadvantages of traditional paperclips are the moderate binding quality (stacks of sheets can fall out from between the stack of connected sheets of paper) and the chance of damaging the paper by the protruding ends of the wire of the paperclips. Another disadvantage of the traditional paperclip is the use of material. Paperclips are made of metal or plastic. These are not sustainable materials, whereby the paperclips have a negative effect on the well-being of the environment. This also applies to the recycling process, wherein the material used for paperclips must be separated from the paper. In addition, traditional paperclips have a single functionality, namely the binding of paper. Traditional paperclips do not have the possibility of combining promotional or illustrative expressions with the binding functionality. The final disadvantage of the traditional paperclips is that, when paperclips are applied to a larger quantity of paper sheets, the paperclip can spring off, whereby the clip itself may cause injury to the user (for example to the eye). Also a paperclip based on clamping force may damage the nails of the user when the clip is attached.

In the past, many improvements have been made to the traditional paperclip to increase the clamping force and prevent damage to the paper (for example US D623.229 S, US 2009/0165260 A1, US 2009/0151129 A1). However the improved designs are usually based on the same connecting principle, namely

are not intuitive. To remove the paperclip from the stack of sheets, all actions must be carried out in reverse order.

Another paperclip is disclosed in NL1011086. This document discloses a compact corner device for holding together a stack of sheets. The holding method of the corner device is characterised by a foldable lever arm with a recess therein, a rigid support which is created on the first folding action of the corner device, an open ridge between a rear surface in which a foldable clamping hook is integrated and a foldable front surface in which the closing corner is integrated. By using a punch form, the corner device can be attached to and removed from the stack of sheets in a number of actions.

One problem with existing solutions is that these are not user-friendly. The existing solutions require many actions from the user, of which a number of actions are not intuitive. The paperclip in NL1011086 is described as flat sheet. The attachment of the paperclip, like the paperclip in patent no. NL1011526, consists of six actions. First the paperclip must be rotated as the paper must be attached to the back side of the clip. Then a retaining arm must be attached behind a front surface by means of folding movement, by pushing this retaining arm into a small recess. Then the stack of sheets must be pushed between this retaining arm and the rear surface. The next step consists of folding the stack of sheets over the retaining arm. This takes place including a clamping corner which is integrated with the rear surface. The penultimate step is folding the front surface over 180° to the front. To attach the paperclip as a final step the closure must be pushed into a recess in the retaining arm. The paperclip is now attached and binds a stack of sheets. The disadvantage is that the paperclip needs six actions to attach it, that the fixing is not intuitive because the clip must be attached on the back side, and the fixing of the retaining arm takes place by partly deforming the retaining arm before this can be pushed into the recess in the rear surface.

Another disadvantage of this paperclip is that there is a protrusion on the side of the paperclip (visible from the front). This is the end of the retaining arm. Because of this protrusion, the paperclip with the stack of sheets cannot or not easily be placed in an envelope as the protrusion catches the back side of the envelope. Document NL-C-1017399 discloses a device according to the preamble of claim 1.

SUMMARY OF THE INVENTION

The first object of the invention is to create a device for holding together an end of a stack of sheets, which is user-friendly.

The invention is defined by the independent claims. The dependent claims define advantageous embodiments.

In a first aspect, in accordance with the object of the invention, the invention relates to a device according to claim 1.

The effect of the properties of the invention is as follows. The first wall and the second wall jointly define the space in which the end of the stack of sheets must be placed. The first wall and second wall are joined such that in operational use these need merely be pushed over an end of the stack of sheets, which is a first great advantage for the user who does not need to perform any complex non-intuitive actions. The pivotable auxiliary piece cooperates with the first folding edge which is formed by the first wall in the second opening. The auxiliary piece and the first folding edge are configured and positioned so as to be suitable, in operational use, via a lever arm action on the end of the stack of sheets, for folding over the end of the stack of sheets about the first folding edge in the direction of the first wall. Furthermore, the auxiliary piece is configured such that, in operational use, in unfolded state of the stack of sheets, this protrudes at least at one location further than the end of the stack of sheets so that in folded state of the stack of sheets it can make physical contact with the first wall. Furthermore, the stack of sheets is folded over the entire predetermined distance (with a corner device, this is up to the corner and against the closed edges). The fact that the auxiliary piece protrudes beyond the edge of the sheets has two very great advantages. Firstly this amplifies the lever arm effect (only very little force need be exerted) during bending of the end of the sheets. Secondly the protruding part makes the action for use very intuitive. In fact the user need perform only two steps in fitting the device to the end of the stack of sheets. The first step concerns a step described above of introducing the end in the space so that this protrudes from the second opening. The second step concerns bending the end of the stack of sheets by means of the protruding auxiliary piece. The invention thus creates a very user- friendly and intuitive solution.

