Nov. 7, 1944. P. F. FISHBECK 2,362,062

PELT STRETCHER

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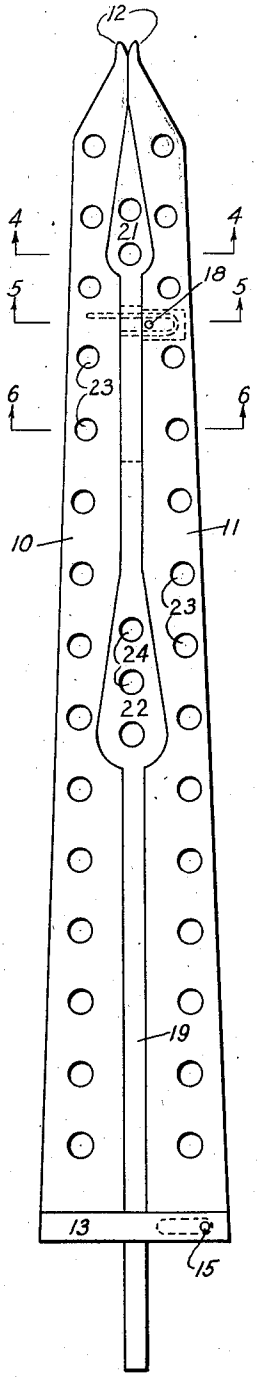


FIG. 1

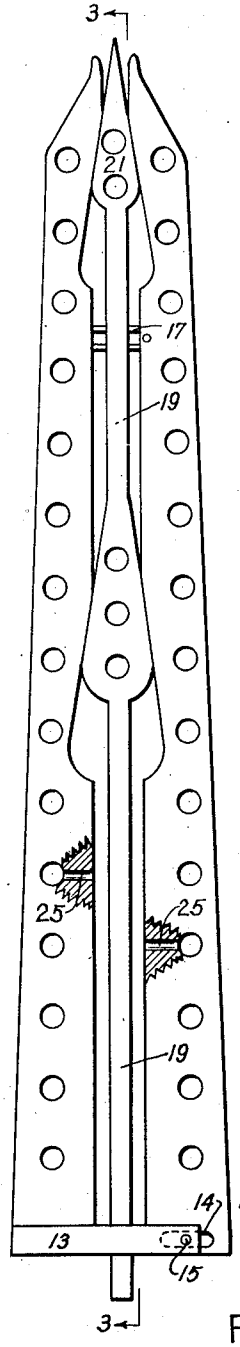


FIG. 2

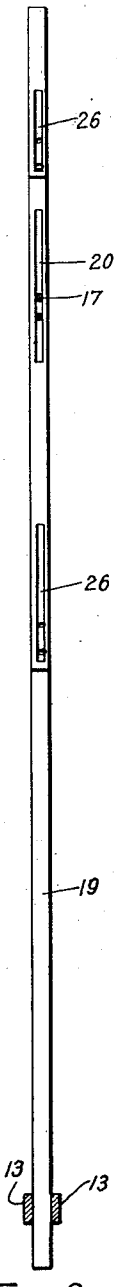


FIG. 3

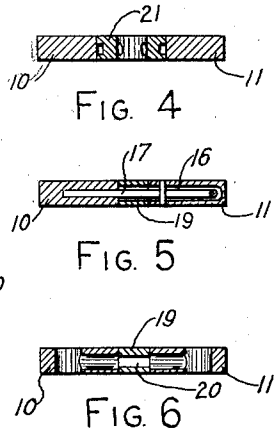


FIG. 4

FIG. 5

FIG. 6

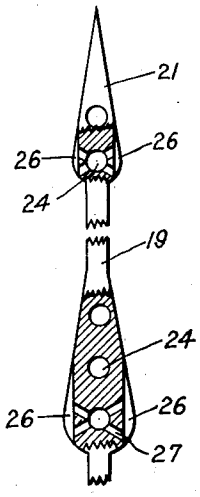


FIG. 7

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PELT STRETCHER

Philip F. Fishbeck, near Denver, Colo.

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5 Claims. (Cl. 45—24)

This invention has to do with the initial preparation and conditioning of raw animal pelts and skins for ultimate marketing, and has as an object to provide convenient and efficient means for stretching and supporting raw pelts during drying and curing thereof.

