

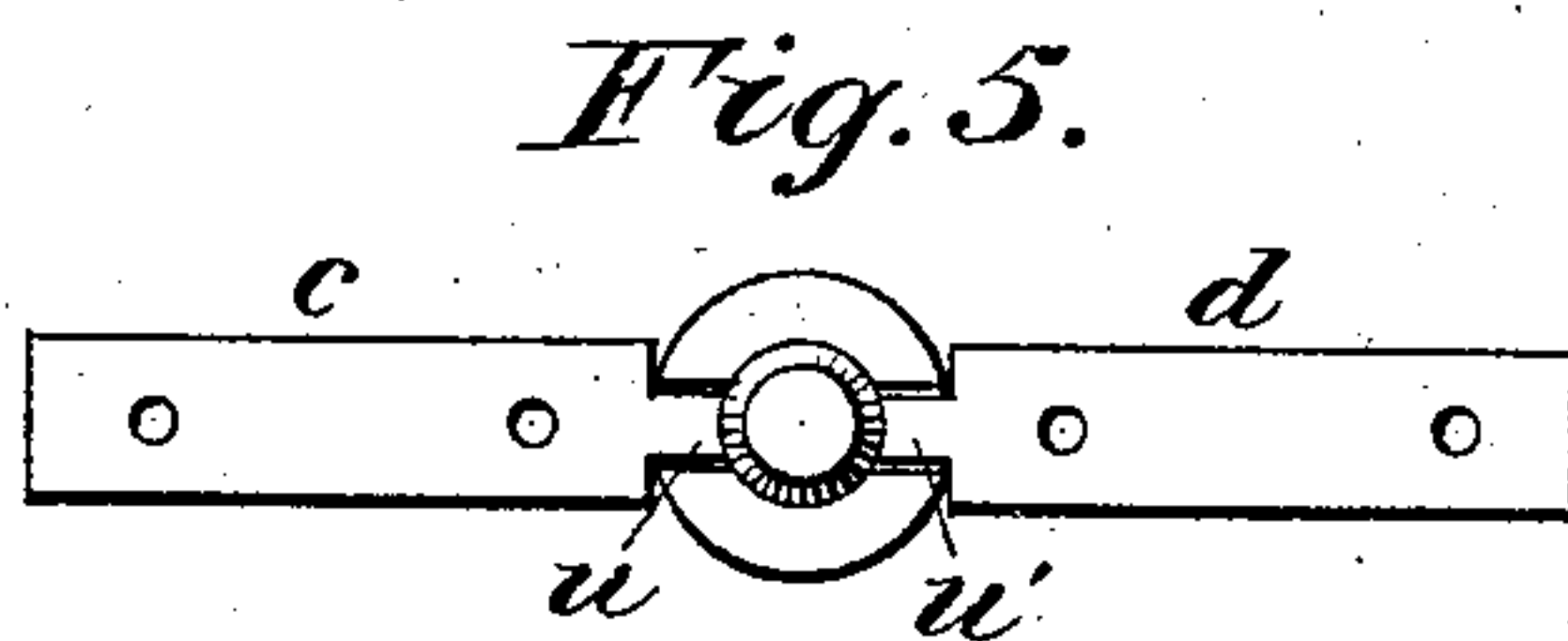
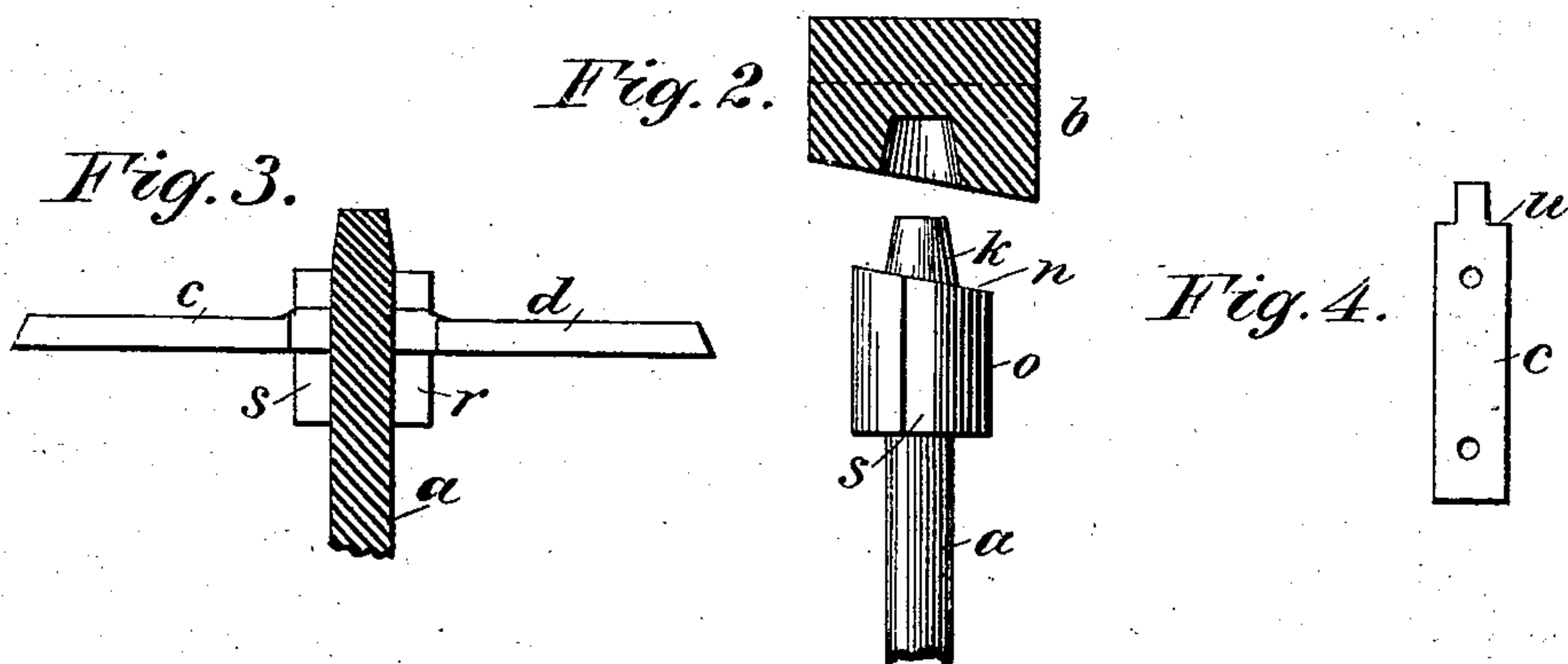
