

Feb. 7, 1967

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3,302,842

STAPLER

Filed March 4, 1965

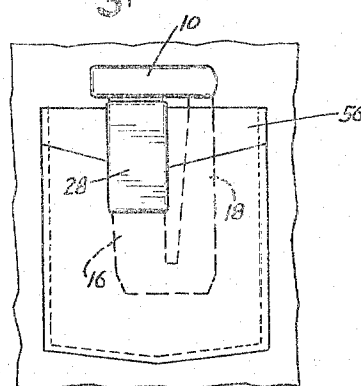
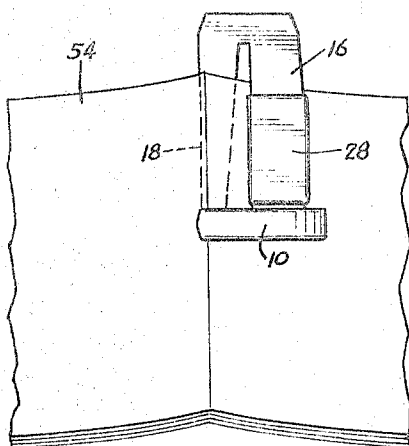
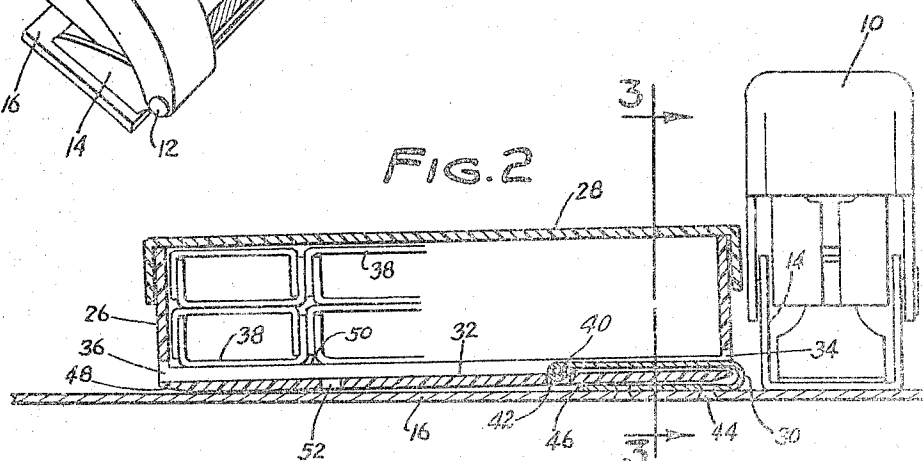
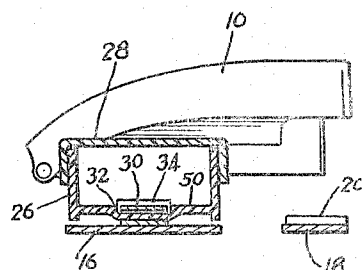
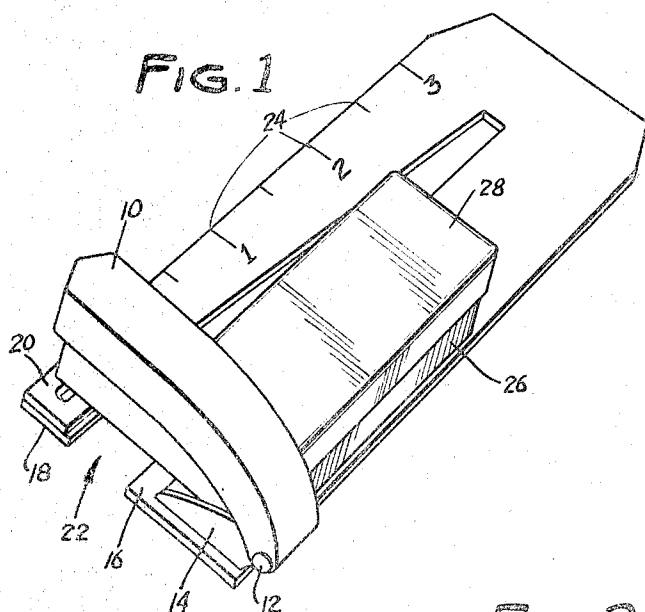


FIG. 5

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Filed Mar. 4, 1965, Ser. No. 437,198
3 Claims. (Cl. 227-120)