A further object of the invention is to provide improved means quickly and conveniently insertable and extensible within a pelt to smoothly extend said pelt and hold it in stretched condition during drying and curing.

A further object of the invention is to provide an improved arrangement of means for the circulation of air within and about a stretched pelt.

A further object of the invention is to provide improved means in a pelt stretcher operable to quickly and positively extend and retract the stretcher relative to a pelt.

A further object of the invention is to provide an improved pelt stretcher that is simple and inexpensive of manufacture in such sizes as may be best adapted for use with pelts from specific animals, which is compact, light in weight, and readily transportable, which requires no tools or special appliances for its use and operation, and which is highly efficient in the accomplishment of the ends desired.

My invention consists in the construction, arrangement, and combination of elements hereinafter described, pointed out in my claims, and illustrated by the accompanying drawing, in which—

Figure 1 is an elevation of the improved stretcher as retracted for insertion within a pelt. Figure 2 is a view similar to Figure 1 illustrating the stretcher as laterally extended or expanded for stretching of a pelt, certain surface portions being broken away to disclose otherwise concealed construction. Figure 3 is an edge view, partly in section, taken on the indicated line 3—3 of Figure 2. Figure 4 is a cross section taken on the indicated line 4—4 of Figure 1. Figure 5 is a cross section taken on the indicated line 5—5 of Figure 1. Figure 6 is a cross section taken on the indicated line 6—6 of Figure 1. Figure 7 is a fragmentary, detail elevation, partly in section and with certain portions broken away to conserve space, of the stretcher-expanding member employed in the improvement.

In the construction of the improved stretcher, as shown, the numerals 10 and 11 designate substantially identical, complementary board elements, preferably formed of wood or equivalent readily-obtainable, light weight, substantially rigid, and easily worked material. Each of the elements 10 and 11 is relatively long, flat, narrow in proportion to its length and thin in proportion to its width, and is tapered from a relatively wider base to a somewhat narrower tip end. Long margins of the elements 10 and 11 are preferably straight and said elements are arranged to be assembled with their inner, adjacent long margins parallel and their outer long margins consequently converging from the base and toward the tip of the assembly. Tip portions of the elements 10 and 11 have their outer edge margins curved or inclined inwardly into relatively-sharper convergence to provide a somewhat pointed end adapted to facilitate insertion of the assembly within a pelt, and each of said elements 10 and 11 preferably terminates at its tip end in a longitudinally projecting point 12 adapted to engage in a nostril of the pelt, said points 12 being closely adjacent when the device is retracted as shown in Figure 1 and being laterally separated when the device is expanded as shown in Figure 2.

The board elements 10 and 11 are maintained in the desired relationship and associated for relative lateral movement in any convenient or desired manner, means suitable for such purpose being illustrated as comprising slats 13 transversely of and overlying opposite sides of the element wider or butt ends and secured to the element 10, a transversely-disposed slot 14 intersecting the wider end of the element 11 between the slats 13, and a pin 15 fixed in and extending between the free ends of the slats 13 in traversing relation with the slot 14, a relatively-deep recess 16 in and opening laterally through the inner margin of the element 11 adjacent and spaced somewhat inwardly from the tip end of said element, a U-shaped yoke 17 fixed at its open end in and to the inner margin of the element 10 to project laterally from said element and position its closed end for slidable reception within the recess 16, and a pin 18 fixedly engaging through and adjacent the inner margin of the element 11 to traverse the recess 16 between the arms of the yoke 17. As will be apparent, the arrangement of means just above described serves to maintain the elements 10 and 11 in coplanar relation and against longitudinal relative displacement, while permitting limited lateral movement of one of said elements toward and away from the other.

