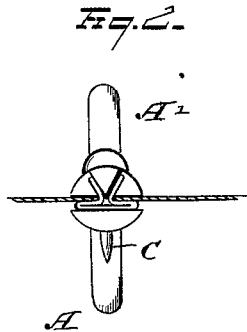
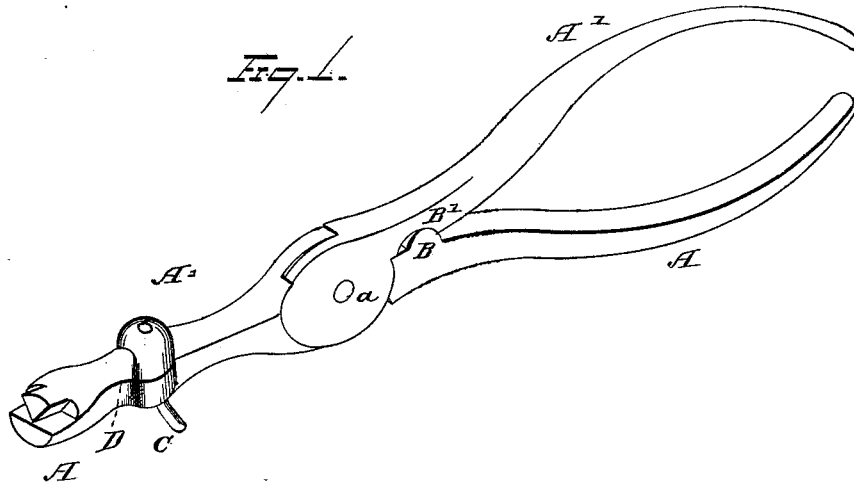


W. H. SPRAGUE.
Compound Implement.

No. 198,524.

Patented Dec. 25, 1877.



WITNESSES
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UNITED STATES PATENT OFFICE.

WILLIAM H. SPRAGUE, OF CLEVELAND, OHIO.

IMPROVEMENT IN COMPOUND IMPLEMENTS.

Specification forming part of Letters Patent No. **198,524**, dated December 25, 1877; application filed November 17, 1877.

To all whom it may concern:

Be it known that I, WILLIAM H. SPRAGUE, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Compound Tool; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to a compound tool or implement for office use, whereby pens may be fixed in or removed from their holders; also, whereby paper may be pierced for the introduction of fasteners or temporary binders; also, whereby said fasteners or binders may be adjusted and fixed in proper binding condition.

Said invention consists in the following parts and combinations, as hereinafter specified and claimed.

A and A' are the two arms of a forceps pivoted at *a*. To one arm is made the round-topped lug or projection B, which, when the forceps are closed, enters a more or less counterpart-shaped concavity, B', in the other forcep-arm.

The arrangement B B' may be placed either in front of or behind the fulcrum *a*, and the function of the parts B B' is to grasp and firmly retain a pen, so that it may be placed in or removed from its holder.

C is a perforator, which may be a blade or a stiletto. This is firmly attached to one jaw of the forceps, and may be made either straight or curved.

As the forceps are closed the blade C is permitted to pass through an opening made in the opposite forcep-jaw. The function of this portion of my device is to perforate paper or other substance placed between the forcep-jaws, and this is accomplished in a manner too obvious to necessitate further description.

Between the blade C and fulcrum *a* the opposing faces of the forcep-jaws are made flat,

so that when closed they shall come face to face together.

A similar construction obtains for a short distance—say, from one-half to one and one-half inch—forward of the blade, as indicated at D in the drawings.

One forcep-jaw has an entirely flat face throughout its entire length, while the other jaw at its extremity is formed into a V shape, with the ridge, comb, or apex facing the opposite jaw-face.

The operation of my device as regards the parts last specified is as follows: After the papers have been perforated by the blade C, the fastener or binder is placed in said perforation to be subsequently operated upon.

For purposes of illustration we will suppose said binder to be the well-known "McGill" fastener. After this fastener has been introduced into the perforation above mentioned, the pointed ends are separated from each other and spread apart by introducing between them the V-shaped forcep-blade. This operation only separates the binder-points partially; but when thus partially separated they are placed further into the forcep-jaws, between the flat faces thereof, and now, when the forceps are closed, the pointed ends of the fastener are completely opened and flattened down upon the paper, and the operation of binding is completed.

In the drawings, Figure 1 is a perspective view of my device; Fig. 2, an end view of said device, showing the peculiar V-shaped construction formed on the extremity of one of the jaws, as above specified; also showing the function of primarily opening or spreading apart the points of the paper-fastener.

Any spring or other device may be employed, if wished, whereby the jaws and handles shall be kept open, and that shall act to automatically open and release the device after every operation.

What I claim is—

1. In a compound implement, the combination, with one arm of the forceps formed

with the round-topped projection B, of the second arm provided with the counterpart concavity B', the two adapted to clamp a pen for purpose of insertion or removal from its holder, substantially as set forth.

2. The compound implement herein specified, having the devices for placing and removing pens, for perforating paper, and for fixing temporary paper fasteners or binders, substantially as shown.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WM. H. SPRAGUE.

Witnesses:

F. TOUMBEY,

W. E. DONNELLY,