(54) Title: A DETACHABLY MOUNTED SEAL

(57) Abstract: A detachably mounted seal is disclosed. When the seal is used for the decoration of bread, for example, of a sandwich, a piece of toast, or a waffle, one handle is easily attached to and detached from various kinds of stamping parts, so that various patterns or letters may be made on the bread or may be coated with syrup including chocolate and cream by changing the stamping parts as desired. Further, when the seal is used for children's play, one handle is easily attached to and detached from various kinds of stamping parts so that various patterns or letters may be changed and pressed as desired.
Description

A DETACHABLY MOUNTED SEAL

Technical Field

[1] The present invention relates, in general, to a detachably mounted seal and, more particularly, to a detachably mounted seal in which one handle is easily attached to and detached from various kinds of stamping parts when the seal is used for the decoration of bread, for example, of a sandwich, a piece of toast, or a waffle, so that various patterns or letters may be made on the bread or may be coated with syrup including chocolate and cream by changing the stamping parts as desired, and in which one handle is easily attached to and detached from various kinds of stamping parts when the seal is used for children's play, so that various patterns or letters may be changed and pressed as desired.

Background Art

[2] Conventionally, after bread produced in homes, bakeries or flour-based meal shops has been baked or finished, it is difficult to carve an additional pattern or letter into the bread. Further, up to now, after bread has been baked or finished, a person manually decorates the surface of the bread using syrup or manually carves a pattern or letter into the surface of the bread. However, this decorating work is conducted manually by a person, so that it is inefficient, and besides, it is difficult to constantly obtain the same result. Meanwhile, a seal for use in children's play which can stamp various patterns by easy attachment and detachment of a single handle to various kinds of stamping parts is required.

Disclosure of Invention

Technical Problem

[3] Accordingly, the present invention has been made keeping in mind the above problems occurring in the prior art, and an object of the present invention is to provide a detachably mounted seal including a stamping part which stamps a pattern or a letter on the surface of bread or coats syrup on the surface of the bread in accordance with the pattern or letter even after it has been baked or finished, and a handle which is coupled to the stamping part.

[4] Another object of the present invention is to provide a detachably mounted seal, which is constructed so that a handle is easily attached and detached to and from a plurality of stamping parts which are manufactured in accordance with various patterns or letters.

[5] A further object of the present invention is to provide a detachably mounted seal, in which a handle itself is provided with a heating unit, thus independently heating a
stamping part without the necessity of using an additional heating device.

Yet another object of the present invention is to provide a detachably mounted seal, in which a handle is easily detachably attached to various kinds of stamping parts incised to have various patterns or letters, or to various kinds of stamping parts including stamping pads incised to have various patterns or letters.

**Technical Solution**

In order to accomplish the above objects, the present invention provides a detachably mounted seal which is constructed as follows.

According to an embodiment of the present invention, a detachably mounted seal includes a stamping part including a shaping member which is shaped into various patterns or letters and a handle which is detachably coupled to the stamping part, so that various patterns or letters are stamped by the stamping part, or a surface of bread is stamped with various patterns or letters or is coated with syrup using the stamping part.

According to another embodiment of the present invention, the detachably mounted seal further includes a heating unit for heating the shaping member, the shaping member being made of a material which is heatable by the heating unit.

According to a further embodiment of the present invention, the stamping part further includes a coupling member to which the handle is detachably coupled.

According to a further embodiment of the present invention, a locking hole is formed in the coupling member so that the handle is locked to the locking hole.

According to a further embodiment of the present invention, the handle includes a handle frame which defines an external appearance of the handle, and a locking unit which is inserted into the handle frame and detachably coupled to the stamping part.

According to a further embodiment of the present invention, a guide protrusion is provided in the handle frame, and a guide hole is formed in the locking unit so that the guide protrusion is inserted into the guide hole, whereby the locking unit moves up and down along a predetermined course without being dislodged leftwards or rightwards owing to the guide protrusion, when the locking unit moves up and down in the handle frame.

According to a further embodiment of the present invention, the locking unit includes a locking protrusion having an inclined surface, and a 'U'-shaped body.

According to a further embodiment of the present invention, the handle further includes a button which is mounted and secured to the locking unit or is integrated with the locking unit.

According to a further embodiment of the present invention, the handle includes a locking step provided in the handle, and a support part installed to be held by the
locking step, thus supporting the locking unit and the button at a predetermined height in the handle frame.

[17] According to a further embodiment of the present invention, the handle further includes an elastic member installed between the button and the support part.

[18] According to a further embodiment of the present invention, when the handle is coupled to the stamping part, the locking unit is locked by an upper portion of the coupling member, and the locking protrusion is retracted into the handle frame because of the inclined surface formed on the locking protrusion and a coupling direction of the handle, so that the handle frame may be inserted into the coupling member, and thereafter, the locking protrusion protrudes out of the handle frame again because of the 'U' -shaped body, so that the locking protrusion is locked to the locking hole formed in the coupling member.

