Jan. 5, 1943. S. H. KRASNO 2,307,280

APPARATUS FOR APPLYING INSERTS IN PILE MATERIALS

Filed Sept. 13, 1940

Fig. 1.

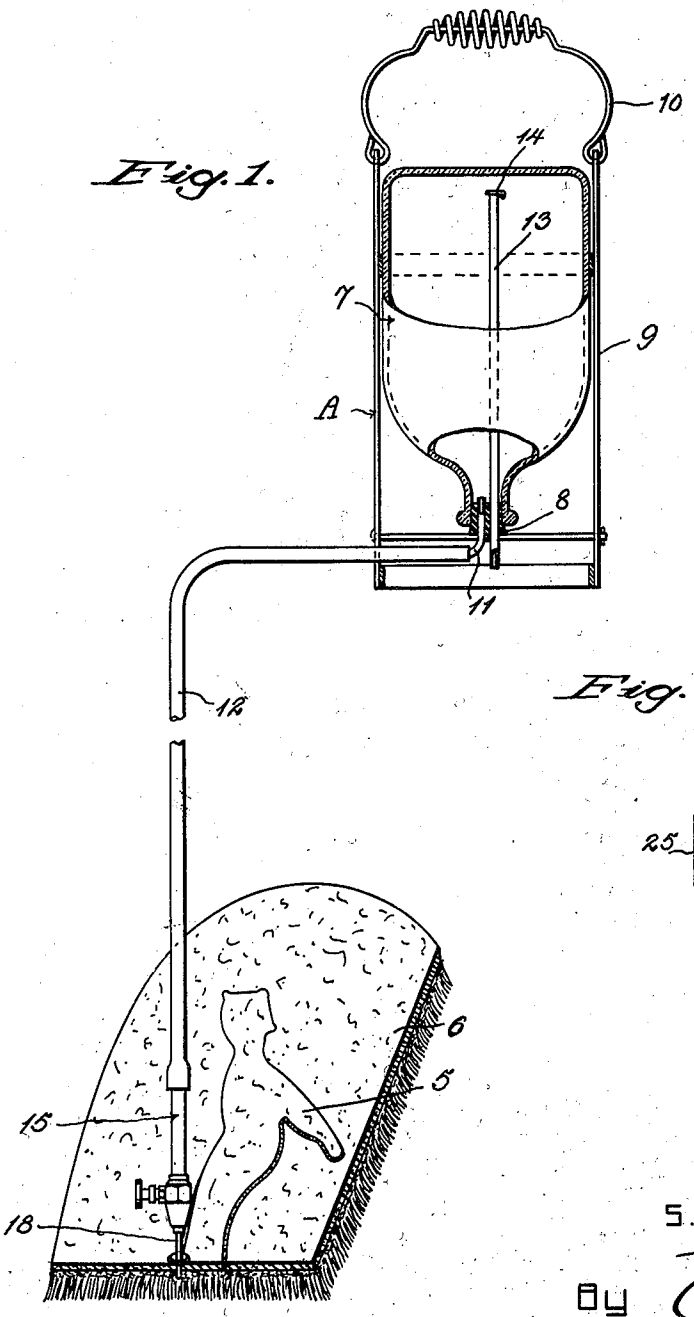
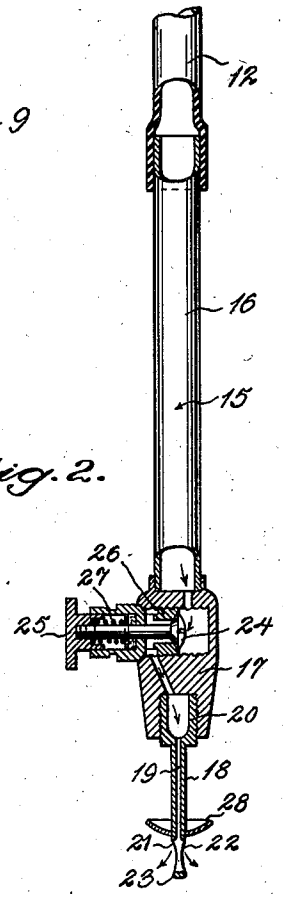


Fig. 2.