This invention is a stapler and more particularly is a stapler having a very short staple driving mechanism which is provided with a base that extends laterally a substantial distance and has a slot therein. This slot base structure permits a very small stapler to do work normally associated with much larger devices. The stapler incorporates a box for additional staples so that the normal limitation of a very short stapler of carrying a very small supply of staples is alleviated. This same box serves as a pocket clip whereby the stapler may be securely held in the pocket of a user and secured against loss. The extra staple box is also removable so that it can be taken off at times for particular kinds of work. Also, when the last group or clip of staples from the box has been inserted into the staple driving head, the box may be removed and by its absence serve as a reminder to the owner of the stapling machine that a new supply of staples should be acquired soon. The device incorporates a further feature of having a scale on the leading edge of the staple driving anvil arm whereby the distance from the edge of a sheet that a staple being placed may be noted and repeated if desired to produce a consistent or regular pattern of stapling.

The idea of having a slot in a stapler to permit a smaller stapler to do the work of a larger stapler is not novel.

However, when this principle is carried to its logical end, a very small or short reach stapler is used in which a group of staples that can be inserted into the head may be as few as 50 or 55. Although this may sound like a fair number; that many staples can be used up very rapidly. Accordingly, unless one has a supply of staples readily at hand, he may often find himself with an empty stapler. On the other hand, to have a box or reservoir for additional groups of staples or clips secured to the base of the stapler gets in the way for some kinds of stapling. To provide additional staples without thus limiting the value of having the slotted stapler base, a removable box is provided. A clip, secured to the base, extends through an opening in either end of the box so that the boxes are reversible and therefore do not require any particular attention to get them on the clip correctly. This opening in each end of the box leads into a central channel into which the clip secured to the base extends. Both sides of the channel engage the clip so as to prevent the extra staple reservoir from canting. Each bottom end of the box is curved in such a manner that it will assist in sliding the top edge of a shirt or other garment pocket between the box and the base. In this way the extra staple box doubles as a clip. This is a very compact stapler that is capable of doing most any chore that the average person would care to put it to and one which is highly portable.

The invention will be described with reference to the drawings in which corresponding numerals refer to the same parts and in which:

FIGURE 1 is a prospective view of the invention;

FIGURE 2 is a longitudinal section drawn to a larger scale than FIGURE 1;

FIGURE 3 is a section taken on the line and in the direction of the arrows 3-3 of FIGURE 2, but drawn to a scale approximately like that of FIGURE 1;

FIGURE 4 is a plan view of the device drawn to a much smaller scale than FIGURE 1 and shown in use

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performing a stapling job that would ordinarily require a much larger unit; broken lines illustrate hidden parts; and

FIGURE 5 is a view drawn to the same scale as FIGURE 4 illustrating how the device may be inserted into a garment pocket; broken lines again illustrate hidden parts.

In FIGURE 1 the staple driving head 10 is seen to be of the usual configuration and pivotally mounted as at 12 on a channel member 14. The channel member 14 is secured to base portion 16. Base 16 extends away laterally from the stapler more than twice as far as the length of the staple driving head. The base then bends back toward the staple driving head until it provides a portion 18 directly under the staple driving head which portion 18 carries the staple bending anvil 20. In this manner a slot 22 separates the staple driving anvil 20 from the hinge point 12 of the staple driving head.

Along the leading edge of the arm 18 which carries the staple bending anvil 20 may be seen to be a series of calibrated marks making the scale 24 by means of which the distance that a sheet is inserted into the slot 22 may be measured and repeated if desired. This is particularly convenient when doing the type of stapling illustrated in FIGURE 4 as will be discussed in more detail in connection with that figure.

Beyond the staple driving head 10 on the base portion 16 is seen an extra staple box or reservoir comprising a bottom 26 and a top 28. Any suitable type of box may be used and here it is one in which box top 28 may be separated completely from the box bottom 26. Box 26-28 is no wider than the portion 16 of the base.

Turning to FIGURE 2, it will be seen that the box is secured to the base portion 16 by means of a clip such as that shown at 30. The box itself is provided with a longitudinally extending channel 32 in its bottom which is a close sliding fit on clip 30. Clip 30 enters the channel 32 by openings such as those shown at 34 and 36 in both ends of the box. It is preferable to have clip 30 smooth on top throughout its length so as not to catch on the staples 38. The end of the clip, however, should be provided with a knob or bump which, if it is made by bending or forming a flat sheet of material, should be bent under as seen at 40 in FIGURE 2 so that the top of the clip will be smooth and not catch on the staples.