[19] According to a further embodiment of the present invention, when the handle is detached from the stamping part, the inclined surface of the locking protrusion slides down into the handle frame by pushing the button, so that the locking protrusion is retracted into the handle frame, and the locking protrusion is released from the locking hole, thereby the handle frame is removable from the coupling member.

[20] According to a further embodiment of the present invention, when a pushing operation of the button is released, the locking unit and the button are moved upwards in the handle frame by an elastic force of the elastic member, so that the inclined surface of the locking protrusion slides up towards an outside of the handle frame, and thus the locking protrusion protrudes out of the handle frame.

[21] According to a further embodiment of the present invention, a detachably mounted seal includes a stamping part having various patterns or letters shaped therein or having a stamping pad into which various patterns or letters are shaped, and a handle detachably coupled to the stamping part, so that various patterns or letters are stamped by the stamping part.

[22] According to a further embodiment of the present invention, the stamping part further includes a handle insertion cavity to which the handle is detachably coupled.

[23] According to a further embodiment of the present invention, a locking hole is formed in the handle insertion cavity so that the handle is locked to the locking hole.

[24] According to a further embodiment of the present invention, the handle includes a handle frame defining an external appearance of the handle, and a locking unit inserted into the handle frame to be detachably coupled to the stamping part.

[25] According to a further embodiment of the present invention, a guide protrusion is provided in the handle frame, and a guide hole is formed in the locking unit so that the guide protrusion is inserted into the guide hole, whereby the locking unit moves up and down along a predetermined course without being dislodged leftwards or rightwards.
owing to the guide protrusion, when the locking unit moves up and down in the handle frame.

[26] According to a further embodiment of the present invention, the locking unit includes a locking protrusion having an inclined surface, and a 'U' -shaped body.

[27] According to a further embodiment of the present invention, the handle further includes a button which is mounted and secured to the locking unit or is integrated with the locking unit.

[28] According to a further embodiment of the present invention, the handle includes a locking step provided in the handle, and a support part installed be held by the locking step, thus supporting the locking unit and the button at a predetermined height in the handle frame.

[29] According to a further embodiment of the present invention, the handle further includes an elastic member installed between the button and the support part.

[30] According to a further embodiment of the present invention, when the handle is coupled to the stamping part, the locking unit is locked by an upper portion of the handle insertion cavity, and the locking protrusion is retracted into the handle frame because of the inclined surface formed on the locking protrusion and a coupling direction of the handle, so that the handle frame may be inserted into the handle insertion cavity, and thereafter, the locking protrusion protrudes out of the handle frame again because of the 'U' -shaped body, so that the locking protrusion is locked to the locking hole formed in the handle insertion cavity.

[31] According to a further embodiment of the present invention, when the handle is detached from the stamping part, the inclined surface of the locking protrusion slides down into the handle frame by pushing the button, so that the locking protrusion is retracted into the handle frame, and the locking protrusion is released from the locking hole, thereby the handle frame is movable from the handle insertion cavity, and when a pushing operation for the button is released, the locking unit and the button are moved upwards in the handle frame by an elastic force of the elastic member, so that the inclined surface of the locking protrusion slides up towards an outside of the handle frame, and thus the locking protrusion protrudes out of the handle frame.

**Advantageous Effects**

[32] A detachably mounted seal according to the present invention is advantageous in that a pattern or a letter can be stamped on the surface of bread and syrup can be coated on the surface of the bread in accordance with the pattern or the letter even after the bread has been baked or finished.

[33] A detachably mounted seal according to the present invention is advantageous in that a handle is easily attached and detached to and from a plurality of stamping parts
which are manufactured in accordance with various patterns or letters.

A detachably mounted seal according to the present invention is advantageous in that a handle itself is provided with a heating unit, thus being capable of independently heating a stamping part without the necessity of using an additional heating device.

A detachably mounted seal according to the present invention is advantageous in that a handle is easily detachably mounted to a plurality of stamping parts manufactured in accordance with the shape of various patterns or letters.

A detachably mounted seal according to the present invention is advantageous in that a handle is easily detachably attached to various kinds of stamping parts incised to have various patterns or letters, or to various kinds of stamping parts including stamping pads incised to have various patterns or letters.

**Brief Description of Drawings**

FIG. 1 is a perspective view illustrating a detachably mounted seal according to a first embodiment of the present invention;

FIG. 2 is an exploded perspective view illustrating a handle applied to the detachably mounted seal according to the first embodiment of the present invention;

FIG. 3 is a view illustrating the operation of the handle applied to the detachably mounted seal according to the first embodiment of the present invention;

FIG. 4 is a view illustrating the state in which a stamping part and the handle applied to the detachably mounted seal according to the first embodiment of the present invention are being coupled to each other;

FIG. 5 is a view illustrating the state in which the stamping part and the handle applied to the detachably mounted seal according to the first embodiment of the present invention have been coupled to each other;

FIG. 6 is a view illustrating the state in which the stamping part and the handle applied to the detachably mounted seal according to the first embodiment of the present invention are being separated from each other;

FIG. 7 is a perspective view illustrating a detachably mounted seal according to a second embodiment of the present invention;

FIG. 8 is an exploded perspective view illustrating a handle applied to the detachably mounted seal according to the second embodiment of the present invention;