Lateral separation of the elements 10 and 11 for the application of forces operating to stretch a pelt telescoped over the assembly is accomplished through the agency of a longitudinally-shiftable wedge or cam bar disposed between the inner margins of said elements. The stretcher-

expanding member is designated generally by the numeral 19 and, throughout the major portion of its length, consists of a straight shaft of uniform width and of a thickness corresponding with that of the elements 10 and 11, said straight shaft portion being received between and serving to uniformly space apart adjacent inner margins of the elements 10 and 11 when the stretcher is retracted as shown in Figure 1. The member 19 has a length somewhat greater than that of the elements 10 and 11 and the shaft portion of said member at the butt end of the stretcher extends freely and slidably between the spaced slats 13 and projects outwardly beyond said slats a considerable distance, while the other end of said member shaft portion extends beyond the yoke 17 and is provided with a laterally-opening, longitudinal slot 20 disposed to accommodate and slidably embrace said yoke so as to permit limited longitudinal reciprocation of the member 19 relative to said yoke. The tip end of the member 19 is expanded or enlarged laterally to form a head 21 whereof the side margins converge, at equal degrees of inclination toward the tip of the device, to meet in a sharply-acute point on the longitudinal median line of the assembly, thus providing a symmetrically-disposed wedge on the tip end of said member, and inner side margins of the elements 10 and 11 between the position of the yoke 17 and element tip ends are notched and recessed to conform with and fit closely about the outline of the head 21 when said elements are moved laterally into engagement of their inner margin straight portions against the member 19 shaft margins. Similarly, an intermediate portion of the member 19 is extended laterally and marginally contoured to form a symmetrically-disposed second wedge or cam 22 positioned about half way between the head 21 and the butt end of the device and presenting side margins converging toward the tip end of the device at substantially the same degree of inclination as characterizes the converging margins of the head 21, and corresponding portions of the element inner margins are shaped to accommodate and fit closely about the wedge 22 when the elements of the assembly are in the position shown in Figure 1.

As will be clear from the foregoing, the elements 10 and 11 are held in coplanar relation and associated for limited relative lateral travel by means of the slats 13, yoke 17 and pins 15 and 18, while the member 19 is held in position between said elements and mounted for limited longitudinal travel relative thereto by means of said slats 13 and yoke 17. In the use of the device, the member 19 is moved to the limit of its range of travel toward the butt end of the device, whereby the head 21 and wedge 22 of said member are brought into full registration with the recesses or notches formed for their accommodation in the element inner margins, whereupon the elements 10 and 11 may be approached laterally until their inner margins engage with and against corresponding margins of the member 19 and the device is then retracted to the position of elements shown in Figure 1. With the stretcher retracted to its minimum lateral dimension, a pelt is telescoped over the tip end of the device and drawn therealong until fully extended thereon, with the nostrils of the pelt preferably engaged by the points 12, whereafter, holding the stretcher substantially vertical, the projecting end of the member 19 may be tapped against any suitable firm object or surface and said member thereby shifted longitudinally of the device and toward the tip end thereof for wedging action of the head 21 and wedge 22 against and for laterally separating effect between the elements 10 and 11, such action tending to shift the elements of the device to the relative positions shown in Figure 2 and thereby exert effective stretching tension interiorly of the pelt. The angle of inclination of the wedge or cam surfaces is so selected as to provide that friction between the engaged surfaces will hold the member 19 in its shifted position for maintenance of stretching effect upon the pelt, thereby eliminating the necessity for any other means for fixing said member 19 in its shifted position. After the pelt has dried or cured to the desired extent, the member 19 is reversely shifted to permit the elements 10 and 11 to again approach laterally, and the thus-loosened pelt may be slipped freely and easily over the tip end and away from the device.

The device thus far described is operable to mount and stretch a pelt and presents novelty of structure and operative relationship of elements for such purpose, but the invention presents additional novelty in the provision of means for the positive circulation of air within and through a pelt stretched on the device, such air circulation serving to facilitate and enhance proper curing and drying of the pelt. Each of the elements 10 and 11 is intersected by a plurality of relatively-large holes or openings 23 spaced apart in any suitable arrangement to open through the parallel faces of said elements, and the head 21 and wedge 22 of the member 19 are similarly intersected by correspondingly-disposed holes or openings 24. A bore or passage 25 formed in the thickness of the element communicates between each of the holes 23 and the space between the element inner margin and the adjacent member 19, so that when the stretcher is expanded, as shown in Figure 2, air may pass freely between each of the holes 23 and the channel open between the member 19 and elements 10 and 11, even though said holes and channel may be covered by a pelt. To insure that air may circulate longitudinally of the device and through the channel above mentioned, longitudinal rabbets 26 are formed in the inclined side margins of the head 21 and wedge 22, so that a continuous passage longitudinally of the assembly is provided whenever the member 19 is moved to laterally separate the elements 10 and 11. As is clearly shown in Figure 7, the holes 24 intersecting the head 21 and wedge 22 communicate through suitable bores 27 with the rabbets 26, thereby providing for access of air to all major portions of a pelt interior during stretching and drying of such pelt on the device.

