

(No Model.)

W. J. BROWN.
STAPLE HOLDER.

No. 514,699.

Patented Feb. 13, 1894.

Fig. 1.

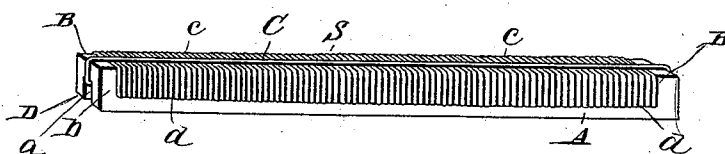


Fig. 2.

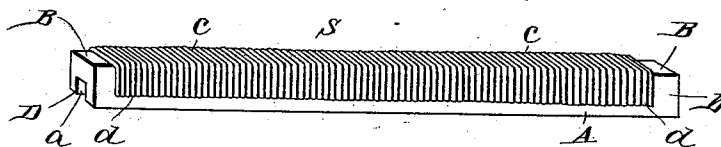
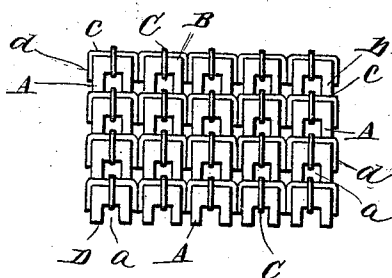


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

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STAPLE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 514,699, dated February 13, 1894.

Application filed May 8, 1893. Serial No. 473,433. (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 placed "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.

Several inventions in this class of devices have heretofore been made by me, for which Letters Patent of the United States have been granted to me from time to time.

My present invention has for its object to provide means for temporarily holding the staples upon the stick or holder, the two being constructed and combined in such manner that while the staples will be held sufficiently firmly in place upon the stick until such time as they may be required for use, the means provided in my present invention enables the sticks of staples to be more compactly packed in a box, and the staples, with their retaining devices, to be freed from injury by contact while so packed.

In two previous Letters Patent granted to me, No. 483,374, dated September 27, 1892, and No. 491,235, dated February 7, 1893, is shown a stick or holder containing staples arranged in train on one face thereof, with the opposite face longitudinally grooved, and a wedge or key inserted in the groove to spread the sides thereof against the staple legs and hold them in place upon the stick. In an earlier patent granted to me December 10, 1878, No. 210,748, is shown a stick or holder with slotted ends, the train of staples being held upon the stick by a band of rubber or other suitable material passing over the crown and resting in the said recesses at the end of the stick.

My present invention relates to the latter mode of holding the staples on the stick, and embodies also the desirable feature of the other form of stick first mentioned, mak-

ing use, however, of one of its peculiarities for a different purpose or function, in connection with the elastic or other suitable band of the earlier patent for temporarily holding the staples upon the stick.

In the accompanying drawings illustrating my present invention, Figure 1 is a perspective view of the stick or holder with a train of staples mounted thereon, the latter being held upon the stick by means of a rubber or other suitable band passing over the crown thereof and resting within the longitudinal groove of the opposite face of the stick. Fig. 2 is a like view showing the holder alone, and without the band; and, Fig. 3 is an end view of a series of said sticks with staples mounted thereon and held by bands showing how these articles of manufacture are packed in boxes in quantities awaiting use and for transportation.

The holder A is made of wood or other suitable material, having a top side B upon which the crown *c* of the staple rests; the legs *d* of the staple hanging over the vertical sides *b* (see Fig. 3), and they are strung thereon in train as at S, Figs. 1 and 2. The under face D of the stick or holder, *i. e.* the side opposite that upon which the crown of the staple rests, is longitudinally grooved at *a* from end to end, the depth of the groove being sufficient to wholly receive within it a band of rubber or other suitable material C, so that it will not project beyond the face D of the holder.

Strung staples have become an article of extensive commercial use and are more frequently put up by stringing them on small sticks or holders as affording a ready and efficient means of charging a self-feeding staple driving machine, as it is only necessary to place the end of the rod or holder against the end of the feed bar of the machine and push the staples along the same into the machine by one movement of the thumb and finger.

The difficulty heretofore has been to provide efficient means for temporarily retaining the staples on the holder after they shall have been placed thereon and until ready for use; and in the commercial form in which these articles are put up and packed for transportation, a number of such sticks or holders charged with staples, are necessarily compactly piled upon each other as indicated in

Fig. 3. Many persons in the trade prefer the device shown in my earlier Patent No. 210,748, dated December 10, 1878, the rubber band thereof affording an easy means, by simply cutting it, of releasing the staples when it is desired to use the same in charging the machine. The recessed or tapered ends of that stick, however, were found to be useless, or rather unnecessary, owing to subsequent changes in the construction of wire stapling machines; but the chief defect of the stick was found to be that in packing the sticks of staples as illustrated in Fig. 3, the rubber band on the lower face of, say the top row, would contact with the rubber band on the top face of, say row No. 2, and being pressed tightly in the box, or even by their own weight, the rubbers would stick together, especially in warm weather, and on lifting the sticks or holders out of the box the rubbers would adhere to each other and break, spilling the staples, and such contact with even the slight pressure of their own weight had the effect of discoloring and blackening the surface of the staples, the metal apparently taking up the sulphur in the rubber. Another defect or objection in that mode, perhaps a minor one, was the increased space taken up by the rubber which was naturally endeavored to be overcome by pressing the pile of sticks as closely together as possible in the box or receptacle in which they were placed for transportation, this compact pressing resulting in increasing the bad effect above mentioned of contact between the rubber bands of the coinciding sticks and of the bands with the staples strung thereon. My present invention, though simple, obviates all these defects and has been recognized by the trade as of great value. It consists simply in providing a stick with a longitudinal groove from end to end on its under face, *i. e.* the face opposite that upon which the crown of the staple rests and passing the band of rub-

ber or other suitable material over the crowns of the string of staples and within the longitudinal groove, so that (as shown in Fig. 3) the rubber of the top row cannot contact with either the rubber or the crown of the staples of the underlying row, nor can the rubber of the underlying row contact with any part of the rubber, staples, or holder, of the overlying row as it will pass, in packing, entirely within the longitudinal groove thereof.

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

1. As a new article of manufacture, a holder for metallic staples consisting of a rod adapted to receive on one of its faces the crown of the staples arranged in train thereon, the opposite face of the rod being longitudinally grooved from end to end, in combination with a band of rubber or other suitable material adapted to rest within the groove of the holder and over the crowns of the staples and operating to retain them temporarily in position thereon, substantially as described.

2. A holder for strung staples mounted thereon, consisting of a rod A having a side B adapted to receive the crown of the staple, and provided on its opposite side with a longitudinal groove *a* extending from end to end of the rod, in combination with means for retaining the train of staples thereon, consisting of the removable bands C of rubber or other suitable material adapted to pass over the staples and rest within the groove of the holder; substantially as described.

In testimony whereof I have hereunto affixed my signature this 4th day of May, A. D. 1893.

WILLIAM J. BROWN.

Witnesses:

WINFIELD S. ASHBEY,
JOHN R. NOLAN.