FIG. 9 is a perspective view illustrating the operation of selecting a desired stamping part and the heating method for the stamping part applied to the detachably mounted seal according to the first embodiment of the present invention;

FIG. 10 is a perspective view illustrating a pattern stamped on the surface of bread using the detachably mounted seal according to the first embodiment of the present invention;
FIG. 11 is a perspective view illustrating a pattern stamped on the surface of bread using the detachably mounted seal according to the second embodiment of the present invention;

FIG. 12 is a perspective view illustrating the selection of the stamping part when the detachably mounted seal according to the first embodiment of the present invention is used for children's play;

FIG. 13 is a perspective view illustrating a pattern stamped on paper when the detachably mounted seal according to the first embodiment of the present invention is used for children's play;

FIG. 14 is a perspective view illustrating a detachably mounted seal according to a third embodiment of the present invention;

FIG. 15 is a perspective view illustrating an embodiment of a stamping part applied to the detachably mounted seal according to the third embodiment of the present invention;

FIG. 16 is a perspective view illustrating another embodiment of a stamping part applied to the detachably mounted seal according to the third embodiment of the present invention;

FIG. 17 is a view illustrating the state in which a stamping part and a handle applied to the detachably mounted seal according to the third embodiment of the present invention have been coupled to each other;

FIG. 18 is a perspective view illustrating the selection of a stamping part applied to the detachably mounted seal according to the third embodiment of the present invention; and

FIG. 19 is a perspective view illustrating a pattern stamped on paper using the detachably mounted seal according to the third embodiment of the present invention.

<Description of reference characters of important parts>

1 : stamping part 2 : handle
11 : shaping member 12 : coupling member
13 : connecting member 21 : handle frame
22 : locking unit 23 : button
24 : support part 25 : elastic member
26 : heating unit 121 : locking hole
211 : lower frame pat 212 : upper frame part
213 : cover frame 221 : locking protrusion
222 : body 231 : insertion hole
241 : support plate 242 : support projection
261 : inner module 262 : outer module
1' : stamping part 11' : body of stamping part
12' : handle insertion cavity 121' : locking hole
13' : pad insertion hole 14' : stamping pad

Best Mode for Carrying out the Invention

Hereinafter, detachably mounted seals according to the preferred embodiments of the present invention will be described in detail with reference to the accompanying drawings.

FIG. 1 is a perspective view illustrating a detachably mounted seal according to a first embodiment of the present invention.

FIG. 2 is an exploded perspective view illustrating a handle applied to the detachably mounted seal according to the first embodiment of the present invention.

FIG. 3 is a view illustrating the operation of the handle applied to the detachably mounted seal according to the first embodiment of the present invention.

FIG. 4 is a view illustrating the state in which a stamping part and the handle applied to the detachably mounted seal according to the first embodiment of the present invention are being coupled to each other.

FIG. 5 is a view illustrating the state in which the stamping part and the handle applied to the detachably mounted seal according to the first embodiment of the present invention have been coupled to each other.

FIG. 6 is a view illustrating the state in which the stamping part and the handle applied to the detachably mounted seal according to the first embodiment of the present invention are being separated from each other.

FIG. 7 is a perspective view illustrating a detachably mounted seal according to a second embodiment of the present invention.

FIG. 8 is an exploded perspective view illustrating a handle applied to the detachably mounted seal according to the second embodiment of the present invention.

FIG. 9 is a perspective view illustrating the operation of selecting a desired stamping part and the heating method for the stamping part applied to the detachably mounted seal according to the first embodiment of the present invention.

FIG. 10 is a perspective view illustrating a pattern stamped on the surface of bread using the detachably mounted seal according to the first embodiment of the present invention.

FIG. 11 is a perspective view illustrating a pattern stamped on the surface of bread using the detachably mounted seal according to the second embodiment of the present invention.

FIG. 12 is a perspective view illustrating the selection of the stamping part when the detachably mounted seal according to the first embodiment of the present invention is
used for children’s play.

FIG. 13 is a perspective view illustrating a pattern stamped on paper when the detachably mounted seal according to the first embodiment of the present invention is used for children’s play.

FIG. 14 is a perspective view illustrating a detachably mounted seal according to a third embodiment of the present invention.

FIG. 15 is a perspective view illustrating an embodiment of a stamping part applied to the detachably mounted seal according to the third embodiment of the present invention.

FIG. 16 is a perspective view illustrating another embodiment of a stamping part applied to the detachably mounted seal according to the third embodiment of the present invention.

FIG. 17 is a view illustrating the state in which a stamping part and a handle applied to the detachably mounted seal according to the third embodiment of the present invention have been coupled to each other.

FIG. 18 is a perspective view illustrating the selection of a stamping part applied to the detachably mounted seal according to the third embodiment of the present invention.

FIG. 19 is a perspective view illustrating a pattern stamped on paper using the detachably mounted seal according to the third embodiment of the present invention.

In the case where the detailed description of the known functions or constructions related to the present invention unnecessarily confuse the characteristics of the present invention, the detailed description will be omitted herein.

