STAPLE REMOVER

Field of the invention

This invention relates to an apparatus for removing staples from a stack of sheet materials or from a solid substrate.

Background of the invention

There is a growing need for staple removing devices, as staplers is now a popular consumer item. Many people use staplers, from builders, office workers, students at school, to the people at home. While stapling sheets or solid substrates such as wood, there are times when the staple needs to be removed because the staple is stapled in the wrong place, or there was a need to add more sheets, or was not stapled properly such that staple was warped and would not hold properly.

Many devices were created to remove staples. A pry type staple remover uses a chisel-like tongue to wedge under the staple's arms to twist and dig the arms up, and the tongue is wedged under the staple crossbar to lift and dig the whole staple up. Removing the staples in this fashion requires a lot of time, a large number of actions, and it usually damages the substrate. Also, it is sometimes unsuccessful in completely removing the staple, requiring fingernails or pliers to complete the job.

A double jawed pincer type staple remover uses a pair of opposed arms with curved teeth members that wedges under the staple crossbar to lift staple up. This type of remover has the advantage over the pry type remover in only requiring one action to operate. However it suffers from an additional disadvantage of requiring a large amount of force to operate because the operator has to press the arms together at the position where there is no mechanical leverage advantage from the opposed arms. Thus this remover is only useful for small office type staples, and not heavy-duty staples. This large force results in unpredictable behavior, since a small variation in the angle of application will result in uneven forces distributed across staple crossbar so that only one arm is removed. Also, when the substrate is especially thing and pliable, such as in the case of only a few sheets stapled together, removing the staple using the double jawed pincer type often makes a mess of the substrate and tears the substrate with the staple still attached to the torn pieces of substrate.

Thus it is desirable to have a staple removing device that does not require excessive force to operate and minimises damage to the substrate.

Summary of the invention

In accordance with the present invention, an improved staple remover comprising:

a base member having a front end, a rear end, and a first section near the front end;

a lever member having a front end, a rear end, and a first section near the front end, the said first section of the lever member is pivotally attached to the first section of the said base member;

a tongue;

means of lifting the staple from the substrate using the leverage from the lever member pivotally attached to the base member, is provided.

In the preferred embodiment of the invention, the said tongue extends from the base member and is used to wedge under the staple crossbar. The means of lifting the staple from the substrate comprises of teeth which extends from the lever member, such that when the lever member is operated from a first position to a second position, the said teeth engages the underside of the staple crossbar and lifts it from the substrate.

The present invention offers the user an easier way of removing staples by using leverage. The base member provides support, allowing the leverage operation to be performed on pliable and flexible substrates such as sheets of paper, and minimizing damage to the substrate.

Additionally, the present invention can be combined with a stapler, either as an integrated part of the stapler, or attached to the stapler as attachments. This gives an additional benefit of making the staple removing device more accessible to the user, and preventing it from being easily misplaced. While the user is stapling, if a need to remove staples arises, the user will no longer need to look for a separate device to remove the staples.

The present invention can be made from metal sheets, punched into the appropriate shape, and then bent into the appropriate form, thus it should not be expensive to manufacture. In the case where the present invention integrated with a stapler, since the same manufacturing processes to make the staple driving lever and the stapler base can be used to also make the base member and the lever member of the present invention, it should not add significantly to the cost of a normal stapler.

The present invention can be used to remove staples from pliable substrates such as sheets of paper, or solid substrates such as wood.

The above preferred embodiment and other variations and advantages of the present invention

will become apparent to those skilled in the art upon a more detailed description of the invention.

Brief description of Drawings

FIG. **1** is a perspective view of the preferred embodiment of the invention

FIG. **2** is an exploded perspective view of the preferred embodiment of the invention.

FIG. **3** is a side view of the preferred embodiment of the invention in the first position.

FIG. **4** is an enlarged side view of the head section of the preferred embodiment of the invention at the point where a staple is about to be lifted.

FIG. **5** is an enlarged side view of the head section of the preferred embodiment of the invention at the point where a staple is completely removed.

FIG. **6** is a perspective view of an embodiment of the invention combined with a stapler.

FIG. **7** is an exploded view of an embodiment of the invention combined with a stapler.

FIG. **8** is a perspective view of an embodiment of the invention attached to a stapler.

FIG. **9** is a perspective view of the attachments.

FIG. **10** is a perspective view of an embodiment of the invention housed around a stapler.

