No. 713,343.

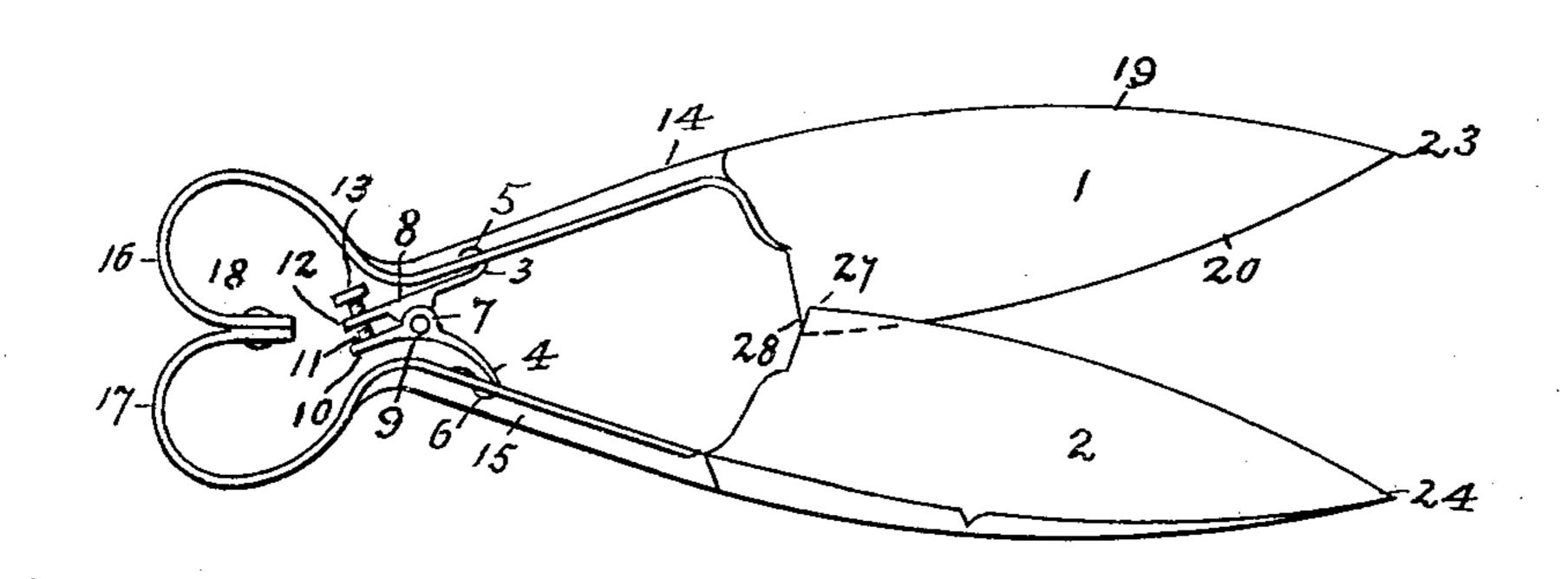
Patented Nov. II, 1902.

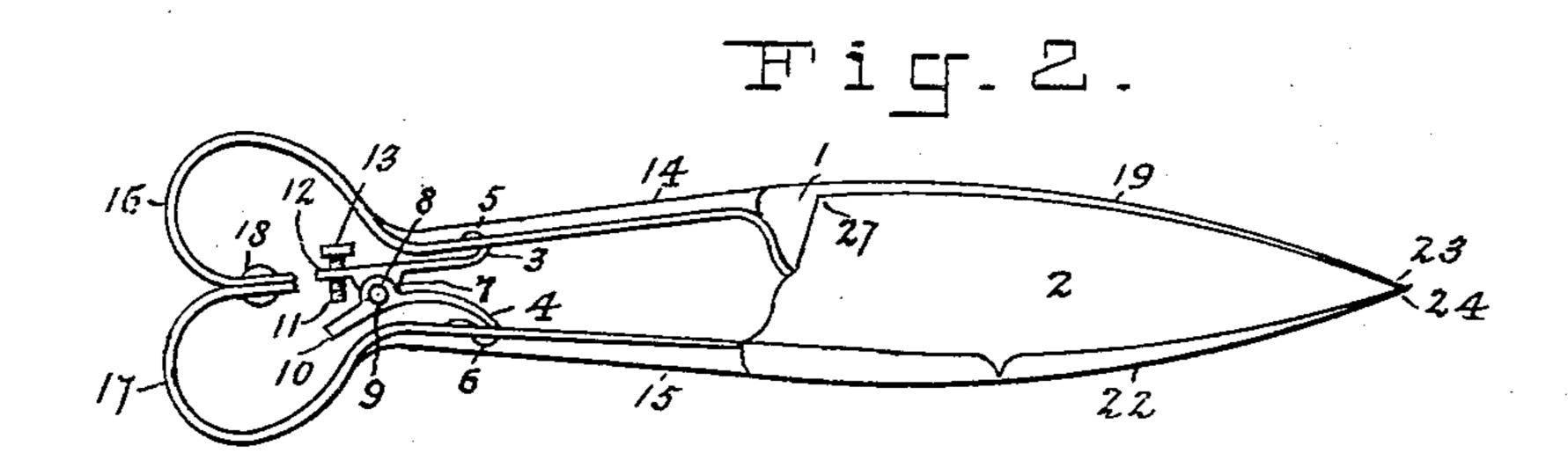
J. POMEROY. SHEEP SHEARS.

