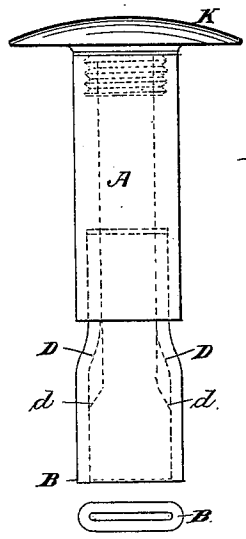
W. J. BROWN, Jr.

Device for Inserting and Clinching Metallic-Staples.

No. 218,227. Patented Aug. 5, 1879.

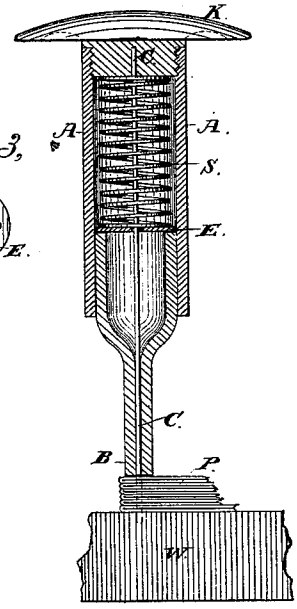
Fig, 1,



Fig, 3,



Fig, 2,



Attest:

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UNITED STATES PATENT OFFICE.

WILLIAM J. BROWN, JR., OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN DEVICES FOR INSERTING AND CLINCHING METALLIC STAPLES.

Specification forming part of Letters Patent No. **218,227**, dated August 5, 1879; application filed May 1, 1879.

To all whom it may concern:

Be it known that I, WILLIAM J. BROWN, Jr., of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented an Improved Device for Inserting and Clinching Metallic Staples, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

This invention relates to an improved hand device of easy and cheap construction adapted for inserting and clinching metallic staples in documents and other articles requiring to be fastened together.

Within a cylinder open at both ends is inserted a vertically-slotted tube, the upper end of which is arranged to fit snugly the lower portion of the cylinder, within which it works. The lower portion of the tube is of taper or flat shape. At the top of this tube is a slotted disk for supporting a spiral spring arranged within the head of the outer cylinder. To the top of the cylinder is secured a cap or knob, to whose under side is secured a hammer-blade adapted to work vertically within the slotted tube and project downward and outward on the downward pressure of the knob. The metallic staple previously placed within the slot in the tapering portion of the tube is, by the above movement, driven out of the tube and into the material to be fastened.

In the drawings, Figure 1 represents a side elevation of the device and an end view of the slotted tube. Fig. 2 represents a vertical section of the device in the act of inserting a staple in the material to be fastened. Fig. 3 represents the spring-supporting disk.

A represents the cylinder or handle, which is open at both ends to permit of the ready arrangement and working therein of the various parts. The upper end of this cylinder is preferably screw-threaded on its interior to receive a screw-threaded cap or knob, K; but this cap may be secured by other desired means.

B is a vertically-slotted tube arranged to snugly fit within the lower portion of the cylinder, its upper portion being cylindrical and snugly fitting the cylinder A, within which it freely slides, and is supported by the impact of the sides of the tube against the sides of the cylinder, the lower portion of the tube being flat or tapered to allow of the staples being readily inserted in the slot, and also to facilitate the insertion of said staples in a straight position within the articles to be fastened.

C is a hammer-blade or pusher, the upper end of which is attached to the lower portion of the knob K, its lower portion sliding vertically within the slotted tube B.

E represents a disk, which is carried by the upper end of the tube B, and serves to guide and stiffen the hammer-blade, and also acts as a support for the spiral spring S, arranged within the upper end of the cylinder. This disk E is slotted to permit of the hammer-blade passing through it.

d d represent shoulders formed on the hammer-blade C, to impinge on projecting corners formed on the inner surface of the tube to keep said blade within its prescribed limits.

P represents the sheets of paper or other material to be fastened together, and W represents a block or pad on which the material is laid. This block may be slotted to receive the projecting legs of the staple, or it may be of some soft or yielding material, as may be found most desirable.

In the operation of this device a metallic staple is placed within the slot in the lower portion of the tube B, points down. The tube is then held over the portion of the material P to be fastened. The staple may then be driven out either by a simple hand-pressure upon the knob K or by violently forcing the lower end of the tube B against the material to be fastened. The hammer-blade C will, by either of these operations, push the staple out and through the material. The spring S will then rebound and draw the hammer-blade C back within the cylinder A, when the projecting points of the staple may be pressed down flat against the material by direct pressure thereon of the side of the tube or of any other part of the device, or they may be flattened in any other desired or convenient manner.

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

1. The combination of the tube or handle A,

spiral spring S, slotted disk E, sliding inner tube, B, and hammer-blade C, having shoulders *d d*, substantially as and for the purpose set forth.

2. The vertically-slotted tube B, of cylindrical form at its upper portion, to adapt it to fit and slide within the cylinder A, and flat or tapering at its lower portion to secure the ready insertion of the staple within the slot and its straight insertion in the material to be fastened, substantially as specified.

3. The hammer-blade C, having shoulders *d d*, adapted, on the upward movement of said blade by the action of the spiral spring S, to impinge on the projecting corners of the inner surface of the tube B, as and for the purpose set forth.

4. The disk E, slotted to receive the hammer-blade C, and arranged on the top of the tube B, to serve as a guide and stiffener to said blade and a support for the spiral spring, substantially as set forth.

In testimony that I claim the above as my invention I hereunto set my hand this 26th day of April, A. D. 1879.

WILLIAM J. BROWN, JR.

Witnesses:
C. W. SYKES,
G. W. FOGEL.