This bump or knob 40 engages in an opening 42 which secures the staple box against accidental disengagement from the staple unit. Clip 30 may be secured to the base in any suitable way as by the rivets 44 in FIGURE 2, and the end 46 of the clip should be beveled so that when the device is clipped on a pocket as shown in FIGURE 5, the top edge of the pocket will not catch on the lower end of the clip. For the same reason, both ends of the box bottom 26 are beveled on the bottom as shown at 48 so that the box will easily engage the edge of a shirt or vest pocket for the purpose of clipping the stapler to the garment. When an empty box is discarded, the clip 30 serves directly this purpose.

As seen in FIGURE 3, the clip 30 engages channel 32 with a close sliding fit so that the box bottom 26 is secured reasonably well against pivoting motions except as the spring clip yields to clip the device onto a pocket. At either side of channel 32 the ledges 50 provide a surface on which the staples 38 rest as can be observed in FIGURE 2.

In certain kinds of stapling it is desirable to have the box 26-28 removed from the staple driving base which is accomplished by simply sliding the box until the channel 32 is free from the clip 30. In this manner the box can be placed out of the way when it is desired to have paper lie flat over the base portion 16. Similarly when

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the last of the staples 38 in the reservoir 26 has been removed from the reservoir and placed inside the stapling head 10, the box may be removed and discarded or at least freed from the base to remind the owner that he has nearly exhausted the supply of staples in the reservoir. If the box is only removed temporarily for the purpose of leaving the base portion 16 free from obstruction of the box 26-28; when the stapling chore is done, it may be reinserted by simply pushing the clip 30 into either the opening 34 or 36 so that the clip extends into the channel and the knob 40 engages the depression 42 or its counterpart 52 near the opening 36. With most forms of stapling, however, there is no need to remove the box 26-28 and it remains clipped to the stapler to provide a handy source of additional staples when the staples in the head 10 are exhausted.

In FIGURE 4 is illustrated how this stapler may accomplish work that would normally be done with a much larger unit. In driving staples, for example, on the fold of a magazine to repair a magazine from which some of the pages have become released from the original staples, the magazine 54 is inserted through the slot 22 and the staple driving head lined up over the fold. Anvil 20 will then be on one side of the magazine and the staple driving head 10 on the other whereupon a staple may be driven through the fold even though the edges of magazines 54 may extend a substantial distance farther than the throat depth of the stapler head 10.

In a similar manner, but not illustrated here, this device will seam together sheets of unlimited size. With the staple reservoir box removed, the stapler is placed on the fold of the first sheet in the manner shown in FIGURE 4 more or less but with the staple driving head near the edge of the sheet and canted to place channel 14 in from the edge as far as possible. The second sheet is then laid over the edge of the first sheet and under the staple driving head, but over both portions of the base. When the entire stapler is canted, the edge of the second sheet can lie under the driving head yet miss the channel 14 of the staple driving head. Thus the two sheet edges may be overlapped and staples driven through both sheets to secure them together even though they extend a great distance in both directions from the edges being secured.

FIGURE 5 is a substantially self-explanatory view of the stapler inserted in a shirt pocket 56 with the box 26-28 (only 28 of which can be seen because the device is being viewed in plan) on the outside of the pocket serving as a clip and with the base portions 16 and 18

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inside of the pocket and shown in broken lines. Stapler head 10 and box 28 are substantially the only portions of the stapler showing when the stapler is thus clipped in the pocket. The stapler may be made narrow enough to fit also a vest pocket or other pockets narrower than a shirt pocket. The actual dimensions of a functioning unit are 2 x 4½ inches.

It is apparent that many modifications and variations of this invention as hereinbefore set forth may be made without departing from the spirit and scope thereof. The specific embodiments described are given by way of example only and the invention is limited only by the terms of the appended claims.

What is claimed is:

1. A stapler comprising: a base having a laterally extending slot forming two legs, a staple clinching anvil adjacent the end of one of said legs, a staple driving head hinged to the other of said legs adjacent the end thereof to position the head over the anvil, and a staple storage box removably secured to said other of said legs near said staple driving head.

2. The stapler of claim 1, wherein the staple storage box is provided with a slot near the bottom thereof, and a resilient clip secured to said other of said legs being engaged in said slot to removably secure said box to said leg.

3. The stapler of claim 2 in which said resilient clip is smooth on top and said staple storage box slot opens into a channel in the bottom of said box, said resilient clip having a knob at its free end and engaged in a depression in said channel to minimize accidental disengagement of said resilient clip from said channel, said staple storage box being rounded at its bottom end opposite to said slot to facilitate slipping a thin member, such as a pocket edge, between said staple storage box and said base.

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