FIG. **11** is a perspective view of an embodiment of the invention where the lever member fits inside the base member, and where the base member is bent to provide a gap for the removed staple.

FIG. **12** is the front view of the embodiment of the invention where the lever member fits inside the base member, and where the base member is bent to provide a gap for the removed staple.

FIG. **13** is a perspective view of an embodiment of the invention where the lever member fits inside the base member, and where washers are used to provide a gap for the removed staple.

FIG. **14** is the front view of the embodiment of the invention where the lever member fits inside the base member, and where washers are used to provide a gap for the removed staple.

FIG. **15** shows an embodiment of the invention where the lever member fits inside the base member, and where instead of using grooves, the tongue made thinner.

FIG. **16** shows an embodiment of the invention where the stapler remover is pushed instead of pulled.

FIG. **17** shows an embodiment of the pushed remover with the tongue on the lever member.

FIG. **18** is an enlarged side view of pushed remover with the tongue on the lever member.

Detailed Description

Referring to FIG. **1**, FIG. **2**, FIG. **3**, it can be seen that a preferred embodiment of the staple remover device according to this invention comprises of a base member **1**, a lever member **2**, a tongue **3**, and teeth **4**. The base member **1** is pivotally connected to the lever member **2** by a

pin **5** that provides a leverage fulcrum point. It should be understood that other means of providing a fulcrum point for leverage such as rivets can be used for this invention, and is not limited to a pin. The tongue **3** extends from the front end of the base member **1** and is used to wedge under the staple crossbar. A groove **6** can be optionally etched into tongue **3** to indicate the point where the staple needs to be wedged up to for removal. The teeth **4** extends from the front end of the lever member **2**. The teeth **4** is narrow at tip **7** and wider at top section **8**. FIG. **1** and FIG. **3** shows the lever member **2** is at a first position where the teeth **4** is above the tongue **3** providing room to wedge a staple above the tongue **3**. The front edges **9** of the teeth **4** are curved in such a way that when the lever member **2** is moved into a second position where the teeth **4** overlaps the tongue **3**, the front edges **9** of the teeth **4** do not go below the baseline of the base member **1**.

FIG. **4** and FIG. **5** illustrates the stapler remover device in operation. FIG. **4** demonstrates the point where the staple **10** is about to be lifted. Although not strictly required, for the easiest operation, the user should first wedge tongue **3** under the staple **10**, to provide room to allow the tip **7** of teeth **4** to go below the staple crossbar **11**. A less effective way is to use a shorter tongue which ends at the point where groove **6** would have been etched, so that the user only need to press the tongue against the side of the staple crossbar **11**. This less effective method relies on a angled knife-like edge on the tip of the tongue and the tip **7** of the teeth **4** such that when both the said tongue and said teeth are pressed against the staple crossbar **11,** coupled with the force of the staple removing device against the substrate, the likelihood is that both the teeth and tongue will both go under the staple crossbar **11**.

The user then lifts the lever member **2** into a second position so that the wider top section **8** of teeth **4** lifts the staple **10** from the substrate, as shown in FIG. **5**. The front edges **9** of teeth **4** are curved such that it does not go below the baseline of base member **1**, and thus do not interfere with or damage the substrate.

The base member **1** presses against substrate at the point where the staple **10** is stapled into the substrate, thus providing support and enabling utilization of the mechanical leverage advantage from the lever member **2** pivotally attached to the base member **1**. The support provided by the base member **1** allows the leverage operation to be performed on pliable and flexible substrates such as sheets of paper, and minimizes damage to the substrate. To minimize movement of the base member **1** against the substrate during the lever member lifting operation, a gripping material such as rubber can be attached to the underside of the said base member.

The following describes variations of the present invention. The basic operation and principles of the present invention remains the same, allowing for variations that will be become clear in the descriptions.