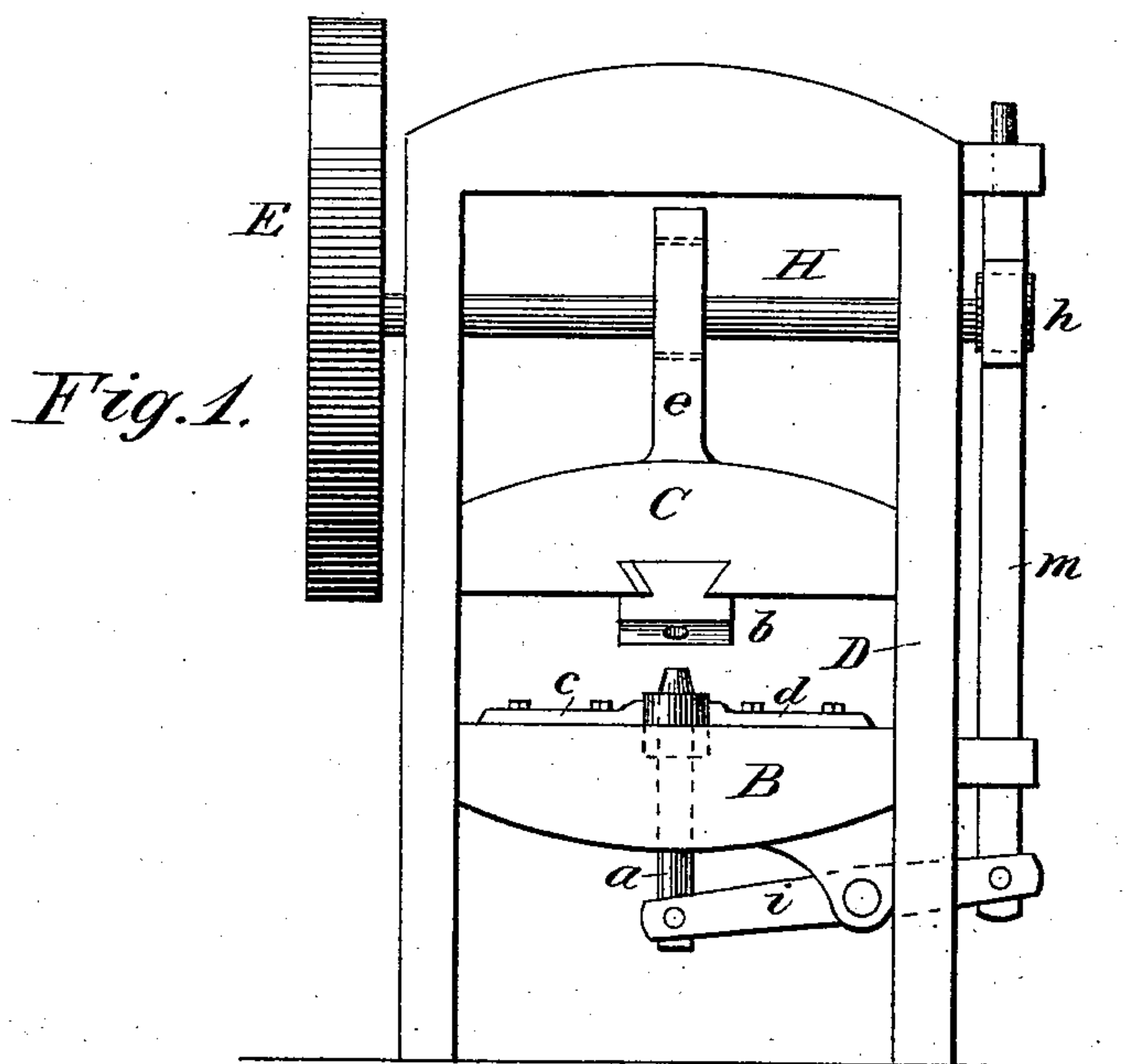
(No Model.)