Referring to FIG. 1, the detachably mounted seal according to the first embodiment of the present invention includes a stamping part 1 and a handle 2.

The stamping part 1 includes a shaping member 11, a coupling member 12, and connecting members 13. The shaping member 11 is manufactured by bending a thin rectangular plate (preferably, the thickness of the plate is 2~3mm, and the plate is made of a material which is easily heated) into the shape of a desired pattern (FIG. 1 illustrates a heart pattern as one example) or letter, and is the part which is heated.

The coupling member 12 has the shape of a hollow cube which is open at the top and bottom thereof. Rectangular locking holes are formed, respectively, in any two opposite surfaces.

The connecting members 13 function to connect the shaping member 11 to the coupling member 12. Each connecting member has the shape of a rod, but may have various cross-sections. Here, the connecting members 13 may be connected to the shaping member 11 and the coupling member 12 through various methods. Of course, the coupling member 12 may be directly connected to the shaping member 11 without
using the connecting members 13, or may be integrated with the shaping member 11 into a single structure.

[97] Referring to FIGS. 1 to 3, the handle 2 includes a handle frame 21, a locking unit 22, a button 23, a support part 24, and an elastic member 25.

[98] The handle frame 21 includes a lower frame part 211, an upper frame part 212 and a cover frame 213. The lower frame part 211 is formed to have the shape of a hollow square pillar which is closed at the bottom. A pair of rectangular protrusion passing holes 2111 is formed in opposite side surfaces of the lower frame part. The upper frame part 212 is coupled or may be integrated with the lower frame part 211, and is formed to have the shape of a hollow cylinder. A circular locking step 2121 is provided on an upper portion in the upper frame part, and a pair of guide protrusions 2122 having the shape of a bar is provided on the inner wall of the upper frame part in such a way as to face each other. Preferably, the upper frame part is made of a material having low heat conductivity. The cover frame 213 has the shape of a hollow cylinder which is closed at the top. A circular button passing hole 2131 is formed in the top of the cover frame.

[99] The locking unit 22 includes locking protrusions 221 each having an inclined surface 2211, and a 'U' shaped body 222. A pair of rectangular guide holes 2221 is formed in the body 222 in such a way as to be opposite to each other.

[100] The button 23 comprises a solid cylinder. An insertion hole 231 having a predetermined depth is formed in the lower portion of the button. The button is secured to the locking unit 22 or may be integrated with the locking unit 22.

[101] The support part 24 is formed to have a disc shape, and includes a support plate 241 having locking unit passing grooves 2411 which are formed to be opposite to each other such that the locking unit passes through the locking unit passing grooves, and a cylindrical support projection 242 which protrudes from the center of the support plate 241. Meanwhile, the support part 24 is inserted into the upper frame part 212 to be held on the circular locking step 2121 which is formed on the upper portion in the upper frame part 212, and the locking unit 22 and the button 23 are secured at a predetermined height in the upper frame part 212 of the handle frame 21. At this time, the elastic member 25 that will be described in detail below is fitted over the support projection 242, and the support projection 242 equipped with the elastic member 25 is inserted into the insertion hole 231 formed in the button 23.

[102] As long as the elastic member 25 has elasticity, any elastic member may be used. It is preferable that a coil spring be used as the elastic member 25.

[103] Herein below, the operation of the handle 2 applied to the detachably mounted seal according to the first embodiment of the present invention and the coupling of the stamping part 1 with the handle 2 will be described in detail.

[104] Referring to FIG. 3, when the button 23 of the handle 2 is pushed down, the locking
unit 22 moving along with the button 23 moves downwards in the handle frame 21, so that the inclined surface 221 of each locking protrusion 221 of the locking unit 22 contacts the lower portion of the corresponding protrusion passing hole 2111 formed in the lower frame part 211 of the handle frame 21, while the locking protrusions slide down into the lower frame part 211 of the handle frame 21. Thereby, each locking protrusion 221 enters the lower frame part 211 of the handle frame 21. Meanwhile, when the pushing of the handle button 23 is released, the button 23 is moved upwards by the elastic force of the elastic member 25, and simultaneously the locking unit 22 moving along with the button 23 moves upwards in the handle frame 21. Thus, while the inclined surface 221 of each locking protrusion 221 of the locking unit 22 contacts the lower portion of the corresponding protrusion passing hole 2111 formed in the lower frame part 211 of the handle frame 21, the locking protrusions slide up from the lower frame part 211 of the handle frame 21, so that the locking protrusions 221 protrude out from the lower frame part 211 of the handle frame 21. Meanwhile, since each locking protrusion 221 of the locking unit 22 is provided with the inclined surface 221 and the body 222 of the locking unit 22 has the ‘U’ shape so that the locking protrusions 221 elastically move leftwards and rightwards, the locking protrusions 221 may slide down or up in the lower frame part 211 of the handle frame 21 when the locking unit 22 moves down or up in the handle frame 21. Meanwhile, in the state where the guide protrusions 2122 provided in the handle frame 21 are inserted into the corresponding guide holes 2221 formed in the locking unit 22, the locking unit 22 moves up or down in the handle frame 21. Thus, the locking unit can move up and down along a predetermined course without being dislodged leftwards or rightwards.

