

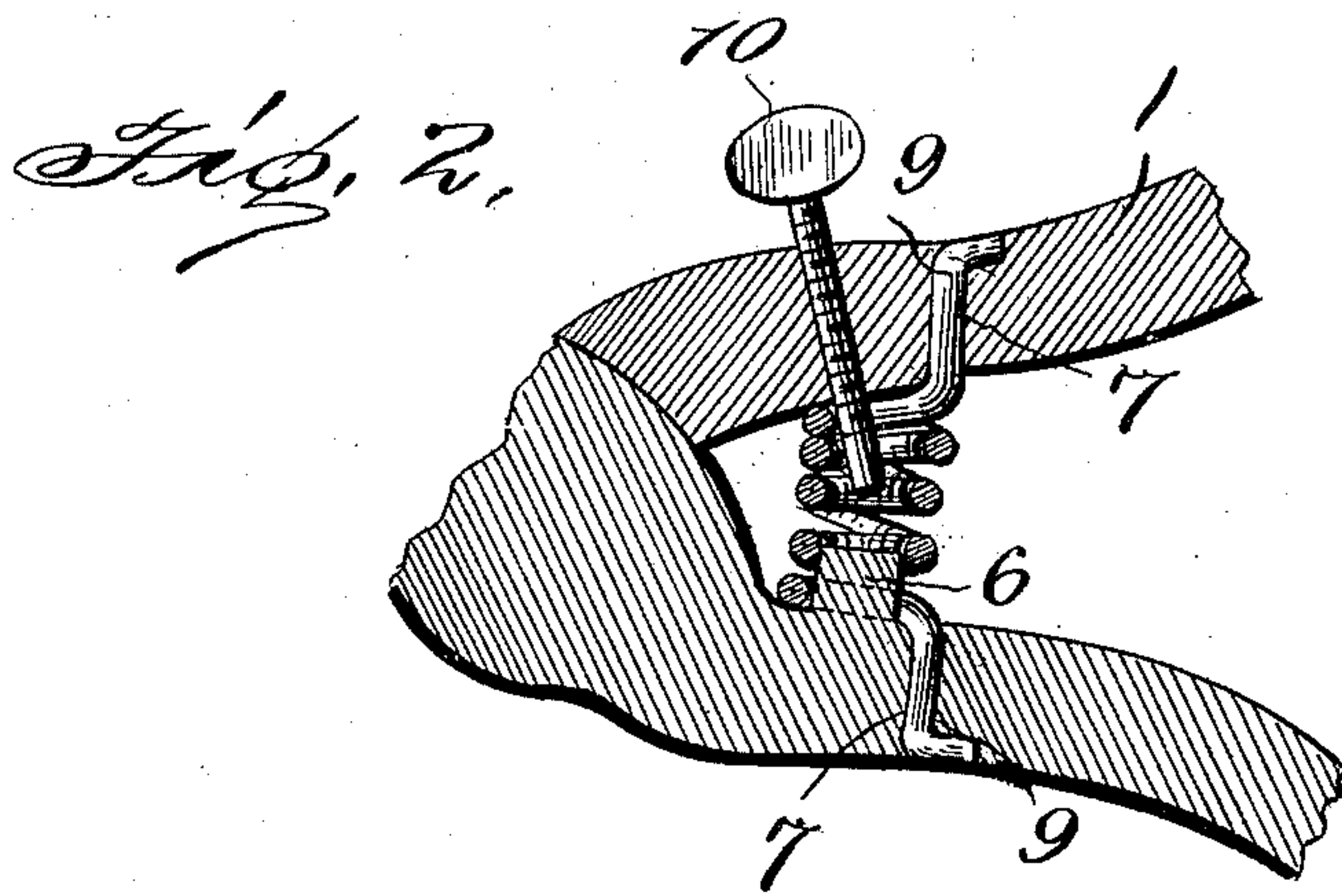
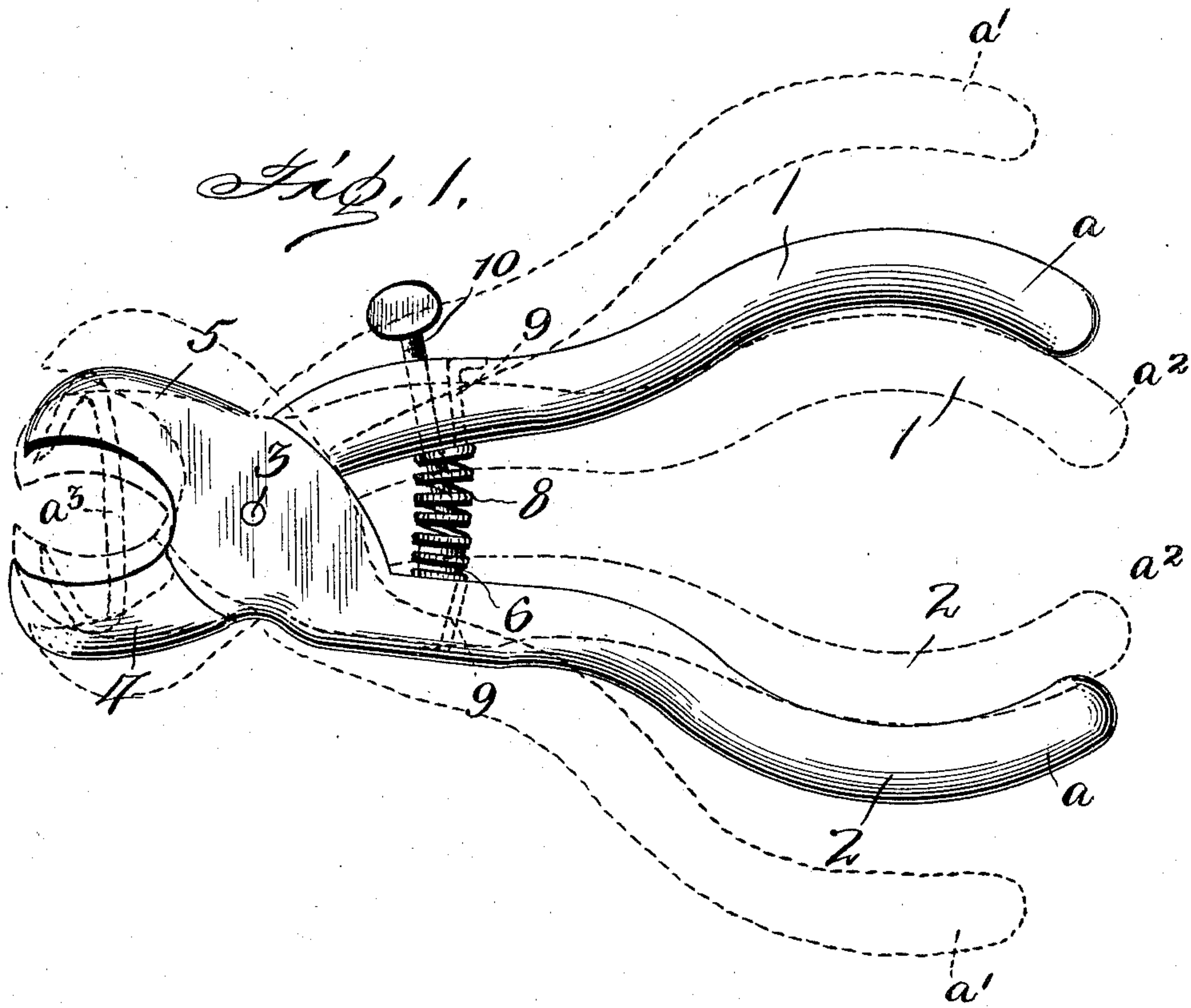
No. 757,054.

