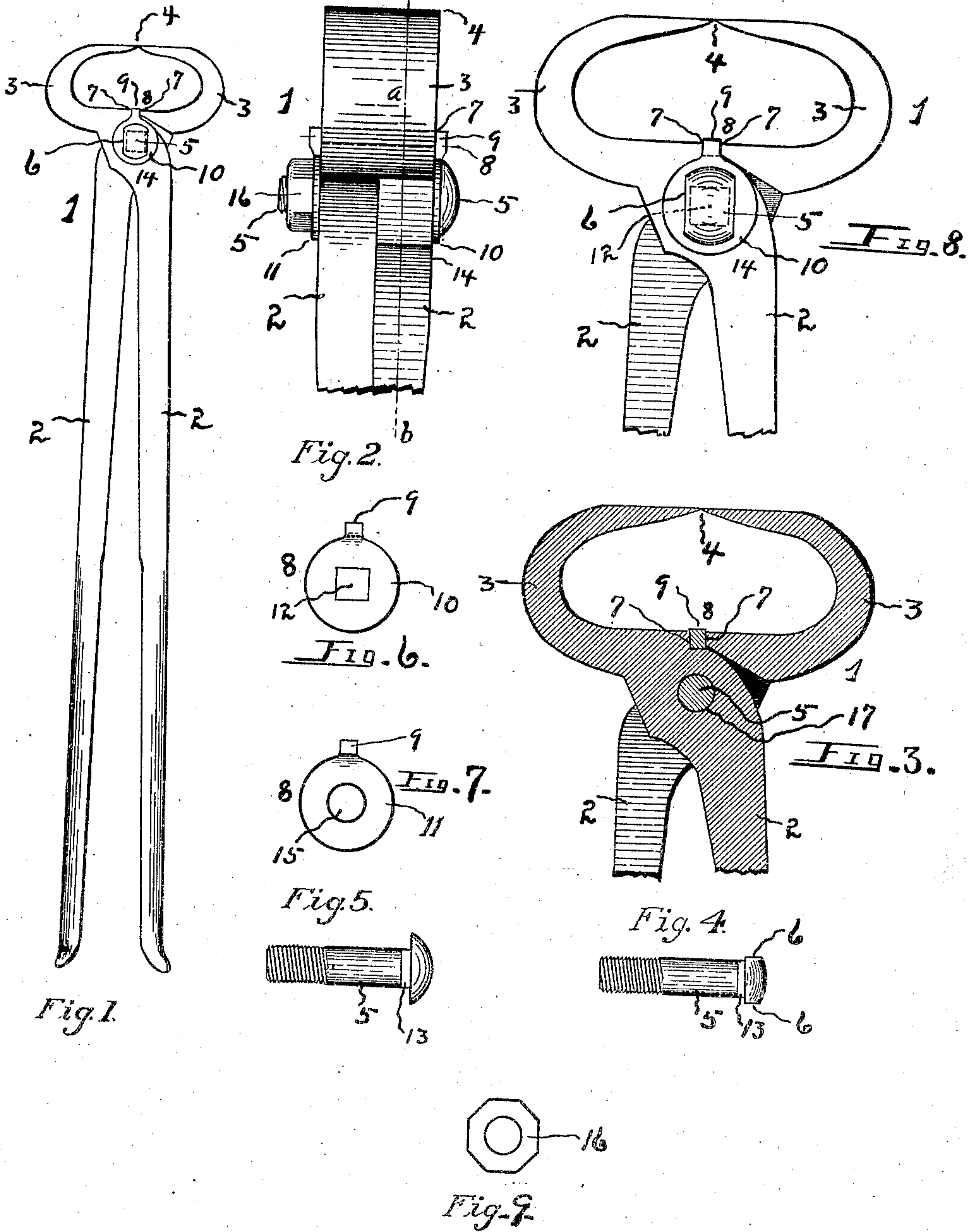


J. A. RYDEN.
HOOF NIPPERS.

APPLICATION FILED MAR. 20, 1909.

928,335.

Patented July 20, 1909.



Witnesses
M. A. Watson
Grant Watson

Inventor
John A. Ryden,
per
Warram A. Sturges
Attorney

UNITED STATES PATENT OFFICE.

JOHN A. RYDEN, OF OMAHA, NEBRASKA.

HOOF-NIPPERS.

No. 928,335.

Specification of Letters Patent.

Patented July 20, 1909.

Application filed March 20, 1909. Serial No. 484,625.