When a user desires to couple the handle 2 operated as described above to the stamping part 1, as shown in FIG. 4, the lower frame part 211 of the handle frame 21 is inserted into the coupling member 12 of the stamping part 1. At this time, the locking protrusions 221 are stopped by the upper portion of the coupling member 12. As the lower frame part 211 moves further downwards, the locking protrusions 221 are retracted into the lower frame part 211 by the coupling member 12, so that the lower frame part 211 is smoothly inserted into the coupling member 12. At this time, the locking protrusions 221 retracted into the lower frame part 211 are always intended to protrude out of the lower frame part 211, whenever a space is created by the restoring force of the narrowed body 222 which is restored to its original shape because of the ‘U’ shape. Thereafter, when the locking protrusion passing holes 2111 formed in the lower frame part 211 reach the locking holes 121 formed in the coupling member 12, as shown in FIG. 5, the locking protrusions 221 protrude out through the locking holes 121 of the coupling member 12 to be locked by the locking holes 121. Thus, the handle 2 is firmly attached to the stamping part 1 by the operation of the locking protrusions.
When a user desires to detach the handle 2 from the stamping part 1, as shown in FIG. 6, the user has only to separate the handle 2 from the stamping part 1 while pushing the button 23. That is, the locking unit 22 moving integrally with the button 23 when the button 23 of the handle 2 is pushed is moved downwards in the handle frame 21. Thus, while the inclined surfaces 2211 of the locking protrusions 221 of the locking unit 22 contact the lower portions of the locking protrusion passing holes 2111 formed in the lower frame part 211 of the handle frame 21, the locking protrusions slide down in the lower frame part 211 of the handle frame 21, so that the locking protrusions 221 are released from the corresponding locking holes 121. In such a state, when the handle 2 is separated from the stamping part 1, the handle 2 is easily detached from the stamping part 1.

In the case of using the detachably mounted seal according to the first embodiment of the present invention constructed as described above, as shown in FIG. 9, all of the stamping parts 1 manufactured to have various shapes are placed on a heating plate P and are heated. A user may select the stamping part 1 corresponding to a desired shape and then couple the handle 2 to the stamping part. As shown in FIG. 10, after the heated detachably mounted seal contacts and presses the surface of bread 100, the seal is separated from the bread. At this time, a pattern 110 corresponding to the shape of the stamping part 1 of the detachably mounted seal is stamped on the surface of the bread 100. Similarly, after the stamping part 1 is dipped into syrup (not shown), the detachably mounted seal contacts and presses the surface of the bread 100. Afterwards, when the seal is separated from the bread, the syrup is applied to the surface of the bread 100 in the same shape as that of the stamping part 1, and besides, the shape of the stamping part 1 is also marked on the surface of the bread. Meanwhile, when a user desires to apply syrup to the surface of the bread 100, it is not necessary to heat the stamping part 1. Even though the stamping part 1 is not heated, it is possible to apply the syrup to the surface of the bread 100.

Meanwhile, the detachably mounted seal according to the second embodiment of the present invention is shown in FIG. 7. The first embodiment of the present invention illustrated in FIGS. 3 to 6 is identically applied to the second embodiment of the present invention. Referring to FIG. 7, the detachably mounted seal according to the embodiment of the present invention includes a stamping part 1 and a handle 2.

The stamping part 1 includes a shaping member 11, a coupling member 12, and connecting members 13. The shaping member 11 is manufactured by bending a thin rectangular plate (preferably, the thickness of the plate is 2-3mm, and the plate is made of a material which is easily heated) into the shape of a desired pattern (FIG. 1 illustrates a heart pattern as one example) or letter, and is the part which is heated.
[110] The coupling member 12 has the shape of a hollow cube which is open at the top and bottom thereof. Rectangular locking holes are formed, respectively, in any two opposite surfaces. Preferably, the coupling member is made of a material having high heat conductivity.

[111] The connecting members 13 function to connect the shaping member 11 to the coupling member 12. Each connecting member has the shape of a rod, but may have various cross-sections. Preferably, each connecting member is made of a material having high heat conductivity. Here, the connecting members 13 may be connected to the shaping member 11 and the coupling member 12 through a variety of methods. The connection of the connecting member to the shaping member and the coupling member through welding is preferable. Of course, the coupling member 12 may be directly connected to the shaping member 11 without using the connecting members 13, or may be integrated with the shaping member 11 into a single structure.

[112] Referring to FIGS. 7, 8 and 3, the handle 2 includes a handle frame 21, a locking unit 22, a button 23, a support part 24, an elastic member 25 and a heating unit 26.