PATENTED APR. 12, 1904.

G. A. ROBINSON.  
HOG RINGER.

APPLICATION FILED DEC. 18, 1903.

NO MODEL.



Witnesses

Jas A. Hoehl.

*[Signature]*

Inventor

Glenn A. Robinson.

By

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# UNITED STATES PATENT OFFICE.

GLENN A. ROBINSON, OF GENESEO, ILLINOIS.

## HOG-RINGER.

SPECIFICATION forming part of Letters Patent No. 757,054, dated April 12, 1904.

Application filed December 18, 1903. Serial No. 185,765. (No model.)

*To all whom it may concern:*

Be it known that I, GLENN A. ROBINSON, a citizen of the United States, residing at Gene-  
seo, in the county of Henry and State of Illi-  
nois, have invented certain new and useful  
Improvements in Hog-Ringers; and I do de-  
clare 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 appertains  
to make and use the same.

This invention relates to improvements in  
hog-ringers of that type comprising pivoted  
handles carrying jaws to grip and compress  
the ring to force it through the septum na-  
rium of the nostrils of the hog; and it con-  
sists of the peculiarities of construction here-  
inafter described and claimed.

The primary object of the invention is to  
provide in a device of this character means  
for holding the jaws partially closed to grip  
the ring between them and to throw the jaws  
open upon the release of the handles after the  
ring has been applied, thus enabling the op-  
erator to employ one hand and arm to hold  
the hog and the other hand to handle the tool  
without liability of the ring becoming disen-  
gaged from the tool and also enabling him to  
effect the quick release of the tool after ring-  
ing the hog.

In the accompanying drawings, Figure 1 is  
a side view of a hog-ringer embodying my  
invention, showing in full and broken lines the  
different positions of the handles and jaws;  
and Fig. 2 is a section through a portion of  
the tool, showing features of the invention.