FIG. **6** and FIG. **7** shows the present invention combined with a stapler device. All the necessary components of a stapler device will not be illustrated in this application, for two reasons: First, it is understood by the inventor that the manufacture of a stapler device is well known by those skilled in the art. Secondly, it will avoid confusion when describing the present invention combined with a stapler device. Referring to FIG. **6** and FIG. **7**, the embodiment of base member of the present invention is combined with the base **13** of a stapler. The embodiment of the lever member of the present invention is combined with the staple driving lever **14**. To be consistent with the orientation introduced in the previous descriptions, the back end of the stapler base **13** is the end with the stapler anvil **12**. The tongue **15** extends from the front end of the stapler base **13** and is used to wedge under the staple crossbar. The stapler base **13** is pivotally connected to the staple driving lever **14** by a pin **17** that provides a leverage fulcrum point. A groove **18** can be optionally etched into tongue **15** to indicate the point where the staple needs to be wedged up to for removal. The teeth **16** extends from the front end of the staple driving lever **14**. The teeth **16** is narrow at tip **19** and wider at top section **20**. FIG. **6** and FIG. **7** shows the staple driving lever **14** is at a first position where the teeth **16** is above the tongue **15** providing room to wedge a staple above the tongue **15**. The front edges **21** of the teeth **16** are curved in such a way that when the staple driving lever **14** is moved into a second position where the teeth **16** overlaps the tongue **15**, the front edges **21** of the teeth **16** do not go below the baseline of the stapler base **13**, and thus do not interfere with or damage the substrate.

FIG. **8** and FIG. **9** illustrate another embodiment of the present invention as attachments to a stapler device. To be consistent with the orientation introduced in the previous descriptions, the back end of the stapler base **23** is the end with the stapler anvil **22**. A tongued member **25** is attached to the front end of the stapler base **23**. A teethed member **26** is attached to the front end of the staple driving lever **24**. Various means of attachment can be used to attach the tongued member **25** and teethed member **26** to the stapler device, such as strong bonding glue, or screws screwed into screw holes in the tongued member **25** and teethed member **26**, or any other attachment means that is obvious to those skilled in the art. The stapler base **23** is pivotally connected to the staple driving lever **24** by a pin **29** that provides a leverage fulcrum point. A groove **30** can be optionally etched into tongue **27** to indicate the point where the staple needs to be wedged up to for removal. The teeth **28** extends from the front end of the teethed member **26**. The teeth **28** is narrow at tip **31** and wider at top section **32**. FIG. **8** and

FIG. **9** shows the staple driving lever **24** is at a first position where the teeth **28** is above the tongue **27** providing room to wedge a staple above the tongue **27**. The front edges **33** of the teeth **28** are curved in such a way that when the staple driving lever **24** is moved into a second position where the teeth **28** overlaps the tongue **27**, the front edges **33** of the teeth **28** do not go below the baseline of the tongued member **25**.

In the normal operation of a stapler device, lifting the staple driving lever of a stapler exposes the contents of the stapler, and is an operation used to refill the stapler. To prevent lifting the staple driving lever in the staple removing operation, another embodiment of the present invention is presented. FIG. **10** shows an embodiment of the present invention housed around a stapler device. A lever member **37** is housed around the staple driving lever **36**, and can be moved independently from the staple driving lever **36**. Thus when the user is operating the staple remover, the user does not need to move the staple driving lever **36** of a stapler. To be consistent with the orientation introduced in the previous descriptions, the back end of the stapler base **35** is the end with the stapler anvil **34**. The tongue **38** extends from the front end of the stapler base **35** and is used to wedge under the staple crossbar. The stapler base **35** is pivotally connected to the staple driving lever **36** by a pin **40** that provides a leverage fulcrum point. The lever member **37** is also pivotally connected by the pin **40**. A groove **41** can be optionally etched into tongue **38** to indicate the point where the staple needs to be wedged up to for removal. The teeth **39** extends from the front end of the lever member **37**. The teeth **39** is narrow at tip **42** and wider at top section **43**. FIG. **10** shows the lever member **37** is at a first position where the teeth **39** is above the tongue **38** providing room to wedge a staple above the tongue **38**. The front edges **44** of the teeth **39** are curved in such a way that when the lever member **37** is moved into a second position where the teeth **39** overlaps the tongue **38**, the front edges **33** of the teeth **39** do not go below the baseline of the stapler base **35**, and thus do not interfere with or damage the substrate.