It should be noted that NL1011086 describes one of the folding arms as a lever arm. According to the definition of a lever arm, this is not a lever arm. This should rather be described as a retaining arm. In the device according to the invention, however, there is a lever arm effect because the auxiliary piece protrudes beyond the stack of sheets.

In one embodiment of the device according to the invention the auxiliary piece (B) is pivotably attached to the second wall (W2) close to the second opening (O2) via a pivot axis (D1). The pivot axis facilitates the user-friendliness and

closed edges (C1, C2) of the corner device. The range given in this embodiment forms the most practical, whereby an angle of 45° is most advantageous in view of the most common paper formats wherein all corners are 90°. An angle of 45° results in the easiest folding of the sheets.

In one embodiment of the device according to the invention a size of the second opening (O2) is configured such that it establishes the predetermined distance (DST1). This applies in particular to the corner device.

In one embodiment of the device according to the invention the length of the second opening (O2) lies in the range of 10 to 60 mm. The range given in this embodiment forms the most practical in view of the formats of the most common paper, which are A3, A4 or A5.

In one embodiment of the device according to the invention the material for each of the first wall (W1), second wall (W2) and auxiliary piece (B) is selected from the group comprising: paper, plastic, wood, metal, biological materials, mixtures of these materials, and other similar materials. The materials listed here can all well be used for the device according to the invention. However the use of paper is very advantageous as the material can be shredded without problems in a shredder.

In one embodiment of the device according to the invention the first wall (W1), second wall (W2) and auxiliary piece (B) are made of one piece. This embodiment is very advantageous because it is very cheap and quick to manufacture. This embodiment is extremely advantageous when the device is made of paper.

In another embodiment of the device according to the invention one or more of the first wall (W1), second wall (W2) and auxiliary piece (B) are attached to the device as separate components. This can for example be achieved by means of gluing, riveting, and other comparable techniques. Within these variants of the invention for example the auxiliary piece (B) can be attached to the device as a separate component. In the light of the invention in any case it is important that the auxiliary piece (B) is attached to be pivotable about at least one pivot point (or pivot axis) and whereby the pivot point, in relation to the folding edge (E1), is positioned, and wherein the auxiliary piece is configured such that this at least at one point protrudes beyond the stack of sheets when, in operational use, these are inserted in the device to the maximum pre-specified distance.

Described is an intermediate product for manufacturing of the device according to the invention. It must be noted that also the

intermediate product from which the device is manufactutred enjoys an important advantage, namely that of user-friendliness, due to the lever arm principle of the auxiliary piece. Such an intermediate product should therefore in the future also be able to be sold as an independent product.

An embodiment of the intermediate product corresponds with regards to shape to one of Figures 7, 8 and 9, 20, 24 and 28.

A further improved embodiment of the intermediate product is made of one piece, which is advantageous for the manufacturing of the intermediate product. This can be produced by means of cutting out from the flat sheet and punching the folding lines.

Described is also a method. The basic principle of the invention can be applied in many ways, also in ways which are not explicitly mentioned in this description, as long as they fall under the scope of the claims. The described method actually comprises two steps. The first step concerns the insertion of the stack of sheets to beyond a folding edge over the entire predetermined distance (for a corner device, this is up to the corner and against the closed edges). The second step concerns folding of the end of the stack of sheets using an auxiliary piece which has a lever arm effect on the end of the stack of sheets. It should be noted that is actually the stack of sheets connected together with only one movement, namely that of bending the corners of the sheets using the auxiliary piece. This in itself is a unique feature, which distinguishes from existing paperclips which also work on the folding principle, but in which many actions are required before the sheets in the stack are attached to each other.