The form of tool herein shown is of a type  
in common use, modified for the application  
of the parts constituting the present inven-  
tion. It consists, as shown, of handles 1 and 2,  
crossed and pivoted together after the man-  
ner of a pair of pliers, as at 3, and provided  
with the ring holding and compressing jaws  
4 and 5. I have shown in Fig. 1 of the draw-  
ings the normal position (denoted  $a$ ) of the  
parts in full lines, the expanded condition of  
the parts (denoted by  $a'$ ) in dotted lines, the  
same representing the adjustment of the parts  
to admit a ring between the jaws, and the com-  
pressed condition of the parts (denoted  $a''$ ) in  
dotted lines, the latter illustrating the action

of the handles and jaws in compressing the  
ring in applying the same to the nostrils of a  
hog.

In carrying my invention into practice I  
provide one of the handles of the tool—say  
the handle 2—with a lug or projection 6, ex-  
tending from its inner side and form both  
handles with openings 7. Between the han-  
dles I interpose a coil-spring 8, which sur-  
rounds or seats at its lower end about the lug  
6 and bears against the inner sides of the  
handles. The ends of the wire composing  
this spring form attaching extensions 9, which  
are projected through the openings 7 and are  
bent or otherwise offset upon the outer sides  
of the handles to hold them in position. By  
this construction it will be observed that the  
expansive action of the spring upon the han-  
dles 1 and 2 causes the latter to be forced  
apart from the dotted-line position  $a''$  to the  
full-line position  $a$ , thereby moving the jaws  
4 and 5 from a compressed condition, which  
closes the ring, to the normal position, in which  
the closed contracted ring is automatically  
released.

It is well known that in the use of the or-  
dinary construction of ringers of this charac-  
ter the operation of ringing a hog is at all  
times rendered exceedingly difficult, for the  
reason that the operator is compelled to hold  
the jaws closed to grip the ring, which is fre-  
quently released under the struggles of the  
animal to free itself, thus compelling the op-  
erator in many cases to release the hog to re-  
cover and reapply the ring or to insert a new  
ring under difficulties while holding the hog.  
By my construction these disadvantages are  
overcome, as the jaws under the expansive  
pressure of the spring will hold the ring suf-  
ficiently firm to prevent its disengagement  
even in the event of the tool being knocked  
out of the hand of the operator while strug-  
gling with a fractious hog. The spring also  
by the mode of application herein shown per-  
forms a secondary function of restoring the  
parts to their normal position after the ring  
has been compressed and applied to the nos-  
trils of the hog to release the grip of the jaws  
upon said ring, thereby enabling the tool to  
be quickly released. This function is attained



by the compression of the spring when the handles are forced together from the full-line position  $a$  to the dotted-line position  $a^2$ , so that the reaction or expansion of the spring serves to force them apart again when the pressure is released to open the jaws to release the contracted ring. The spring, further, by its retractive action allows the jaws to be forced apart to receive a ring and then contracts and automatically partially closes the jaws to grip the ring upon the release of the handles 1 and 2. Thus in the operation of the tool the jaws are first opened to their widest extent to receive the ring  $a^3$  by spreading the handles 1 and 2 apart to the position  $a'$ , whereby the spring 8 is expanded and upon the removal of spreading pressure upon the handles contracts, causing the jaws to grip the ring  $a^3$  before they are closed as far as the full-line position  $a'$ . Then upon compressing the handles to position  $a^2$  the jaws will be forced to a greater extent toward each other and will contract and close the ring  $a^3$ , this being the operation in applying the ring to the hog's nostrils. Such compressing action of the handles of course compresses the spring, which upon the removal of the pressure expands to the normal position  $a$  again, thereby opening the jaws to the normal extent and releasing the applied spring. Hence it will be seen that the spring is important in its applied relation, as it not only insures the firm retention of the open ring, but releases the closed ring upon the release of the pressure of the hand of the operator on the handles 1 and 2.

The ringer will hold any size open ring ready for use and will release any size of closed or contracted ring. A set-screw 10 of ordinary construction is mounted upon the jaw 1 and projects through the spring 8 and is adapted to engage the lug 6 to limit the closing movement of the handles and jaws to suit different

sizes of rings. The function of the lug 6 is to center and reinforce the spring 8 and prevent it from twisting out of place. It also forms an abutment for engagement by the set-screw 10, whereby the latter may be made shorter, so as to decrease the liability of its becoming broken in the operation of the tool.

From the foregoing description, taken in connection with the accompanying drawings, the construction, operation, and advantages of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

1. A hog-ringer comprising pivoted handles provided with jaws, and a spring interposed between the handles and acting thereon by contraction to partially close the jaws to grip a ring, and adapted, when the handles are compressed, to close the jaws to compress and close a ring and by expansion to open the jaws when the handles are released, substantially as described.

2. A hog-ringer comprising pivoted handles provided with jaws, a lug upon one handle, a coiled spring secured at its ends to the handles and surrounding said lug, and a set-screw upon the other handle extending through the spring to engage said lug, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

GLENN A. ROBINSON.

Witnesses:

HARRY A. REHERD,  
RUTH J. RICE.