FIG. **11** to FIG. **15** shows another embodiment of the present invention where the lever member **45** fits inside the base member **46**. When the lever member **45** fits inside the base member **46**, it is important to provide a gap for the staple when the staple is removed. FIG.**11** and FIG. **12** illustrates an embodiment where the gap is provided by bending the base member **45** at the section **48** near the pin **47**. An alternative way of providing the gap is with the use of washers **55** as shown in FIG. **13** and FIG. **14**. When the lever member **45** fits inside the base member **46**, it is important to provide space to facilitate the passage of teeth **50** when the staple remover is operated. FIG. **11** to FIG. **14** shows an embodiment of the present invention where there are parallel grooves **54** in tongue **49** that facilitate the passage of teeth **50** when the lever **45** is lifted. FIG. **15** shows another variation where the tongue **56** is made thinner so

that is no wider than the distance between the teeth **50** of the lever member **45**. Referring to FIG. **11** to FIG. **14**, the base member **46** is pivotally connected to the lever member **45** by a pin **47** that provides a leverage fulcrum point. The tongue **49** extends from the front end of the base member **46** and is used to wedge under the staple crossbar. The teeth **50** extends from the front end of the lever member **45**. The teeth **50** is narrow at tip **51** and wider at top section **52**. FIG. **11** to FIG. **15** lever member **46** is at a first position where the teeth **50** is above the tongue **49** providing room to wedge a staple above the tongue **49**. The front edges **53** of the teeth **50** are curved in such a way that when the lever member **45** is moved into a second position where the teeth **50** overlaps the tongue **49**, the front edges **53** of the teeth **50** do not go below the baseline of the base member **46**, and thus do not interfere with or damage the substrate.

FIG. **16** shows another embodiment of the present invention where the staple removing operation is performed by pushing the lever member **57** instead of lifting it. The base member **58** is pivotally connected to the lever member **57** by a pin **59** that provides a leverage fulcrum point. The tongue **60** extends from the front end of the base member **58** and is used to wedge under the staple crossbar. A groove **61** can be optionally etched into tongue **60** to indicate the point where the staple needs to be wedged up to for removal. The teeth **62** extends from the front end of the lever member **57**. The teeth **62** is narrow at tip **63** and wider at top section **64**. FIG. **16** shows the lever member **57** is at a first position where the upper edge **66** of the tip **63** of teeth **62** is flush the top of the tongue **60**. The back edges **65** of the teeth **62** are curved in such a way that when the lever member **57** is moved into a second position where the tip **63** of teeth **64** is well above the tongue **60**, the back edges **65** of the teeth **62** do not go below the baseline of the base member **58**, and thus do not interfere with or damage the substrate. Another variation of this embodiment of the present invention is where the lever member **45** fits inside the base member **46** and grooves are provides in the tongue **60** to facilitate the passage of teeth **62**.

FIG. **17** shows another embodiment of the present invention where the tongue **67** extends from the lever member **68**. A groove **71** is etched into tongue **60** to indicate the point where the staple needs to be wedged up to for removal, and to hold the staple when the lever member **68** is lifted. The base member **69** is pivotally connected to the lever member **67** by a pin **70** that provides a leverage fulcrum point.

The claims defining the invention are as follows:

1. An apparatus for removing staples comprising:
   a base member having a front end, a rear end, and a first section near the front end;
   a lever member having a front end, a rear end, and a first section near the front end, the said first section of the lever member is pivotally attached to the first section of the said base member;
   means of wedging under the staple crossbar;
   means of lifting the staple from the substrate using the leverage from the lever member pivotally attached to the base member.
2. The apparatus of claim **1**, wherein the wedging means comprises of a tongue.
3. The apparatus of claim **1**, further comprising handles attached to the rear ends of the base member and the lever member.
4. The apparatus of claim **1**, including means of increasing the friction of the base member to the substrate.
5. The apparatus of claim **4**, wherein the friction increasing means comprises of a rubber material attached to the underside of the base member.
6. The apparatus of claim **2**, wherein there is a groove in the tongue indicating the point where a staple can be removed.
7. The apparatus of claim **2**, wherein the said tongue extends from the front end of the said base member.
8. The apparatus of claim **7**, wherein the staple lifting means comprises of teeth which extends from the front end of the said lever member, such that when the lever member is moved from a first position where the teeth is above the said tongue of the base member, to a second position where the teeth overlaps the tongue, the said teeth engages the underside of the staple crossbar and lifts it from the substrate; additionally the front edges of the teeth are curved such that when the lever member is moved from the said first position to the said second position, the said front edges of the teeth does not extend below the baseline of the base member.
9. The apparatus of claim **8**, wherein the lever member is a chambered member such that the base member fits inside the lever member.
10. The apparatus of claim **8**, wherein the base member is a chambered member such that the lever member fits inside the base member, further comprising means of providing a gap between the outer faces of the base member and the inner faces of the lever member.
11. The apparatus of claim **10**, wherein the gap providing means comprises of washers at the pivot in between the base lever and the jawed lever.
12. The apparatus of claim **10**, wherein the gap providing means comprises of the base

lever being bent in a manner such that the base lever is wider at the base and narrower at the pivot point.