In a second aspect the invention relates to a stack of devices according to claim 15. An advantageous embodiment of the stack is obtained with great value if at least the respective devices in the stack (at least one but preferably all) are provided with an adhesive layer and described in the description variant thereof with double function. Such a stack is illustrated in Figures 15 and 16.

BRIEF DESCRIPTION OF THE FIGURES

These and other details of the invention are described below with reference to the Figures, which serve to illustrate the invention, but are not to be considered as restrictive for the invention, wherein:

Figure 1 shows a front view of a paper paperclip in accordance with

solutions. Certain embodiments of the invention are cheap, sustainable, function well and offer numerous possibilities for application. The function of the invention is based on a number of basic principles, the most important of which are: visually clearly distinguished areas renders the use intuitive, by using a lever arm effect minimises the effort required for fixing, by using, in certain embodiments, an adhesive layer or a retaining system the fixing requires particularly few actions, whereby the invention is simple, intuitive and functions appropriately.

The invention can be used in various application areas. It can be used amongst others in office environments, but also certainly in all households.

Various variations of the invention and the embodiments described here are possible. However, these do not fall outside the scope of protection of the invention as long as they fall under the claims.

It must be noted that the above embodiments illustrate the invention rather than limiting it and that the skilled person will be able to come up with many alternative embodiments without going outside the scope of protection of the attached claims.

The claims use reference Figures in brackets and these should not be interpreted as limiting the claims. The term "comprise" and its additions do not exclude the presence of elements or steps other than those cited in the claims. The word "a" which stands before an element does not exclude the possibility of several of the elements being able to be present. In the device claims, various means can be named with which several of such means are performed in one and the same piece of hardware. In the Figures same or corresponding properties or elements are indicated with same reference numerals.

CLAIMS

1. A device for holding together an end of a stack of sheets (P), wherein the device has a front and a back side, the device comprising:

- a first wall (W1) on the back side of the device and a second wall (W2) on the front of the device, wherein the first wall (W1) and the second wall (W2) reside substantially facing each other and are joined to each other such that the first wall (W1) and the second wall (W2) together define a space with, at the first end (UE1) of the space, a first opening (O1) to receive the end of the stack of sheets (P), and wherein at the opposite end (UE2) of the space a second opening (O2) is present, which is adapted to allow the end of the stack of sheets (P) to protrude over a predetermined distance (DST1) in relation to a first folding edge (E1), when the stack of sheets (P) resides in the space in operational use;
- the first folding edge (E1) being formed by the first wall (W1) in the second opening (O2), and
- an auxiliary piece (B) which is pivotably attached to the second wall (W2) near the second opening (O2) via a pivot point (D1) and wherein the auxiliary piece (B) and pivot point (D1) are configured and positioned in relation to the first folding edge (E1) such that, in operational use, the auxiliary piece (B) is able to fold, via a lever arm effect acting on the end of the stack of sheets (P), the end of the stack of sheets (P) about the first folding edge (E1) in the direction of the first wall (W1), wherein the auxiliary piece (B) is configured such that it protrudes, in operational use, in the unfolded state of the stack of sheets (P), at least at one location further than the end of the stack of sheets (P), so that it is able to make physical contact with the first wall (W1) in a folded state of the stack of sheets (P), wherein the auxiliary piece (B) is pivotably attached on the back side of the second wall (W2), characterised in that after folding the stack of sheets (P) in the direction of the back side, the front of the device follows the rectangular form of the sheets which they had before folding.

2. The device according to claim 1, wherein the auxiliary piece (B) is attached to the second wall (W2) via an intermediate wall (H, K).

3. The device according to claim 1 or 2, wherein the first wall (W1) close to the first opening (O1) of the space extends further than the second wall (W2) in order to create a support to facilitate the insertion of the stack of sheets (P) in the space.