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SPRING-ACTUATED ANIMAL SNARE

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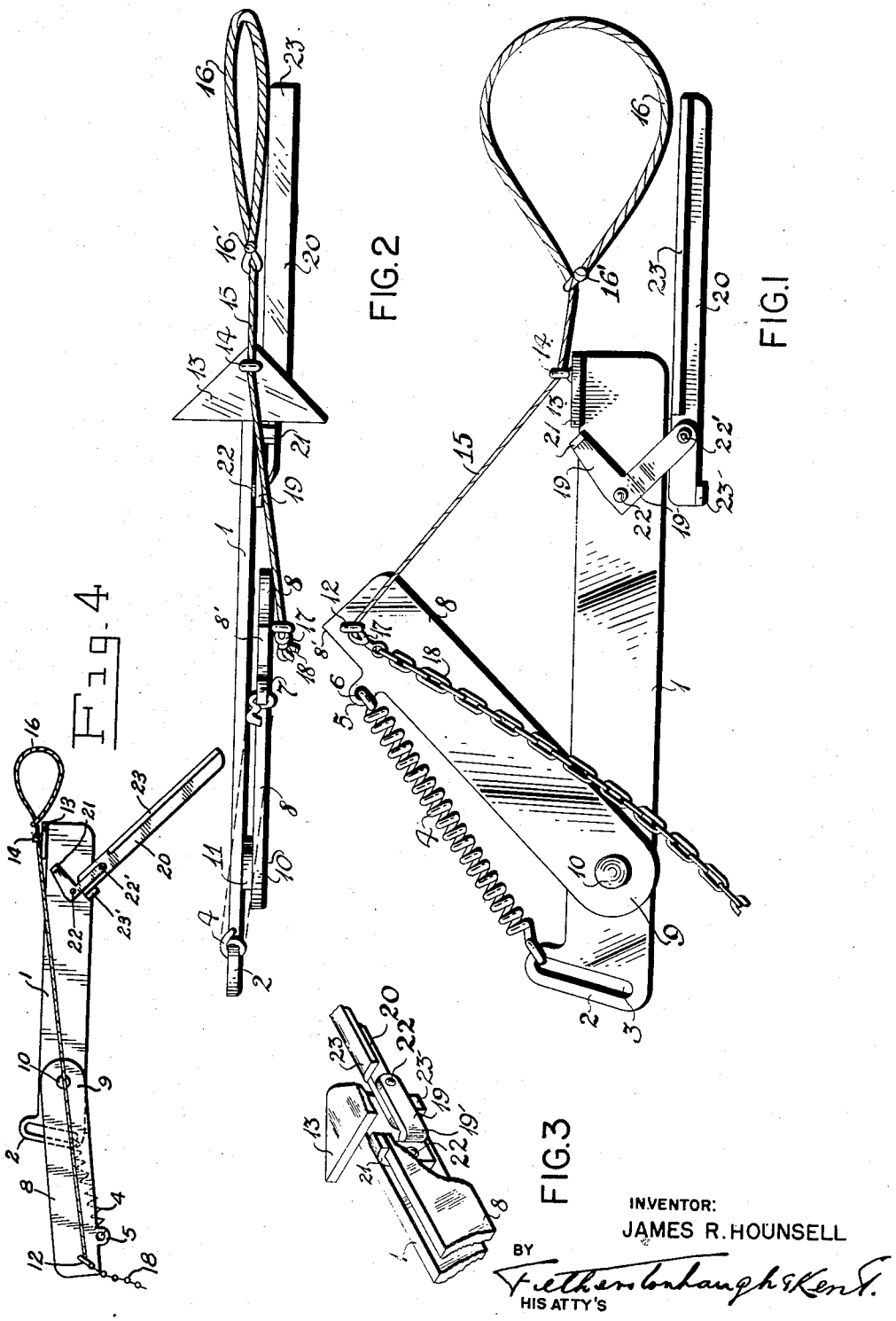

FIG. 1

FIG. 2

FIG. 3

FIG. 4

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HIS ATTY'S

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SPRING-ACTUATED ANIMAL SNARE

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1 Claim. (Cl. 43—87)

My invention relates to snares for capturing animals, particularly to a spring-actuated snare of the character herewithin described, an object of which is to provide a device which seizes the body of the animal, rather than a limb of such animal as in conventional traps.

