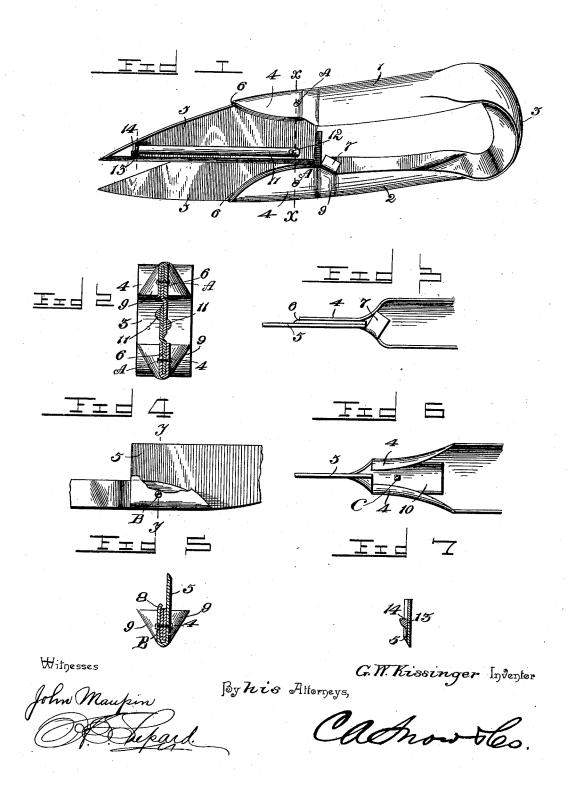
G. W. KISSINGER. ANIMAL SHEARS.

(Application filed Aug. 15, 1899.)

(No Model.)



UNITED STATES PATENT OFFICE.

GEORGE W. KISSINGER, OF JACKSON, WYOMING.

ANIMAL-SHEARS.

SPECIFICATION forming part of Letters Patent No. 647,500, dated April 17, 1900.

Application filed August 15, 1899. Serial No. 727,319. (No model.)

To all whom it may concern:

Beitknown that I, George W. Kissinger, a citizen of the United States, residing at Jackson, in the county of Uinta and State of Wyoming, have invented a new and useful Animal-Shears, of which the following is a specification.

This invention relates to animal-shears, and has for its object to provide improved 10 means for detachably connecting the blades to the handles of the implement and also to provide an improved guard for each blade, the said guard being capable of being moved or swung out of the way to facilitate the sharp-

15 ening of the blade.

To these ends the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, 20 and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and the minor details of construction may be made within the scope of the appended claims without depart-25 ing from the spirit or sacrificing any of the advantages of the present invention.

In the accompanying drawings, Figure 1 is a perspective view of the improved shears. Fig. 2 is a transverse sectional view taken on 30 the line x x of Fig. 1. Fig. 3 is a detail elevation of one of the handles and looking at the sharp edge of the cutting-blade. Fig. 4 is a detail elevation showing a modified form of connection between the handles and the blades. Fig. 5 is a detail cross-sectional view taken on the line y y of Fig. 4. Fig. 6 is a detail elevation of the inner side of one of the handles and showing another modified form of connection for the cutting-blades. Fig. 7 40 is a transverse sectional view taken through the outer end of one of the blades and showing the manner of holding the movable guard

Corresponding parts in the several figures 45 of the drawings are designated by like char-

acters of reference.

Referring to the accompanying drawings, and particularly to Fig. 1 thereof, it will be seen that the opposite handles 1 and 2, re-50 spectively, are formed from a single blank of sheet metal, which is bent intermediate of its

ends to provide the bowed spring 3, connecting the rear ends of the handles and normally holding the same open or apart. Each handle is formed by bending one side of the metal 55 blank into substantially-tubular form and extending longitudinally of the device. The opposite sides of the free end of the handle are bent close together, so as to form the opposite jaws 4, which are adapted to receive 60 therebetween the cutting-blade 5, as best illustrated in Fig. 2 of the drawings. The blade is removably held between the jaws by means of a suitable screw-fastening A, which passes through the blade and both jaws 4. 65 At the inner end of the blade and opposite the cutting edge thereof there is provided a laterally-offset portion 6, which is received between the clamping-jaws 4 of the handle, and thereby disposes the blade in or beyond 70 the plane of one of the jaws 4, so that said jaws may not interfere with the operation of the blade and the latter may rest as close as possible to the body of the animal.