Since many changes, variations, and modifications in the specific form, construction, and arrangement of the elements shown and described may be had without departing from the spirit of my invention, I wish to be understood as being limited solely by the scope of the appended claims, rather than by any details of the illustrative showing and foregoing description.

I claim as my invention:

1. A pelt stretcher comprising a pair of longitudinally-tapered, complementary elements correspondingly disposed in coplanar relation with their adjacent inner margins parallel, means fixed to the wider end of one of said elements in slidably-embracing relation with the wider end of the other element, a recess in and opening

through the inner margin of one of said elements toward the tip end thereof, a yoke fixed at its open end in and projecting laterally from the inner margin of the other element for slidable reception in said recess, a pin fixedly traversing said recess between the arms of said yoke, a straight member slidably supported by said yoke and element-embracing means for longitudinal reciprocation in the plane of and in separating relation between said elements, laterally-extended, uniformly-inclined wedge blocks in longitudinally-spaced relation on said member, and notches contoured to conform with the outline of said wedge blocks opening through inner margins of said elements for accommodation of said wedge blocks when said member is in one position and cooperation with said wedge blocks to laterally separate said elements when said member is shifted toward the narrower ends of the elements.

2. A pelt stretcher comprising a pair of longitudinally-tapered, complementary elements each formed with a narrowed tip portion terminating in a longitudinally-projecting point, means for connecting said elements in laterally-shiftable, longitudinally-fixed, coplanar relation, said means comprising a yoke fixed to and extending laterally from a wider end of one of said elements in slidably-embracing relation with the wider end of the other element, a slot in and elongated laterally of the wider end of said slidably-embraced element between the arms of said yoke, a pin fixedly engaging between the yoke arms in traversing relation with said slot, a recess in and opening through the inner margin of one of said elements toward the narrower end thereof, a second yoke fixed at its open end in and projecting from the inner margin of the other element for slidable reception within said recess, a pin fixedly traversing said recess between the arms of said second yoke, and a wedge-equipped member slidably supported by said yokes in the plane of and in separating relation between said elements and shiftable longitudinally for variation in the lateral separation of said elements.

3. In a pelt stretcher having a pair of longitudinally-tapered, coplanar elements correspondingly disposed for limited lateral separation, means for varying the lateral separation of said elements, said means comprising a straight member shiftably associated with, in the plane of, and for longitudinal relative displacement in spacing relation between parallel adjacent inner margins of said elements and projecting beyond the wider butt ends of the elements, a laterally-expanded head on the end of said member adjacent and inwardly of the tip ends of said elements and defined between uniformly-inclined side margins converging toward the tip ends of the elements, a laterally-expanded block on an intermediate portion of said straight member defined between side margins inclined at the same degree and in the same direction as the head side margins, and notches opening through the opposed inner margins of said elements contoured to correspond with side margins of said head and block and disposed to accommodate said head and block when said member is shifted toward the wider end of the assembly and to coact with said head and block side margins for lateral separation of said elements when said member is shifted toward the narrower end of the assembly.

4. In a pelt stretcher having longitudinally-tapered, complementary elements disposed in longitudinally-fixed, laterally-shiftable, coplanar relation and wedge-equipped means in spacing relation between and longitudinally shiftable to laterally separate said elements, means for the circulation of air interiorly of a pelt mounted on the stretcher, said means comprising a plurality of holes opening through said elements and the wedge portions of said separating means, and a passage connecting each of said holes with the channel between the inner margins of said elements.

5. In a pelt stretcher having a pair of coplanar, laterally-shiftable elements and a wedge-equipped member in spacing relation between and shiftable longitudinally to separate said elements and simultaneously establish an open channel therebetween, means for the circulation of air interiorly of a pelt mounted on the stretcher, said means comprising rabbets longitudinally of and opening through side margins of the wedge portions of the separating member, holes intersecting said wedge portions, passages communicating between said holes and rabbets, a plurality of holes spaced throughout and intersecting the areas of said elements, and passages connecting said latter holes through inner margins of said elements with the channel therebetween.

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