A further object of my invention is to provide a device of the character herewithin described in which the operating parts are relieved of strain after having sprung, thus prolonging the useful life of the snare.

A still further object of my invention is to provide a device of the character herewithin described which avoids dependence upon jaws, as in conventional traps, and thus prevent mutilation of the pelt.

And yet another object of my invention is to provide a device of the character herewithin described which is simple and economical to manufacture and use, and is, otherwise, well suited to the purposes for which it is intended.

With the foregoing objects in view, and such other objects and advantages as will become apparent to those skilled in the art to which this invention relates as this specification proceeds, my invention consists essentially in the arrangement and construction of parts all as hereinafter more particularly described, reference being had to the accompanying drawings in which:

Figure 1 is a side elevation of my snare in situ, and in action; said action having been arrested in the view illustrated just before completion of the springing of the snare.

Figure 2 is a top plan view of my snare in the same position as in Figure 1.

Figure 3 is a fragmentary perspective view of the front end of the snare in the set position.

Figure 4 is a side elevation of the trap but in the sprung position.

In the drawings like characters of reference indicate corresponding parts in the different figures.

My snare is built up upon a substantially upright, relatively rigid, strap, which constitutes the frame **1**. This frame is of elongated, rectangular configuration, one end of which has a projection **2** in angular relation to the longitudinal axis of said frame. The projection contains a relatively short closed slot **3**, which is disposed at the same acute angle with the said longitudinal axis. The end **2** of the frame in which said slot is contained is trimmed parallel with the aforesaid slot.

The purpose of the slot **3** will become evident when it is observed that one attachment eye end of a tension coil spring **4** is looped into said slot, and is attached to the margin of the aforesaid frame projection surrounding the slot **3**.

The other attachment eye end of the coil spring **4** is looped through the ring or lug of material **5**, surrounding an aperture **6** provided in arm **8**. This arm is very similar to the frame **1** and is likewise a substantially rigid strap of elongated rectangular configuration, the lower end, however, being rounded.

The rounded end **9** of the arm **8** is apertured to receive a hinge pin **10**. This pin pivotally attaches the said arm to the aforesaid frame, through a spacer washer **11**. At the outer, opposite end of the arm, an eyelet or guideway **12** is provided which protrudes laterally from the surface thereof.

At the front end of the aforesaid frame, opposite to the slotted end, hereinbefore described, a snow supporting pad or wing **13** is provided. This snow supporting pad is of triangular configuration, and is fixed

to the upper edge of the said frame so that when the frame is vertical, and imbedded in snow, the said snow supporting pad is horizontal. If, however, the trap is used on uncovered ground, then a pair of small blocks (not illustrated) under the pad, may be utilized to support the frame in a vertical position.

At a point near the apex of the said triangular snow supporting pad, a further eyelet or guideway **14** is affixed to the upper surface of said pad.

Threaded through the two eyelets or guideways **12** and **14**, is the snare cord or cable **15** having a snare loop **16** formed in the forward, free end of said cable or cord with loop thimble **16'** in the form of a running noose. The other, or rearward end of said cord, or cable, is bent around a thimble **17** which thimble is larger than the aperture in the eyelet **12** so that it acts as a stop and prevents the undesirable displacement of the cable from the arm. A length of chain **18** is extended from said thimble to a toggle-end which is not illustrated but is conventional, and is intended for staking to the ground or otherwise securing the snare to a convenient limb or trunk.

Triggering of the snare is provided by a linkage comprising the trigger member **19** and snare-actuating trap release foot pad **20**. Said trigger is a member of relatively thin section in the form of a substantially right angled or bell crank, the free end being contra-angulated, at right angles, to form a trigger lip **21**. A hinge pin **22** passes through an aperture provided for it in the angle of the trigger, and in a corresponding point in the aforementioned frame **1**. The lower end of said trigger is rounded and contains a hinge pin **22'** by means of which the trigger is pivotally engaged with the aforementioned foot pad **20** and adjacent to the inner end thereof.