To prevent the blades from being pushed 75 inward, and thereby displaced from between the jaws 4, each handle is provided with a stop-shoulder 7, which is located at the inner ends of the jaws and extends transversely across the space therebetween, whereby the 80 inner end of the blade is adapted to engage said shoulder, as best illustrated in Fig. 3. This stop-shoulder is preferably formed by means of a tongue provided upon one of the side edges of the handle and bent transversely 85

across the rear ends of the jaws 4.

A modified form of detachable connection between the blades and the handles is shown in Figs. 4 and 5, and comprises a pocket carried by the blade and formed by bending a 90 portion 8 thereof back against the blade, at the rear end and outer edge thereof. The folded portion of the blade is substantially segmental in shape, having the curved edge thereof extending longitudinally of the blade 95 and upon the outer side thereof, the straight edge being alined with the rear straight edge of the blades and forming therewith an entrance-opening into the pocket. The jaws 4 of the handle are also of segmental shape and 10> are adapted to be introduced through the entrance-opening into the pocket of the blades

and are detachably retained therein by a screw-fastening B. In forming the jaws 4 there is provided a lateral stop-shoulder 9, located at opposite sides of the jaws and form-5 ing the outer ends of the handle, and in this latter form the rear edges of the blade and the bent portion thereof are adapted to engage against said shoulders, so as to hold the blade in position and prevent the latter from being pushed inward between the opposite sides of the handles.

Another modification is shown in Fig. 6, and comprises a substantially-tubular shank 10, provided at the rear end and at the outer edge of the blade, said shank being snugly fitted within the end of the handle. In this latter form the jaws 4 are not bent as close together as in the prior forms, but are spread farther apart and adapted to snugly embrace the substantially-tubular shank 10, and a screw-fastening C is passed through the latter and the handle.

As best shown in Figs. 1 and 2 of the drawings, each blade is provided upon its outer side 25 with a guard 11, comprising a bar of substantially-segmental shape in cross-section and extending parallel with the cutting edge of the blade. This guard is pivoted at one end upon a suitable pivot-pin 12, and the opposite 30 free end of the bar is provided with a shoulder 13, which is adapted to engage a suitable shoulder 14, formed by thickening the blade at its outer end. It will be noted that these shoulders prevent the guard-bar from being 35 swung away from the cutting edge of the blade during the operation of the implement, but permit of the bar being swung in the opposite direction across the cutting edge of the blade and around to the rear end thereof, so 40 as to facilitate the sharpening of the blade. The purpose of the guard-bar is to prevent the blade from coming in contact with the skin of the animal, so as to protect the latter against injury by the implement.

What I claim is—

1. A pair of animal-shears, comprising opposite handles, jaws located at the forward ends of the handles, stops located in rear of the jaws, and cutting-blades having a detach
3 able connection with the jaws and abutting against the respective stops, substantially as shown and described.

2. A pair of animal-shears, comprising opposite handles, and cutting-blades, having lon-55 gitudinally-extending laterally-offset por-

tions connected to the respective handles, substantially as shown and described.

3. A pair of animal-shears, comprising opposite handles formed from a blank of sheet metal, each handle having a portion of its opposite sides folded together and forming jaws located at the forward end of the handle, and a stop-shoulder formed by a tongue bent from one side of the handle and transversely across the rear ends of the jaws, and cutting-blades 65 detachably received between the jaws of the respective handles, and abutting against the respective stop-shoulders, substantially as shown and described.

4. A pair of animal-shears, comprising op- 70 posite handles formed from a single blank of metal bent intermediate of its ends and forming a bowed spring connecting the rear ends of the handles, portions of the opposite sides of each handle being folded together and form- 75 ing jaws located at the forward end of the handle, stop-shoulders formed by tongues bent from the sides of the handles and extending transversely across the rear ends of the respective jaws, and cutting-blades having lat- 80 eral offset portions located at the rear ends and outer edges thereof, said offset portions being detachably received between the respective jaws, and the rear edges of the blades abutting against the respective stop-shoul- 85 ders, substantially as shown and described.

5. A pair of shears, having an adjustable guard, comprising a bar pivoted at one end to the outer face of one of the blades and adjacent to the cutting edge thereof, and means 90 for preventing the barfrom being swung away from the cutting edge and toward the opposite outer edge of the blade, substantially as and for the purpose set forth.

6. A pair of shears, having an adjustable 95 guard, comprising a bar pivoted at one end to the outer face of one of the blades and adjacent to the rear end thereof, and having a stop-shoulder provided at its opposite free end, and a stop-shoulder provided upon the adjacent 100 face of the blade and located between the free end of the bar and the outer edge of the blade, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 105 the presence of two witnesses.

GEORGE W. KISSINGER.
Witnesses:

itnesses:
M. W. Pettigrew,
James S. Higby.