To all whom it may concern:

Be it known that I, JOHN A. RYDEN, a citizen of the United States, residing at Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Hoof-Nippers, of which the following is a specification.

This invention relates to an improvement in hoof nippers and has for its object the provision of means for limiting the movement of the cutting blades in directions toward each other, to preserve the sharpness of their edges; also to provide means for controlling the frictional contact of the arms.

With these and other objects in view the invention presents a novel combination and arrangement of parts as described herein, and in the appended claim and as illustrated in the drawing, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claim without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing, Figure 1 is a side view of a pair of hoof nippers constructed in accordance with my invention. Fig. 2 is a broken away view, somewhat enlarged of the head of the nippers for clearly showing the devices. Fig. 3 is a sectional view on line *a b* of Fig. 2. Figs. 4 and 5 are side views of the bolt. Figs. 6 and 7 are end views of the yoke to show the openings therein. Fig. 8 is a side view of parts shown in Fig. 2. Fig. 9 is an end view of the adjusting nut employed.

Referring now to the drawing for a more particular description, numeral 1 indicates a pair of hoof nippers, comprising arms or handles 2, each having at its forward end a head or jaw 3 formed rectangular in cross-section and provided with a transverse terminal blade or cutting edge 4, the handles of said nippers being disposed crosswise and provided with a connection or pivotal mounting between the handles and jaws, as by bolt 5, said bolt having a head with parallel facets 6 formed thereon. Jaws 3 are bowed outwardly between their pivotal mounting 5 and cutting edges 4, and preferably have their outer and inner surfaces formed convergent near these edges. As thus described, jaws 3 may move in directions toward or away from each other. In order to prevent blades 4 from being dulled

by striking against or contacting with each other, an angular recess, groove or depression 7 is formed in and opening upon the inner side of each jaw 3, said recess or groove having a contact-wall (best shown in Fig. 3) disposed substantially parallel with a line or plane extending between terminal 4 of the blade and pivot or bolt 5; and I provide the striding piece loop or yoke 8 adapted to have a seating in grooves 7. When jaws 3 move in directions toward each other, the longitudinal body 9 of the yoke is engaged by the angular walls of the grooves, and limits the movement of the jaws, and prevents actual contact of the blades. Yoke-arms 10 and 11 are disposed transversely with reference to body 9 and form the terminals of the yoke. Arm 10 is provided with an angular opening 12. Bolt 5 is provided intermediate its body and head with facets 13. Arm 10 of the yoke is adapted to have a seating between the flat face 14 of one of arms 2 and the head of the bolt, the angular opening 12 registering with facets 13. Arm 11 of the yoke has the round opening 15, and when the parts are assembled the bolt traverses this opening.

It is an advantage to have the contacting sides of arms 2 held closely together at their pivotal mounting. These contacting surfaces wear away after considerable use, and it is desirable to have adjustable means for securing the arms with a greater or lesser degree of pressure, nut 16 upon the screw-bolt answering this purpose. By reason of the construction as described it will be seen that bolt 5 will not rotate relative to the yoke arms, since its facets 13 engage the walls of opening 12 of arm 10, and this is a desired result to prevent rotation or loosening of the nut. As ordinarily used, hoof nippers require sharp blades. According to former constructions when the implement is used, the edges of the blades strike against each other, resulting in their impairment. Since, in the present construction, the blades approach closely to each other but do not make contact, no injury occurs to their sharpened edges.

To assemble the parts, after the yoke is placed with its body 9 in grooves 7 of the jaws, bolt 5 is passed through apertures 12 and 15 of the yoke and through bolt openings 17 of the handles, facets 6 engaging within angular opening 12 of arm 10 of said yoke; nut 16 may then be adjusted, and it

will not rotate thereafter from the swinging movements of the handles. If, thereafter, the nut becomes rusted, or will not rotate while making an adjustment of the bolt, 5 facets 6 upon the head of the bolt will be useful as a holding means while forcibly rotating the nut, in a well known manner.

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

10 An implement of the class described, comprising a pair of handles disposed crosswise and pivotally mounted near their forward ends, each of said handles having a curved 15 jaw with a transverse terminal cutting blade

and formed upon its inner side with a groove having a contact-wall disposed substantially parallel with a plane extending between said terminal blade and said pivotal mounting; a striding piece disposed intermediate the 20 grooves of said handles adapted to engage said contact-walls and having arms mounted upon the outer sides of said handles.

In testimony whereof I have affixed my signature in presence of two witnesses.

JOHN A. RYDEN.

Witnesses:

HIRAM A. STURGES,
GEORGE W. COVELL.