April 20, 1926. 1,581,887

H. J. TAPLIN

STAPLE FOR USE WITH HAND STAPLING MACHINES

Filed March 6, 1925

Fig. 1.

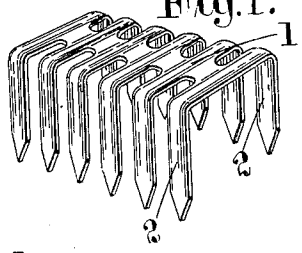


Fig. 2.

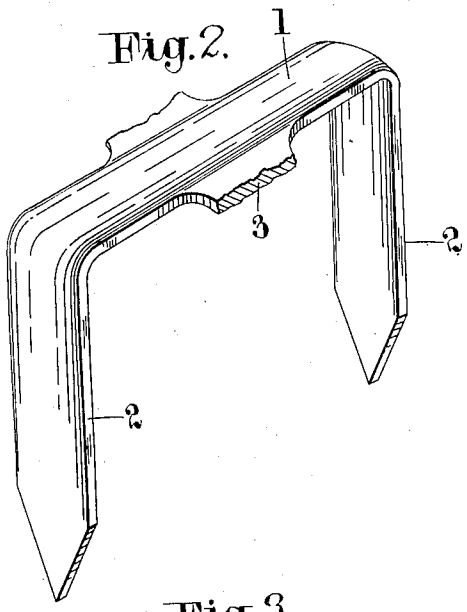
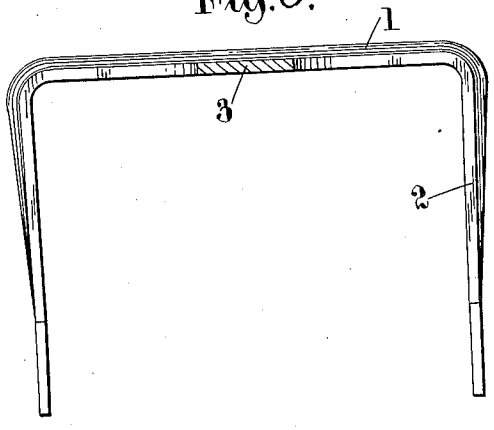


Fig. 3.



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UNITED STATES PATENT OFFICE.

HAROLD JOHN TAPLIN, OF LONDON, ENGLAND, ASSIGNOR TO GERRARD WIRE TYING MACHINES COMPANY LIMITED, OF LONDON, ENGLAND.

STAPLE FOR USE WITH HAND STAPLING MACHINES.

Application filed March 6, 1925. Serial No. 13,587.

To all whom it may concern:

Be it known that HAROLD JOHN TAPLIN, a British subject, residing at London, England, has invented certain new and useful Improvements in Staples for Use with Hand Stapling Machines, of which the following is a specification.

This invention relates to staples for use with hand-stapling machines.

It is already known to provide strips of staples constructed from a sheet of strip metal and sheared off one by one during the process of stapling by means of the machine. Hitherto, however, such staples have been formed with the top bar and legs plane, and according to the present invention, we provide a construction wherein the staples are dished. By this means we find that considerable increase in strength is provided and the staple will drive truly when set across the grain of the wood and even when directed through a knot.

The invention is illustrated in the accompanying drawing in which—

Fig. 1 illustrates a fragment of a strip of staple constructed in accordance with the present invention,

Fig. 2 is an enlarged perspective view, and Fig. 3 an elevational view of a single staple formed in accordance with the invention.

It has been heretofore proposed to provide a series of connected staples united by spacing strips, but in such construction the top bar and the legs of each staple have been plane or flat.

Now according to the present invention I construct a staple for use in a stapling machine as illustrated in Figs. 1, 2 and 3 wherein the legs 2 are dished as shown. Preferably the cross sectional curvature of the legs diminishes gadually from the upper part to the point, the legs being practically plane at the lower region where the point is formed so as to make a satisfactory penetration into the wood or other material in which they are driven. The main portion of the legs 2 and preferably also the top bar 1 are, however, dished as shown. The separating strips 3 may be dished or left plane as is found most convenient in manufacture.

It is to be understood that although I have illustrated a usual form having a single separating strip 3 between adjoining staples, the invention is not limited to this construction as adjoining staples may be united in any suitable manner either by a central strip or by two or more strips or otherwise, and since with the known forms failure usually occurs through deflection of the legs, the invention is to be understood as comprising a staple in which the legs and top bar are dished.

In manufacture the curved shape of the staples is preferably formed during the same pressing operation as constructs the staple strip from a plane sheet of metal, the dies being suitably curved to produce this result; but the dishing can be performed by a separate operation if desired.

I claim:—

A staple including a top bar and legs at the respective ends thereof, the top bar and legs being of concavo-convex form in cross section with the curvature extending to and including the margins of the top bar and legs, the free terminals of the legs having a flat formation in cross section.

In testimony whereof I affix my signature.

HAROLD JOHN TAPLIN.