(No Model.)

W. J. BROWN.

DEVICE FOR HOLDING METALLIC STAPLES.

No. 491,235. Patented Feb. 7, 1893.

FIG. 1.

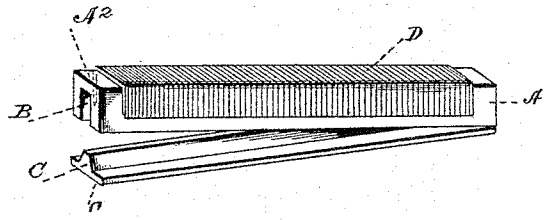


FIG. 2.

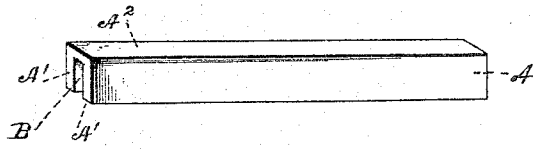
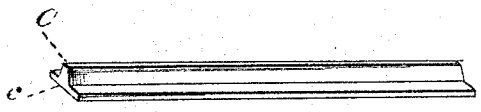


FIG. 3.



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UNITED STATES PATENT OFFICE.

WILLIAM J. BROWN, OF PHILADELPHIA, PENNSYLVANIA.

DEVICE FOR HOLDING METALLIC STAPLES.

SPECIFICATION forming part of Letters Patent No. 491,235, dated February 7, 1893.

Application filed October 20, 1892. Serial No. 449,488. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. BROWN, a citizen of the United States, residing in the city of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in Devices for Holding Metallic Staples, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to devices for holding metallic staples, strung or in train thereon, to prepare them for packing in boxes or otherwise for transportation, and to render them easy of insertion in self-feeding paper fastening machines; and has relation more especially to the staple-holding device patented to me by Letters Patent No. 483,374, granted September 27, 1892, on an application therefor filed April 12, 1892.

My present invention consists of an improvement in the wedge applicable to the form of holder shown in Fig. 2 of said patent.

Strung staples are used very extensively for different kinds of staple-inserting machines. Originally such machines were provided with short, or comparatively short, mandrels or staple bars, and hence the sticks of staples were made correspondingly short. For such purposes the invention shown in my patent above referred to operates perfectly, but for larger machines, where the staples are required to be put up on long sticks, I have found that the necessarily thin wedge C described in said patent, when used in the form shown in Fig. 2 thereof, is apt to break on withdrawing it from the groove of the staple holder A, and there is also difficulty in inserting it in the long longitudinal groove of such a comparatively long staple holder.

My present invention consists in a new form of wedge constructed in such manner that the base of the wedge will correspond substantially in size with the width of the staple holder, and will support and strengthen the upright of the wedge so that it may not only be more readily inserted within the groove of the holder, but be more readily, and with certainty of not breaking, withdrawn from said groove of the holder.

In the drawings illustrating my invention, Figure 1 is a perspective view of the groove or holder showing a string of staples in place thereon with the wedge plug partly withdrawn. Fig. 2 is a like view of the grooved staple holder. Fig. 3 is a like view of the wedge.

As stated in my previous patent aforesaid, strung staples have become an article of extensive commercial use when put up in this form, affording a ready and efficient means of charging a staple-driving machine, the end of the staple holder being placed against the end of the feed bar or mandrel of the machine and the staples pushed thereon off the holder in a body by one movement of the thumb and finger. As also stated in said previous patent, the object is to construct a holder, of a size adapted for the purposes mentioned, which must necessarily be of rectangular form to correspond with the rectangular form of the staples; and my present invention is as aforesaid, to provide means for temporarily retaining the train of staples upon the holder, after they shall have been placed thereon, and until ready for use.

The holder A is made of wood or other suitable material, of rectangular form externally, and is hollowed out or largely recessed longitudinally at B, said groove being of such relative size that its sides A′ A′ will have a slight spring or resilience when a pressure is applied thereto, the underlying principle of the invention being that the staples are retained upon the holder by spreading or distending slightly the sides A′ A′ of the groove so that they will bear against the legs of the staples which straddle the holder, the crown resting upon the face A^2 of said holder.

When it is necessary to withdraw the wedge or plug which as described in my previous patent, is inserted in this groove of the holder, it is obvious that the pressure being withdrawn the staples may then be easily slid off the holder, into the machine. I have found by experience with long staple holders so constructed, that the necessarily thin wedge is difficult to insert and be fitted with pressure, in the groove of the holder and is more difficult to withdraw therefrom without breaking.

I have made no variation in the construction of the holder A shown in my previous patent, but I have invented and constructed a new form of wedge consisting, as shown sepa-

rately in Fig. 3, of a base *c*, from which arises at its longitudinal center, an upright rib C which is the portion of the wedge entering the groove B of the holder as shown in Fig. 1. As it is difficult to make these cheap constructions of the proper relative size, and also in order that the top edge of the wedge may freely enter the groove, I make said wedge rib C slightly narrower at its top than at its base; so that at the top, said wedge rib C will be slightly narrower than the groove B of the holder, while at its base it will be slightly wider. The wedge rib is readily inserted in the groove of the holder by resting it by its flat side on a table and bringing the groove of the holder over it and giving the latter a slight downward pressure by the hand, the effect being that the narrow side of the wedge rib C easily and with certainty, enters the groove, while the wide edge of the wedge rib when the groove reaches that point, distends or slightly spreads the sides A′ A′ of the holder, outwardly against the legs of the train of staples. It will also be observed that this wedge may be more readily withdrawn from the holder, by inserting the thumb nail anywhere between the points of coincidence in the length of the wedge and holder, instead of, as before, bringing the whole pressure to bear upon the outward end of the wedge as shown in my previous patent.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is,

1. A holder for strung staples mounted thereon, provided with a longitudinal groove or recess, in combination with a device for retaining the train of staples thereon, consisting of a wedge key having a base adapted to project beyond the groove of the holder with a centrally longitudinal rib C thereon adapted to enter the said groove of the holder and spread the sides thereof; substantially as and for the purpose set forth.

2. A holder for stringing metallic staples, longitudinally recessed or grooved, and a device for spreading or distending the sides of the groove against the legs of the staples mounted on said holder, consisting of a wedge or key having a flat base *c* projecting beyond the edge of the groove and abutting against the under face of the holder with an upright rib C longitudinally central thereon, narrower at its top and wider at its base than the groove of the holder into which it is to be inserted; said parts being constructed, combined and arranged substantially as described.

In testimony whereof I have hereunto affixed my signature this 19th day of October, A. D. 1892.

WILLIAM J. BROWN.

Witnesses:
JOHN R. NOLAN,
H. T. FENTON.