The said foot pad is an elongated strip with the forward major portion angled or flanged so that a relatively flat surface **23** is presented. The rearmost portion of said foot pad is likewise flanged, but along the lower edge, and for a very short distance thus providing a short but effective stop **23'** so that bearing is provided against the rearward edge **19'** of the aforesaid trigger **19**. Reference to Figure 1 will show that the trigger **19** and the foot pad **20** can be hinged with relation to one another in an upwardly direction but that the stop **23'** engaging the underside or rearward edge **19'** prevents hinging in the opposite direction.

In operation, the trap is set up in the snow in a suitable location. The frame is imbedded in a vertical position so that the wings **13** are upon the surface and stabilize the trap. Thus the foot pad upper surface will be horizontal, and is likewise imbedded in the snow. The arm **8** is drawn downwardly until the trigger lip **21** engages the forward and upper edge **8'** of the arm. The spring **4** is thereby extended, and tensioned. By the same means the snare cable **15** is slackened, and the snare loop **16** is formed and supported in the desired position adjacent to the foot pad **20**. The thimble **17** at the rearmost end of said cable will bear upon or against the rearward edge of the swivel eyelet **12**. The toggle end of the chain **18** is snagged or staked to a convenient point.

When the animal that is to be ensnared treads upon the foot pad **23**, its weight depresses said pad, and causes the trigger to rotate clockwise, thus releasing arm **8**. The spring **4** returns to its free, unextended length and causes arm **8** to snap rearwardly in a radius centering about hinge pin **10**. Due to the bearing of eyelet **12** against thimble **17**, the cable **15** is also snapped back until the loop thimble **16'** is brought up sharply against swivel eye **14**. This draws the loop up tight against the body of the animal and effectively snares it. At the same time, the entire frame will be brought up out of the snow in a lever action with the frame end at the base of the slot **3** as a fulcrum. When this is completed, the arm **8** has rotated through approximately 180 degrees so that the guideways **12** and **14** and pin **10** are substantially in alignment, thus preventing undesirable movement of the arm **8** by tension on the snare wire **16** by the animal, the lower eye end of spring **4** being in the bottom of closed slot **3**. Any

attempt by the ensnared animal to escape and attendant straining upon the snare will be resisted by the chain end toggle and the attachment thereof to a stake or trunk or similar fixing means.

Since various modifications can be made in my invention as hereinabove described, and many apparently widely different embodiments of same made within the spirit and scope of the claim without departing from such spirit and scope, it is intended that all matter contained in the accompanying specification shall be interpreted as illustrative only and not in a limiting sense.

What I claim as my invention is:

A trap or snare for animals comprising in combination an elongated, rectangular strap frame member, a guideway formed on the forward end of said frame member, an arm pivotally attached adjacent the opposite end of said frame member, a pivot extending through said arm and said frame member for said attachment, spring means extending between adjacent the outer end of said arm and the end of said frame member adjacent to which said arm is attached, a bell crank trigger pivotally attached to said frame member, a trigger-lip formed upon one end of said bell crank trigger, said lip adapted to engage the outer forward end of said arm, a foot pad member extending forward of said frame member and being pivotally attached to the other end of said bell crank trigger, said foot pad member and said trigger lip coacting so that said trigger is disengaged from said arm when said foot pad member is depressed, a snare wire attached by one end thereof to the outer end of said arm and extending forwardly through said guideway, the noose of said snare wire being adapted to overlie said foot pad member, means transversely secured to the forward end of said frame member to maintain said trap vertically when in the set position, and the end of said frame member to which one end of said spring means is attached being provided with an elongated slot, said slot inclining upwardly and forwardly, the end of said spring means being slidably engageable within said slot, said point of attachment of said snare wire with said arm, said guideway, and said pivot adapted to align substantially when said trap is in the sprung position, thereby preventing undesirable closing of said trap by tension on said snare wire.

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