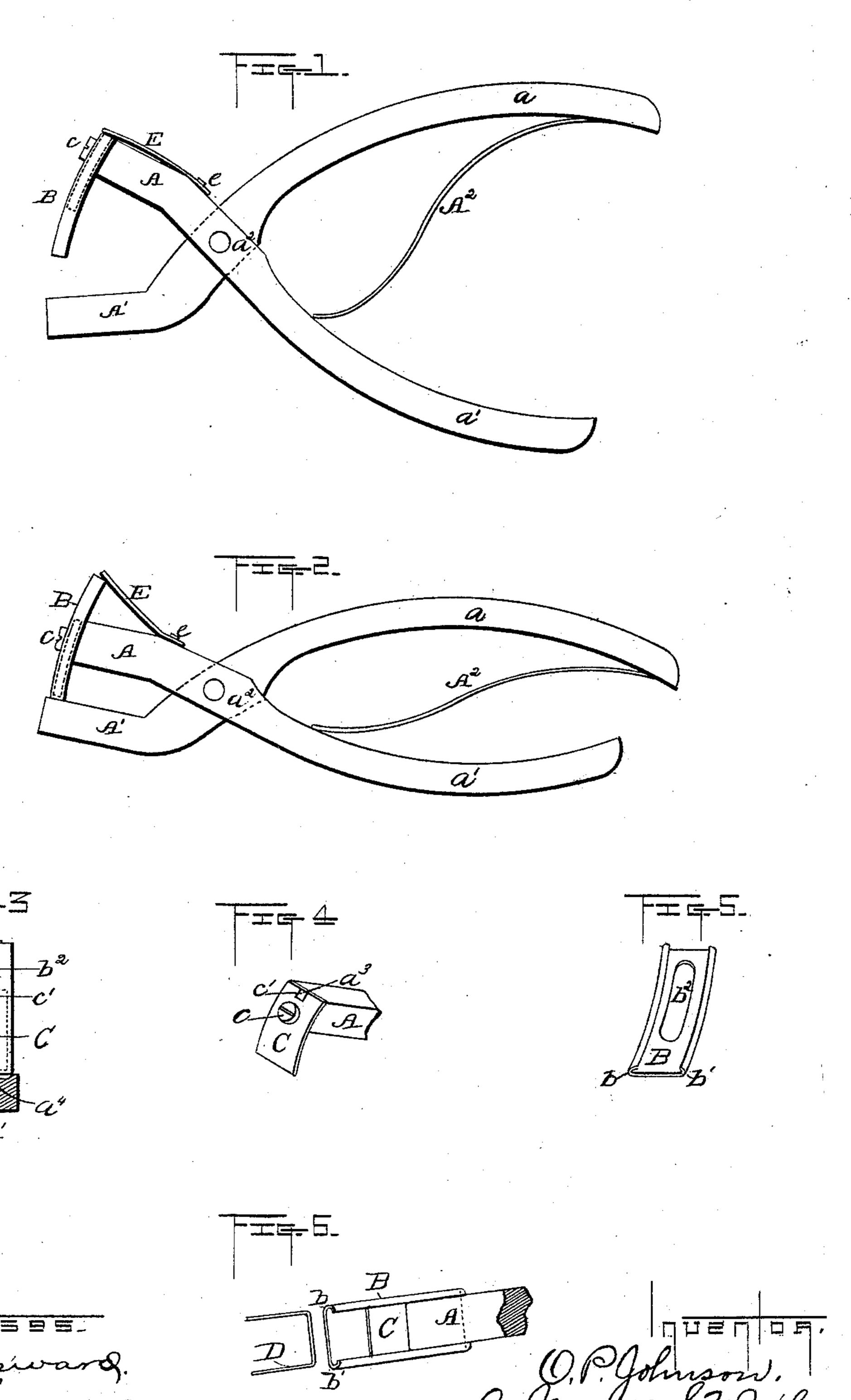
## O. P. JOHNSON.

## STAPLING IMPLEMENT.

No. 391,799.

Patented Oct. 30, 1888.



## UNITED STATES PATENT OFFICE.

OSRO P. JOHNSON, OF DETROIT, MICHIGAN, ASSIGNOR TO H. F. WHITE, OF SAME PLACE.

## STAPLING IMPLEMENT.

SPECIFICATION forming part of Letters Patent No. 391,799, dated October 30, 1888.

Application filed April 16, 1888. Serial No. 270,729. (No model.)

To all whom it may concern:

Be it known that I, Osro P. Johnson, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, ; have invented a certain new and useful Improvement in Stapling Implements; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it ap-10 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to a novel and useful stapling implement for engaging and securing 15 any suitable staple, as a paper or book fast-

ener, and analogous purposes.

My design and object in this invention are to provide a stapling implement of this class of more simple construction than those hereto-20 fore employed, while at the same time it shall be more convenient, more efficient, more economical, and more salable than those previously used.