[113] The handle frame 21 includes a lower frame part 211, an upper frame part 212 and a cover frame 213. The lower frame part 211 is formed to have the shape of a hollow square pillar which is closed at the bottom. A pair of rectangular protrusion passing holes 2111 is formed in the facing side surfaces of the lower frame part and a pair of rectangular plate coupling holes 2112 is formed in the remaining facing side surfaces of the lower frame part. The upper frame part 212 is coupled to or integrated with the lower frame part 211, and is formed to have the shape of a hollow cylinder. A circular locking step 2121 is provided on an upper portion in the upper frame part, and a pair of guide protrusions 2122 having the shape of a bar is provided on the inner wall of the upper frame part in such a way as to face each other. Preferably, the upper frame part is made of a material having low heat conductivity. The cover frame 213 has the shape of a hollow cylinder which is closed at the top. A circular button passing hole 2131 is formed in the top of the cover frame. A circular heating unit coupling hole 2132 is formed at a position adjacent to the button passing hole 2131.

[114] The locking unit 22 includes locking protrusions 221 each having an inclined surface 2211, and a 'U' shaped body 222. A pair of rectangular guide holes 2221 is formed in the body 222 in such a way as to be opposite to each other.

[115] The button 23 comprises a solid cylinder. An insertion hole 231 having a predetermined depth is formed in the lower portion of the button. The button is secured to the locking unit 22 or is integrated with the locking unit 22.

[116] The support part 24 is formed to have a disc shape, and includes a support plate 241 having locking unit passing grooves 2411 which are formed to be opposite to each other such that the locking unit passes through the locking unit passing grooves, and a
cylindrical support projection 242 which protrudes from the center of the support plate 241. Meanwhile, the support part 24 is inserted into the upper frame part 212 to be held on the circular locking step 2121 which is formed on the upper portion in the upper frame part 212, and the locking unit 22 and the button 23 are secured at a predetermined height in the upper frame part 212 of the handle frame 21. At this time, the elastic member 25 that will be described in detail below is fitted over the support projection 242, and the support projection 242 equipped with the elastic member 25 is inserted into the insertion hole 231 formed in the button 23.

Any elastic member may be used so long as the elastic member 25 has elasticity. It is preferable that a coil spring be used as the elastic member 25.

The heating unit 26 generates heat using electricity and includes an inner module 261 and an outer module 262. The inner module includes a pair of rectangular heating plates 2611, an inner conducting wire 2612 connected to each heating plate 2611, and an inner jack 2613 connected to the inner conducting wires 2612. The outer module includes a power plug 2621, an outer conducting wire 2622 connected to the power plug 2621, and an outer jack 2623 connected to the outer conducting wire 2622. Meanwhile, the inner jack 2613 is inserted into the heating unit coupling hole 2132 formed in the cover frame 213 and the outer jack 2623 is coupled to the inner jack 2613. The heating plates 2611 are inserted into the corresponding plate coupling holes 2112 of the lower frame part 211 in such a way as to protrude slightly from the lower frame part 211.

Since the operation of the handle 2 applied to the detachably mounted seal according to the second embodiment of the present invention and the coupling of the stamping part 1 with the handle 2 are equal to the first embodiment of the present invention which was described before, the detailed description will be omitted herein.

Referring to FIG. 11, when a user desires to use the detachably mounted seal according to the second embodiment of the present invention constructed as described above, the desired shape of stamping part 1 is coupled to the handle 2, and the stamping part 1 is heated using the heating unit 26 provided in the handle 2. Next, after the heated detachably mounted seal contacts and presses the surface of the bread 100, the seal is separated from the bread. At this time, the pattern 110 corresponding to the shape of the stamping part 1 of the detachably mounted seal is marked on the surface of the bread 100. Similarly, after the stamping part 1 is dipped into the syrup (not shown), the detachably mounted seal contacts and presses the surface of the bread 100. Afterwards, when the seal is separated from the bread, the syrup is applied to the surface of the bread 100 in the same shape as that of the stamping part, and additionally the shape of the stamping part 1 is also stamped on the surface of the bread. Meanwhile, when a user desires to apply the syrup to the surface of the bread 100, it is
not necessary to heat the stamping part 1. Even though the stamping part 1 is not heated, the syrup may be applied to the surface of the bread 100.

Meanwhile, referring to FIGS. 7 and 8, in order to heat the stamping part 1 of the detachably mounted seal, power is supplied to the handle 2 which has been coupled to the stamping part 1. In this case, the heating plates 2611 of the heating unit 26 accommodated in the handle 2 are heated. Here, each heating plate 2611 is inserted into the corresponding plate coupling hole 2112 of the lower frame part 211 in such a way as to protrude slightly from the lower frame part 211. Thus, when the handle 2 is coupled to the stamping part 1, each heating plate 2611 is in surface contact with the coupling member 12 of the stamping part 1. Thus, heat is effectively transmitted from the heating plates 2611 to the coupling member 12. Thereafter, the heated coupling member 12 transmits heat through the connecting members 13 to the shaping member 11. In this way, the shaping member 11 is heated.

Meanwhile, FIG. 12 is a perspective view illustrating the selection of the stamping part when the detachably mounted seal according to the first embodiment of the present invention is used for children's play. When the detachably mounted seal according to the first embodiment of the present invention is used for children's play, the shaping member 11 of the stamping part 1 may be formed by bending a thin rectangular plate into the shape of a desired pattern or letter. The shaping member may be formed through various machining processes, such as injection molding or cutting, and is preferably made of a plastic material. Meanwhile, the remaining construction is equal to the construction which has been described before with reference to FIGS. 1 to 9.