13. The apparatus of claim **10**, wherein the tongue of the base member contain grooves to facilitate the passage of the teeth of the lever member.

14. The apparatus of claim **10**, wherein the width of the base lever is changed at the front tongued end such that the said tongue is no wider than the distance between the teeth of the jawed lever.

15. An apparatus for removing staples comprising:

a stapler, with a stapler base pivotally connected to the staple driving lever, where the rear end is the staple driving end;

a means of wedging under the staple crossbar with a tongue extending from the front end of the said stapler base;

and a staple lifting means comprises of teeth which extends from the front end of the said staple driving lever, such that when the staple driving lever is moved from a first position where the teeth is above the said tongue of the stapler base, to a second position where the teeth overlaps the tongue, the said teeth engages the underside of the staple crossbar and lifts it from the substrate; additionally the front edges of the teeth are curved such that when the staple driving lever is moved from the said first position to the said second position, the said front edges of the teeth does not extend below the baseline of the stapler base.

16. An apparatus for removing staples comprising:

a stapler, with a stapler base pivotally connected to the staple driving lever, where the rear end is the staple driving end;

a tongued member attached to the front end of the base of the said stapler;

a teethed member attached to the front end of the staple driving lever of the said stapler;

a means of wedging under the staple crossbar with a tongue extending from the front end of the said tongued member;

and a staple lifting means comprises of the said teethed member attached to the front end of the said staple driving lever, such that when the staple driving lever is moved from a first position where the teeth is above the said tongue of the tongued member, to a second position where the teeth overlaps the tongue, the said teeth engages the underside of the staple crossbar and lifts it from the substrate; additionally the front edges of the teeth are curved such that when the staple driving lever is moved from the said first position to the said second position, the said front edges of the teeth does not extend below the baseline of the tongued member.

17. An apparatus for removing staples comprising:

a stapler, with a stapler base pivotally connected to a staple driving lever, where the rear end is the staple driving end;

a chambered lever member that houses the staple driving lever of the said stapler;

a means of wedging under the staple crossbar with a tongue extending from the front end of the said stapler base;

and a staple lifting means comprises of teeth which extends from the front end of the said lever member, such that when the lever member is moved from a first position where the teeth is above the said tongue of the base member, to a second position where the teeth overlaps the tongue, the said teeth engages the underside of the staple crossbar and lifts it from the substrate; additionally the front edges of the teeth are curved such that when the lever member is moved from the said first position to the said second position, the said front edges of the teeth does not extend below the baseline of the base member.

18. The apparatus of claim **7**, wherein the staple lifting means comprises of teeth which extends from the front end of the said lever member, such that when the lever member is moved from a first position where the upper edge of the tip of the said teeth is flush with the upper edge of the tongue, to a second position where the tip of the teeth is well above the tongue, the said teeth engages the underside of the staple crossbar and lifts it from the substrate; additionally the bottom edges of the teeth are curved such that when the lever member is moved from the said first position to the second position, the said bottom edges of the teeth does not extend below the baseline of the base member.

19. The apparatus of claim **18**, including means of biasing the lever member away from the base member into the first position.

20. The apparatus of claim **19**, wherein the biasing means comprises of a spring positioned between the levers.

21. The apparatus of claim **18**, wherein the lever member is a chambered member such that the base member fits inside the lever member.

22. The apparatus of claim **18**, wherein the base member is a chambered member such that the lever member fits inside the base member.

23. The apparatus of claim **22**, wherein the tongue of the base member contain grooves to facilitate the passage of the teeth of the lever member.

24. The apparatus of claim **22**, wherein the width of the base member is changed at the front tongued end such that the said tongue is no wider than the distance between the teeth of the lever member.