J. S. CRAFT.

MACHINE FOR MAKING THE EYES OF HOES.

No. 275,363.

Patented Apr. 10, 1883.



Witnesses.

Saml. V. Essick

Inventor.

Johnston S. Craft

UNITED STATES PATENT OFFICE.

JOHNSTON S. CRAFT, OF ALLIANCE, OHIO.

MACHINE FOR MAKING THE EYES OF HOES.

SPECIFICATION forming part of Letters Patent No. 275,363, dated April 10, 1883.

Application filed April 27, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHNSTON S. CRAFT, a citizen of the United States, residing at Alliance, in the county of Stark and State of Ohio, have invented a new and useful Improvement in Machinery for Making the Eyes of Hoes and other Similar Articles, of which the following is a description.

In reference to the accompanying drawings, Figure 1 is an end view of my said invention shown as connected with the machine of which it is a part. Fig. 2 is a detached view of my said invention, showing the punch and a longitudinal section of the die *b*. Fig. 3 is a detached view, showing the punch *a* and the strippers *c* and *d*. Fig. 4 is a detached view of the strippers *c* and *d*. Fig. 5 is a top view of the punch *a* and the strippers *c* and *d*.

Similar letters refer to similar parts throughout the several views.

D D are uprights, which constitute a part of the frame-work of the machine, and serve the double purpose of a guide for the cross-head *c* and a support for the bed or table *B*.

E is a driving-wheel, by means of which all the moving parts of the machine are driven.

The cross-head *c* is provided with a yoke, in which works a cam for moving the said cross-head up and down.

The shaft *H* is provided with a crank at the end *h*, by means of which the rod *m* is caused to move up and down, thus causing the lever *i* to vibrate and move with it the punch *a*.

a is a punch provided with the point *k*, which corresponds in shape with the shape of the eye of a hoe, provided also with a sloping shoulder, and also provided with the swell *o*, in which are located the grooves *r s* for receiving the points *u u'* of the strippers *c d*.

c and *d* are strippers, which are firmly bolted

to the bed-piece *B*, and the office of which is to strip the eye of the hoe from the point *k* after the same has been formed.

b is a perforated die, having a sloping face which corresponds with the slope of the shoulder *n* of the punch *a*.

The object of my invention is to provide a means for opening out the eyes of hoes and forming them into a finished shape after they have been pressed into a rudimentary form by means of a drop or other process, and its operation may be described as follows: When the eye of the hoe is placed upon the point *k* of the punch *a* the said punch moves upward and meets the perforated die *b* in its downward movement, when the eye of the hoe enters the orifice of the said die *b*, and is there pressed into shape by means of the said point *k* and the shoulder *n* of the punch *a*. After the said operation has been completed the said punch moves down, and in its downward movement the hoe is stripped from the said point *k* by means of the strippers *c* and *d*.

I am aware that a machine for forming the eyes of hoes and other similar articles, having two sloping-faced perforated dies and a punch operating through the dies, is not new; hence I make no claim to that form of machine.

What I claim, and desire to secure by Letters Patent, is—

1. The punch *a*, provided with the point *k* and shoulder *n*, in combination with suitable actuating machinery and with the die *b*.

2. The punch *a*, provided with grooves *r s*, in combination with the strippers *c* and *d* and suitable actuating machinery.

JOHNSTON S. CRAFT.

Witnesses:

J. C. STANLEY,
SAML. V. ESSICK.