When the detachably mounted seal according to the first embodiment of the present invention is used for children's play, as shown in FIG. 12, among a plurality of stamping parts 1 manufactured to have various shapes, a desired shape of stamping part 1 is selected and coupled to the handle 2. As shown in FIG. 13, after the stamping part 1 of the detachably mounted seal is dipped into ink (not shown), the stamping part contacts and presses the surface of paper 200. Thereafter, when the stamping part is separated from the paper, a pattern 210 corresponding to the shape of the stamping part 1 of the detachably mounted seal is made on the surface of the paper 200.

Meanwhile, FIG. 14 illustrates the detachably mounted seal according to the third embodiment of the present invention which is used for children's play. The first embodiment of the present invention illustrated in FIGS. 2 to 6 is identically applied to the third embodiment of the present invention. Here, since a handle insertion cavity 12' and locking holes 121' according to the third embodiment of the present invention correspond to the coupling member 12 and the locking holes 121 according to the first embodiment of the present invention, they have the same function as the coupling
member and the locking holes.

[125] Referring to FIGS. 14 to 17, the detachably mounted seal according to the third embodiment of the present invention includes a stamping part 1’ and a handle 2.

[126] The stamping part 1’ includes a body 11’ and the handle insertion cavity 12’. The front of the body 11’ of the stamping part may have various shapes, including a circular shape and a rectangular shape. The handle insertion cavity 12’ preferably comprises a rectangular cavity. Preferably, as shown in FIGS. 14 and 17, the handle insertion cavity 12’ is directly formed in the back of the body 11’. If necessary, the construction of a shape which is similar to that of the coupling member 12 applied to the first embodiment of the present invention may be provided in the body 11’ of the stamping part. Meanwhile, the rectangular locking holes 121’ are formed in any two facing surfaces in the handle insertion cavity 12’, and various patterns or letters D may be formed on the front of the body 11’ of the stamping part. Here, various patterns or letters D may be formed in relief or in intaglio. Preferably, various patterns or letters are formed in relief. Meanwhile, as shown in FIG. 16, after various patterns or letters D are formed on an additional stamping pad 14’, it may be inserted into a pad insertion hole 13’ formed in the front of the body 11’ of the stamping part. Here, the stamping pad 14’ is preferably made of a rubber material.

[127] Since the operation of the handle 2 applied to the detachably mounted seal according to the third embodiment of the present invention and the coupling of the stamping part 1’ with the handle 2 are equal to the first embodiment of the present invention which was described previously, the detailed description will be omitted herein. That is, since the handle insertion cavity 12’ and the locking holes 121’ of the stamping part 1’ correspond to the coupling member 12 and the locking holes 121 according to the first embodiment of the present invention, respectively, the handle insertion cavity 12’ and the locking holes 121’ have the same function as the coupling member 12 and the locking holes 121.

[128] Referring to FIG. 18, in the case of using the detachably mounted seal according to the third embodiment of the present invention constructed as described above, among a plurality of stamping parts 1’ which have various patterns or letters D formed thereon and a variety of shapes, a desired stamping part 1’ is selected and coupled to the handle 2. As shown in FIG. 19, the stamping part 1’ of the detachably mounted seal is dipped into ink (not shown), and contacts and presses the surface of paper 200. Thereafter, when the stamping part is separated from the paper, a pattern 210’ corresponding to the shape of various patterns or letters D formed on the stamping part 1’ of the detachably mounted seal is stamped on the surface of the paper 200.

[129] Although the preferred embodiments of the present invention have been disclosed for illustrative purposes, those skilled in the art will appreciate that various modifications,
additions and substitutions are possible, without departing from the scope and spirit of the invention as disclosed in the accompanying claims.

[130]
Claims

[1] A detachably mounted seal, comprising:
a stamping part including a shaping member shaped into various patterns or
letters, and
a handle detachably coupled to the stamping part, so that various patterns or
letters are stamped by the stamping part, or a surface of bread is stamped with
various patterns or letters or is coated with syrup using the stamping part.

[2] The detachably mounted seal according to claim 1, further comprising:
a heating unit for heating the shaping member, the shaping member being made
of a material which is heatable by the heating unit.

[3] The detachably mounted seal according to claim 1, wherein the stamping part
further comprises a coupling member to which the handle is detachably coupled.

[4] The detachably mounted seal according to claim 3, wherein a locking hole is
formed in the coupling member so that the handle is locked to the locking hole.

[5] The detachably mounted seal according to any one of claims 1 to 4, wherein the
handle comprises:
a handle frame defining an external appearance of the handle; and
a locking unit inserted into the handle frame and detachably coupled to the
stamping part.

[6] The detachably mounted seal according to claim 5, wherein a guide protrusion is
provided in the handle frame, and a guide hole is formed in the locking unit so
that the guide protrusion is inserted into the guide hole, whereby the locking unit
moves up and down along a predetermined course without being dislodged
leftwards or rightwards owing to the guide protrusion, when the locking unit
moves up and down in the handle frame.