I accomplish my object as illustrated in the 25 accompanying drawings, and as hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is a view illustrating my invention in its normal relation of parts. Fig. 2 represents the device and rela-30 tion of parts assumed at the limit of their operation. Fig. 3 is a front view showing the lower jaw in section; Fig. 4, a detail view with the sliding head removed from guide-arm. Fig. 5 is a separate view of the head; Fig. 6, 35 a view looking to the rear of the sliding head.

A A' represent the two jaws of the implement with their projecting arms a a' pivotally connected, as at  $a^2$ . These jaws are constructed and engaged in a manner analogous to that of 40 a conductor's punch, and are preferably provided with a spring, A2, to normally open the jaws ready for use. The jaw A constitutes a driving-jaw, and at its forward extremity is provided with a sliding head, B, engaged there-45 upon in any suitable manner, and constructed to receive any ordinary staple to be employed as a paper or book fastener. While I do not limit myself to any precise manner of engaging said head upon the jaw, I find the follow-

50 ing to be a suitable and desirable way of accomplishing the said engagement. Upon the lin contact with the inwardly-sloping surfaces

end of the jaw A, I engage a guide-arm, C, as by a screw, c. This will permit the ready removal of the arm, if desired; and to prevent any lateral turning of the said arm in its engage-55 ment upon the jaw the arm may be recessed, as at c', to receive a corresponding shoulder, a, upon the jaw. In this manner the arm will be held rigidly in place and form a firm guide and support for the sliding head located there- 60 upon. It will be convenient to construct the said head with marginal flanges to embrace the edges of the guide arm C and permit the head sliding thereupon.

To limit the movement of the head and pre- 65 vent its displacement from the guide arm, the head may be constructed with an elongated orifice,  $b^2$ . By projecting the head of the screw c through said orifice it will form an effectual stop to the movement of the head, permitting 70 it to reciprocate simply the length of said orifice and prevent its disengagement. The flanges of the head extending to the lower extremity are also adapted to receive and properly hold a staple-fastener, D, its prongs being 75 directed toward the opposite jaw of the implement.

To hold the sliding head in normal position ready to receive the staple, I prefer to employ any suitable spring, E, which may be engaged 80 upon the jaw, as at e, and have a bearing upon

the upper end of the sliding head.

The operation of the device will now be readily understood. A staple-fastener is located in the lower end of the sliding head, 85 when the operator, seizing the handles or arms of the implement, causes the sliding head to impinge upon the opposite jaw, A'. As force is applied the sliding head is forced along the guide-arm to the limit of its movement. The 90 lower edge of the arm C is thereby brought against the staple, which, by continued pressure, is forced into the paper located between the jaw A' and the sliding head.

To turn the prongs of the staple-fastener in- 95 ward, as desired, in order that it may be so clinched in place, the clinching jaw A' is constructed adjacent to the contact-point of the sliding head with a groove,  $a^4$ , the end walls thereof being slanted or curved inward, as 100 shown in Fig. 3. Thus when the prongs come

of the groove they are bent inward, and when the operation is completed the staple is effect-

ually clinched.

I design to construct the sliding head of any 5 desired size, and such heads of various sizes, as may be desired, may be engaged upon the jaw, as the engagement is preferably a removable one. Thus the guide-arms C may be made of varying sizes to correspond to the 10 size of the head desired, and any required size of head may be readily applied, with its guide, by simply adjusting the screw c, which may be done quickly. Thus different sizes of heads and guides are readily interchangeable. As 15 staples are made of different sizes, a sliding head corresponding thereto may very conveniently be applied to the implement. In this manner any assortment of various sizes of staples may be used by an implement of my in-20 vention, and in a very economical manner, as the head and the guide may each be made of sheet metal and shaped to required form.

I do not limit myself to any method of engaging the guide-arm, as it may be either integral or removable, as may be preferred, and may be of any desired construction.

What I claim is—

1. A stapling implement consisting of jaws A A', one of said jaws provided with a shoul-

der,  $a^3$ , an arm formed with a recess, a', a screw, 30 and a sliding head, substantially as set forth.

2. A stapling implement consisting of the following elements, namely: the arms aa', provided with jaws A A', one of which is formed with a groove,  $a^4$ , while the other is provided 35 with a driver, C, formed with a recess, c', a screw, c, a shoulder,  $a^3$ , a sliding vertically-slotted head, B, and springs for retracting said head and said arms.

3. A stapling implement consisting of a 40 driving-jaw, A, and clinching-jaw A', pivotally connected, said driving-jaw having in combination therewith a driver, C, a connecting-screw, c, uniting said arm upon the driving-jaw, a sliding head, B, supported upon 45 said driver and constructed with a vertically-elongated aperture, b<sup>3</sup>, the head of the screw projecting through said aperture, and said driving-jaw provided with a shoulder to prevent the lateral movement of said driver, sub-50 stantially as set forth.

In testimony whereof I sign this specification

in the presence of two witnesses.

OSRO P. JOHNSON.

Witnesses:

N. S. WRIGHT, H. F. WHITE.