25. An apparatus for removing staples comprising:

a stapler, with a stapler base pivotally connected to the staple driving lever, where the rear end is the staple driving end;

a means of wedging under the staple crossbar with a tongue extending from the front end of the said stapler base;

and a staple lifting means comprises of teeth which extends from the front end of the said staple driving lever, such that when the staple driving lever is moved from a first position where the upper edge of the tip of the said teeth is flush with the upper edge of the tongue, to a second position where the tip of the teeth is well above the tongue, the said teeth engages the underside of the staple crossbar and lifts it from the substrate; additionally the bottom edges of the teeth are curved such that when the staple driving lever is moved from the said first position to the second position, the said bottom edges of the teeth does not extend below the baseline of the stapler base.

26. An apparatus for removing staples comprising:

a stapler, with a stapler base pivotally connected to the staple driving lever, where the rear end is the staple driving end;

a tongued member attached to the front end of the base of the said stapler;

a teethed member attached to the front end of the staple driving lever of the said stapler;

a means of wedging under the staple crossbar with a tongue extending from the front end of the said tongued member;

and a staple lifting means comprises of the said teethed member attached to the front end of the said staple driving lever, such that when the staple driving lever is moved from a first position where the upper edge of the tip of the said teeth is flush with the upper edge of the tongue, to a second position where the tip of the teeth is well above the tongue, the said teeth engages the underside of the staple crossbar and lifts it from the substrate; additionally the bottom edges of the teeth are curved such that when the stapler driving lever is moved from the said first position to the second position, the said bottom edges of the teeth does not extend below the baseline of the tongued member.

27. An apparatus for removing staples comprising:

a stapler, with a stapler base pivotally connected to a staple driving lever, where the rear end is the staple driving end;

a chambered lever member that houses the staple driving lever of the said stapler;

a means of wedging under the staple crossbar with a tongue extending from the front end of the said stapler base;

the staple lifting means comprises of teeth which extends from the front end of the

said lever member, such that when the lever member is moved from a first position where the upper edge of the said teeth is flush with the upper edge of the tongue, to a second position where the teeth is well above the tongue, the said teeth engages the underside of the staple crossbar and lifts it from the substrate; additionally the bottom edges of the teeth are curved such that when the lever member is moved from the said first position to the second position, the said bottom edges of the teeth does not extend below the baseline of the stapler base.

28. The apparatus of claim **2**, wherein:

the said tongue extends from the front end of the said staple driving lever;

the base member is a chambered member such that the lever member fits inside the base member;

and the staple lifting means comprises of the said tongue which extends from the front end of the said lever member, such that when the lever member is moved from a first position where the baseline of the tongue is flush with the baseline of the base member, to a second position where the tongue is well above the baseline of the base member, the said tongue lifts the staple from the substrate.

29. The apparatus of claim **28**, including means of biasing the lever member away from the base member into the first position.

30. The apparatus of claim **29**, wherein the biasing means comprises a spring positioned between the levers.

31. An apparatus for removing staples comprising:

a stapler, with a stapler base pivotally connected to the staple driving lever, where the rear end is the staple driving end;

a means of wedging under the staple crossbar with a tongue extending from the front end of the said stapler driving lever;

and the staple lifting means comprises of the said tongue which extends from the front end of the said staple driving lever, such that when the staple driving lever is moved from a first position where the baseline of the tongue is flush with the baseline of the stapler base, to a second position where the tongue is well above the baseline of the stapler base, the said tongue lifts the staple from the substrate.

32. An apparatus for removing staples comprising:

a stapler, with a stapler base pivotally connected to the staple driving lever, where the rear end is the staple driving end;

a tongued member attached to the front end of the staple driving lever of the said stapler;

a means of wedging under the staple crossbar with a tongue extending from the front end of the said tongued member;

and a staple lifting means comprises of the said tongued member attached to the front end of the said staple driving lever, such that when the staple driving lever is moved from a first position where the baseline of the tongue is flush with the baseline of the stapler base, to a second position where the tongue is well above the baseline of the stapler base, the said tongue lifts the staple from the substrate.

33. An apparatus for removing staples comprising:

a stapler, with a stapler base pivotally connected to the staple driving lever, where the rear end is the staple driving end;

a chambered lever member that houses the staple driving lever of the said stapler, and is pivotally attached to the staple driving lever at a first section near the front end;

a means of wedging under the staple crossbar with a tongue extending from the front end of the said chambered lever member;

a staple lifting means comprises of the said tongue which extends from the front end of the said lever member, such that when the lever member is moved from a first position where the baseline of the tongue is flush with the baseline of the stapler base, to a second position where the tongue is well above the baseline of the stapler base, the said tongue lifts the staple from the substrate.