A. S. TONKIN.

PAPER FASTENER.

APPLICATION FILED AUG. 8, 1921.

1,422,148.

Patented July 11, 1922.

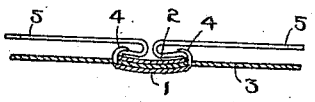


FIG. 2.

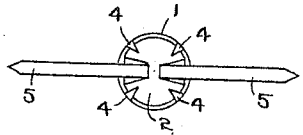


FIG. 7.

FIG. 1.

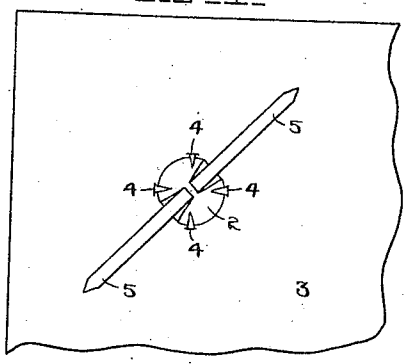


FIG. 5.

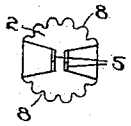


FIG. 6.



FIG. 3.

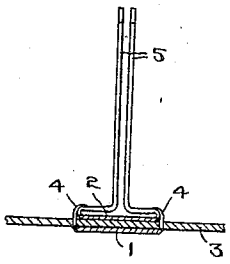
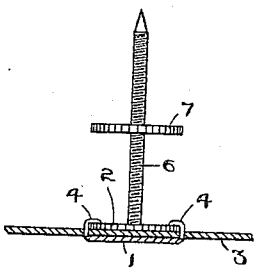


FIG. 4.



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UNITED STATES PATENT OFFICE.

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PAPER FASTENER.

1,422,148. Specification of Letters Patent. Patented July 11, 1922.

Application filed August 8, 1921. Serial No. 490,614.

To all whom it may concern:

Be it known that ARTHUR STANLEY TONKIN, citizen of the Dominion of New Zealand, residing at Lyndhurst Road, Hastings, in the Provincial District of Hawke's Bay, has invented certain new and useful Improvements in Paper Fasteners, of which the following is a specification.

This invention relates to fasteners used for attaching papers to any suitable backing, and has for its object the provision of improved means for the aforesaid purpose.

Serious faults common to known forms of fasteners employed for attaching papers to backings are as follows.

In a great many cases the means for attaching the papers to the backing are also utilized for holding the fastener on the latter, with the result that very often in adjusting the papers, the fastener becomes detached from the backing, causing inconvenience by the file coming to pieces and papers being mislaid.

Where means apart from the means for holding the papers on the backing are provided for securing the fastener thereto, said latter means are not secure or their mobility is limited, besides which the devices are constructed and used in such manner, that they soon work loose and provide obstructions which catch on and in adjacent papers, cards and the like.

In short, a comparatively cheap, simple and efficient fastener to which none of the above objections can be raised has not yet been produced.

According to the invention the improved fastener comprises two members capable of being securely clamped at any desired point to a backing, one of said members being provided with prongs which are passed through the backing, and between which, the other member located at the other side of the backing is secured, by bending the prongs inwards.

The last mentioned member carries the means upon which the papers which it is desired to attach are passed.

Both members are the same or nearly the same size and are formed from this sheet metal or other suitable material so as to be capable of being clamped tightly together, not only for the purpose of securely gripping the backing, but in order that the edge of the member with the prongs thereon will lie closely against the backing, so as to not provide any obstruction in or on which adjacent papers, files or the like are liable to be caught.

The invention will however be further described with reference to the accompanying drawing wherein the various parts have been slightly exaggerated for clearness of illustration.

In the drawing:—

Figure 1 is a plan view and

Figure 2 a vertical sectional view of the fastener as it appears in use.

Figures 3 and 4 are vertical sectional views of modified forms of the fastener.

Figure 5 is a plan view of the member carrying the paper receiving means, showing a modification.

Figure 6 is a perspective view of the member provided with the clamping prongs and

Figure 7 is a plan view of a fastener, where one member is made slightly smaller than the other.

The members 1 and 2 are preferably discs of thin sheet metal, the edge of the disc 1 being bevelled on its outer or under side, in order that said edge will lie closely against the backing 3, such as a file back, or portion of a folder or cover.

The disc 1 is provided with a number of right angle prongs 4 which pass through the backing 3, and between which the member 2 is placed on the reverse side of the backing 3, and secured by having bent inwards thereover, the prongs 4 of the disc 1.

The disc 2 is provided either with a pair of prongs 5, or with a screwed stem 6 having a nut 7 thereon (Figure 4) upon which the papers it is desired to attach to the backing 3 are passed.

The preferred method of affixing the fastener to the backing 3 is as follows.

The member 1 is placed on a flat surface with the prongs 4 pointing upwards, and the backing 3 is pressed on to the latter at the point it is desired that the fastener should be located on the backing, and so that said prongs 4 will project from the inner side of the backing.

The member 2 is then placed on the backing 3 between the prongs 4, and the latter bent inwards over the member 2, so as to force the latter and the member 1 tightly together to obtain a firm and secure grip of the backing 3.

Papers can then be placed on and removed from the prongs 5, or stem 6 in the usual way without disturbing the attachment of the fastener to the backing 3.

The members 1 and 2 can be equal in diameter (Figures 2 and 3) or the latter member can be slightly smaller than the member 1 as the Figure 7.

Also both the members 1 and 2 can be perfectly flat (Figure 3) or preferably the member 2 can be slightly convex with the member 1 slightly concave to accommodate it (Figure 2). The latter construction enables the members 1 and 2 to obtain a better grip of the folder, than where they are flat, and also lessens the possibility of the member 2 turning between the prongs 4 of the member 1.

Further means for preventing turning movement of the member 2, consists in forming notches or serrations 8 in the edge of the member 2. The prongs 4 of the member 1 being bent into these notches or serrations 8, and thereby locking the two parts securely together.

A fastener such as above described besides providing means which ensures the fastener remaining attached to the backing at all times, can be secured to the latter at any desired point. It also by reason of the grip of the backing obtainable between the members 1 and 2, is enabled to be more securely attached than existing fasteners.

Further, the greater part of the fastener is on the inner of the backing 3, and that part or the member 1 located outside the latter by reason of its bevelled edge, and the fact that the latter is drawn and retained by the prongs 4 closely against the backing, affords practically no obstruction in and on which adjacent files, cards, papers and the like are likely to be caught and damaged.

What I do claim and desire to obtain by Letters Patent of the United States of America is:—

1. A paper fastener comprising, a member bevelled at its outer edge and also provided at its edge with a plurality of bendable prongs adapted to pass through a backing from the outer side, a separate member adapted to be placed between said prongs and secured on the inner side of the backing when said prongs are bent inwardly, and a pair of elongated prongs on said member upon which papers are passed.

2. A paper fastener comprising a circular concave member, a plurality of integral and bendable prongs carried by the edge of the concave member and adapted to pass through the backing from the outer side, a separate convex member adapted to be placed between said prongs and provided with a series of notches at its outer edge, for the reception of the prongs when the prongs are bent inwardly whereby to securely lock the convex member to the inner side of the backing, and means on the convex member upon which papers are passed.

In testimony whereof he has affixed his signature in presence of two witnesses.

ARTHUR STANLEY TONKIN.

Witnesses:

ERNEST WILFRED BOYCE CAREY,

COLIN STUART SCOTT.