[7] The detachably mounted seal according to claim 5, wherein the locking unit
comprises:
a locking protrusion having an inclined surface; and
a ‘U’ -shaped body.

[8] The detachably mounted seal according to claim 7, wherein the handle further
comprises a button which is mounted and secured to the locking unit or is
integrated with the locking unit.

[9] The detachably mounted seal according to claim 8, wherein the handle
comprises:
a locking step provided in the handle; and
a support part installed to be held by the locking step, thus supporting the locking
unit and the button at a predetermined height in the handle frame.
The detachably mounted seal according to claim 9, wherein the handle further comprises an elastic member installed between the button and the support part.

The detachably mounted seal according to claim 10, wherein when the handle is coupled to the stamping part, the locking unit is locked by an upper portion of the coupling member, and the locking protrusion is retracted into the handle frame because of the inclined surface formed on the locking protrusion and a coupling direction of the handle, so that the handle frame may be inserted into the coupling member, and thereafter, the locking protrusion protrudes out of the handle frame again because of the ‘U’-shaped body, so that the locking protrusion is locked to the locking hole formed in the coupling member.

The detachably mounted seal according to claim 11, wherein when the handle is detached from the stamping part, the inclined surface of the locking protrusion slides down into the handle frame by pushing the button, so that the locking protrusion is retracted into the handle frame, and the locking protrusion is released from the locking hole, thereby the handle frame is removable from the coupling member.

The detachably mounted seal according to claim 12, wherein when a pushing operation of the button is released, the locking unit and the button are moved upwards in the handle frame by an elastic force of the elastic member, so that the inclined surface of the locking protrusion slides up towards an outside of the handle frame, and thus the locking protrusion protrudes out of the handle frame.

A detachably mounted seal, comprising:

A stamping part having various patterns or letters shaped therein or having a stamping pad into which various patterns or letters are shaped; and

A handle detachably coupled to the stamping part, so that various patterns or letters are stamped by the stamping part.

The detachably mounted seal according to claim 14, wherein the stamping part further comprises a handle insertion cavity to which the handle is detachably coupled.

The detachably mounted seal according to claim 15, wherein a locking hole is formed in the handle insertion cavity so that the handle is locked to the locking hole.

The detachably mounted seal according to any one of claims 14 to 16, wherein the handle comprises:

A handle frame defining an external appearance of the handle; and

A locking unit inserted into the handle frame to be detachably coupled to the stamping part.

The detachably mounted seal according to claim 17, wherein a guide protrusion
is provided in the handle frame, and a guide hole is formed in the locking unit so that the guide protrusion is inserted into the guide hole, whereby the locking unit moves up and down along a predetermined course without being dislodged leftwards or rightwards owing to the guide protrusion, when the locking unit moves up and down in the handle frame.

[19] The detachably mounted seal according to claim 18, wherein the locking unit comprises:
- a locking protrusion having an inclined surface; and
- a 'U' shaped body.

[20] The detachably mounted seal according to claim 19, wherein the handle further comprises a button which is mounted and secured to the locking unit or is integrated with the locking unit.

[21] The detachably mounted seal according to claim 20, wherein the handle comprises:
- a locking step provided in the handle; and
- a support part installed to be held by the locking step, thus supporting the locking unit and the button at a predetermined height in the handle frame.

[22] The detachably mounted seal according to claim 21, wherein the handle further comprises an elastic member installed between the button and the support part.

[23] The detachably mounted seal according to claim 22, wherein when the handle is coupled to the stamping part, the locking unit is locked by an upper portion of the handle insertion cavity, and the locking protrusion is retracted into the handle frame because of the inclined surface formed on the locking protrusion and a coupling direction of the handle, so that the handle frame may be inserted into the handle insertion cavity, and thereafter, the locking protrusion protrudes out of the handle frame again because of the 'U'-shaped body, so that the locking protrusion is locked to the locking hole formed in the handle insertion cavity.

[24] The detachably mounted seal according to claim 23, wherein when the handle is detached from the stamping part, the inclined surface of the locking protrusion slides down into the handle frame by pushing the button, so that the locking protrusion is retracted into the handle frame, and the locking protrusion is released from the locking hole, thereby the handle frame is removable from the handle insertion cavity, and when a pushing operation for the button is released, the locking unit and the button are moved upwards in the handle frame by an elastic force of the elastic member, so that the inclined surface of the locking protrusion slides up towards an outside of the handle frame, and thus the locking protrusion protrudes out of the handle frame.
A. CLASSIFICATION OF SUBJECT MATTER

B41K1/04(2006.01)i

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 8 A21B 3/13, A21C 15/00 11/00, B41K 1/04,

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Korean Utility models and applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
DB eKIPASS(KIPO internal)
Key word seal, stamp, bread, confectionary

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
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<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No</th>
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<td>JP 2004-261 168 A (WATANABE KAZUHISA) 24 September 2004 See the whole document</td>
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### International Search Report

**International application No**

**PCT/KR2008/002609**

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<td>JP 11-300056 A</td>
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