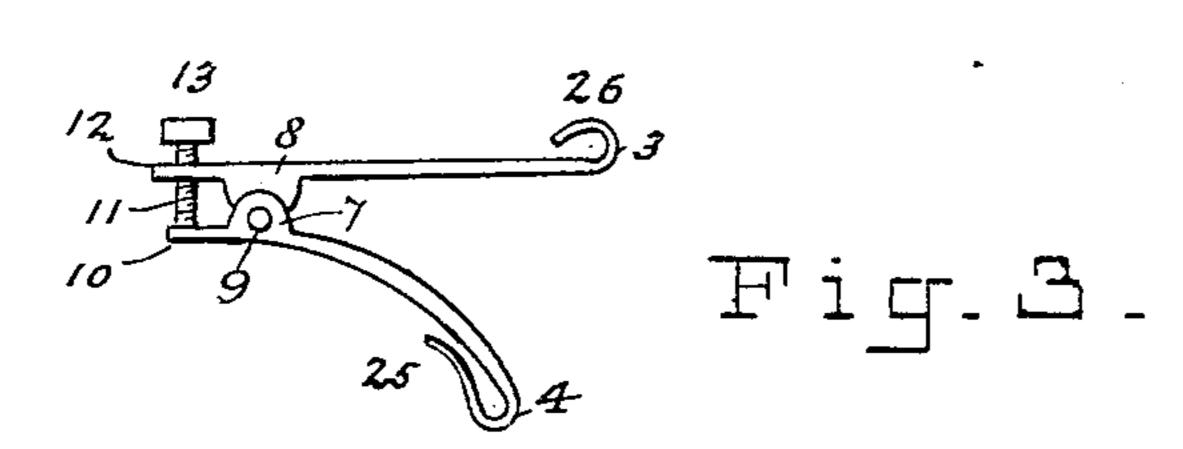
Application filed Aug. 13, 1902.)

(No Model.)

Fig.1.







Witnesses: &BBotton

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Inventor:

Du Rand To

his Attorneys.

United States Patent Office.

JOHN POMEROY, OF NORTH INVERCARGILL, NEW ZEALAND.

SHEEP-SHEARS.

SPECIFICATION forming part of Letters Patent No. 713,343, dated November 11, 1902.

Application filed August 13, 1902. Serial No. 119,511. (No model.)

To all whom it may concern:

Be it known that I, John Pomerov, a subject of the King of Great Britain, residing at North Invercargill, New Zealand, have invented certain new and useful Improvements in Sheep-Shears, of which the following is a specification.

This invention relates to the class of shears known as "sheep-shears," in which the blades to when in operation are forced together by the hand of the operator against the resistance of a spring by which their handles are united and under the influence of which they are separated when the pressure is relieved.

The invention consists in the features, combination, and arrangement of parts hereinafter described, and more particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a side view of a pair of B-spring shears open with the device attached. Fig. 2 is a side view of the same closed. Fig. 3 is an enlarged view of the device removed from the shears.

In the drawings, 1 and 2 are the blades of the shears.

12 is a straight spring-link bent at 3 to form the hook 26, adapted to pass around and be loosely attached to the pin 5, fixed in the 30 handle 14 of blade 1. A stud 13, provided with a thread 11, travels through a screwthreaded hole in the heel of said link 12 and is adapted to press against the corresponding heel of the corresponding link 10. The link 35 12 is provided with a lug 8, which fits a corresponding lug 7 on the link 10. The links 10 and 12 are held together by pin 9, passing through their respective lugs 7 and 8 and forming a fulcrum. The link 10 is curved 40 and is also bent at 4 to form a spring-hook 25, which is adapted to hook over pin 6 in handle 15 of blade 2 and grip same firmly.

16 is the spring, 19 the back, and 23 the point, of blade 1.

17 is the spring, 22 the back, and 24 the point, of blade 2.

The shears illustrated are B-spring shears; but the invention works equally well with the older form, known as "bow-shears."

There is a constant tendency on the part of the blades of these shears to open out after

being used for a short time, so that the corners 28 and 27 become separated. The sharpening of the blades also causes the distance between their edges to be increased. This 55 opening out of the blades requires a wider grip of the operator's hand, which is tiring when long-continued and repeated. Again, when a narrow cut is required in shearing the operator has to keep the blades pressed 60 in against the spring, thus causing a constant strain on the hand. One feature of my device is to remove these defects, as it provides means for regulating the setting of the blades, as follows: After the device has been placed 65 on the shears, as illustrated, the stud 13 is turned and operating on the heel 10 of the corresponding link draws the blades together into the best position for the ordinary width of cut, as illustrated at 2728, Fig. 1, or closer 70 together for a narrower cut, as desired. The blades may be pressed together by hand to assist the operation just described. One link is made straight and the other is curved, so that their heels may be close together and 75 afford a large adjustment with a small turn of the stud and so as to allow this part of the device to rest within the open space formed by the springs, thus affording access to the stud for manipulating it.

Another feature of the invention is that the device is constructed as described so that it can be placed at the base of the handles 14 15 and partly within the springs. Consequently in shearing it does not hinder the full driving 85 stroke of the operator, as the space 7 to 27 is left open for the purpose. Other devices that are placed between the handles nearer the blades or that project externally beyond the handles are objectionable by reason of their 90 liability to be caught in the wool, a smooth external surface to the shears being necessary, as is afforded by my device. The links of the device being resilient and connected as described afford a yielding resistance, so 95 as to prevent the constant jar to the hand of the operator when the blades open for a fresh cut. Overlapping of the blades, whereby the thumb of the operator is liable to be cut, is also obviated by the resistance of the stud- 100 screw 13, pressing on the heel 10, adjusted so as to keep the corners 28 27 of the blades

in the position illustrated in Fig. 1. Further, when it is desired to separate the blades for sharpening or bending, the device is readily detachable from one handle by means of the spring-hook 26, yet it remains fast on the other handle, and consequently is not liable to get lost. The device is also of the construction described, so as to cause as little resistance as possible to the closing of the blades during the operation of shearing, there being only the very slight friction at the pins. Either of the links may be straight, provided the other is curved.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. In combination with the handles of sheep-shears a pair of pivotally-connected links, means at one end for their relative adjustment and means for attachment of said links to said handles by their other ends substantially as and for the purposes set forth.

2. In combination with the handles of sheepshears a hook-ended straight link securable
to a pin in one of said handles, a spring hookended curved link adapted to engage an opposite pin in the other handle a pivotal connection between said links and an adjusting

screw-stud on the heel of said straight link 30 substantially as and for the purposes set forth.

3. In combination with sheep-shears, a regulating device consisting of a straight springlink, a hook end thereto adapted to grip a pin in a handle of said shears, a perforated heel 35 to said link, with a screw-ended stud therethrough adapted to engage the heel of an adjacent curved link, a lug on said straight link intermediate the ends of said link adapted to engage a corresponding lug on said adjacent 40 curved link, a pivot fulcrum-pin through said lugs, and a spring-hook extension of said curved link adapted to engage a pin in the other handle of said shears substantially as and for the purposes set forth.

4. In combination with sheep-shears the straight spring-link 12 with hook end 26, pin 5, lug 8, perforated heel to said link, and screw-stud 13, and the curved spring-link 10, with spring-hook end 25, pin 6, heel, lug 7, 50 and the fulcrum-pivot 9 connecting said lugs substantially as and for the purposes set forth.

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

JOHN POMEROY.

Witnesses:

A. J. PARK,

J. R. Park.