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Patented Jan. 5, 1943 2,307,280

UNITED STATES PATENT OFFICE

2,307,280

APPARATUS FOR APPLYING INSERTS IN PILE MATERIALS

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Application September 13, 1940, Serial No. 356,685

3 Claims. (Cl. 91—62.5)

This invention appertains to a novel apparatus for facilitating the repairing of furs and for incorporating contrasting inserts or inlays in furs, electrified shearlings, plush, carpets, or any other similar material, and is a continuation in part of my copending application Serial No. 313,021, filed January 8, 1940.

One of the primary objects of my present invention is to provide a novel device for facilitating the incorporation of delicate or intricate designs, such as animals, human figures, and the like, in materials having an upstanding pile, whereby novel effects may successfully be had in relative small objects, such as mittens, ear muffs, etc.

Another prime object of my invention is the provision of a novel needle for spreading the joint between the inlay and the body, and for applying the desired adhesive to the edges of the inlay and body simultaneously, whereby the adhesive can be quickly and efficiently applied to permit the proper fastening of the inlay in place.

A further salient object of my invention is the provision of a tool so formed and constructed that a small quantity of an adhesive can be successfully applied at the base of the fur or the like, so that the hair or fibres will be intermingled and bound together next to the hide or body, so that upon the flexing of the material no seam will be visible to the naked eye.

A still further object of my invention is the provision of means incorporated directly in the tool for accurately controlling the flow of the liquid to the needle.

With these and other objects in view, the invention consists in the novel construction, arrangement, and formation of parts, as will be hereinafter more specifically described, claimed, and illustrated in the accompanying drawing, in which drawing:

Figure 1 is a side elevational view of my novel apparatus, showing the same in use for applying an adhesive simultaneously to the edges of an insert arranged in a section of an electrified shearling, parts of the view being shown broken away and in section.

Figure 2 is an enlarged detail view illustrating the novel tool, with parts thereof shown broken away and in section.

Referring to the drawing in detail, wherein similar reference characters designate corresponding parts throughout the several views, the letter A generally indicates my novel apparatus for securing an insert 5 in a section of material 6, such as an electrified shearling.

The apparatus A comprises a tank or receptacle 7 for the reception of a suitable adhesive, which preferably has a latex base. The receptacle 7 can be in the nature of a jar or bottle having its neck closed by a stopper 8, and this bottle or jar is received in a carrying and supporting frame 9. The frame 9 can be provided with a handle 10, whereby the jar can be easily carried, and whereby the same can be suspended from an overhead support.

When the jar is in use, the same is disposed in an inverted position, and for filling, the jar can be disposed with its neck uppermost to facilitate the removal of the stopper and the placing of the adhesive therein. Extending through the stopper is an L-shaped conducting tube 11, and a section of rubber tube or the like 12 is connected therewith. Also extending through the stopper is an air inlet pipe 13, and the upper end of the pipe can be closed by a hinge flap valve 14, which will prevent the dripping of the adhesive from the air inlet pipe during the inverting of the jar after the filling thereof with the adhesive. The flap valve has a sufficiently loose fit to allow the escape of air past the same.

The outer end of the flexible tubing 12 carries the operating tool 15, and this tool includes an elongated hollow manipulating handle 15, which can be in the nature of a short length of metal tubing. Threaded on the forward end of the handle 16 is a valve casing 17, and the valve casing 17, in turn, carries the adhesive applying needle 18. The needle 18 has formed therethrough a longitudinally extending bore 19, and the inner end of the needle is provided with an enlarged hollow shank 20, which can be readily threaded into the valve casing 17. The opposite sides of the needle 18 adjacent its forward end are provided with outlet openings 21 and 22, leaving the extreme tip of the needle closed by a wall 23.

The valve casing 17 is provided with a way therethrough for permitting the flow of the adhesive from the flexible tubing 12 and hollow handle 16 to the needle, and a spring-pressed thumb-operated valve 24 is provided for cutting off and controlling the flow of the adhesive through the passageway in the valve casing. By referring to Figure 2, it can be seen that when pressure is exerted on the finger piece 25 connected with the valve 24, the valve can be moved off its seat 26 against the tension of its spring 27 for permitting the flow of the adhesive through the valve casing.

After the insert or inlay 5 has been incorpo-

rated in the section of the fur, electrified shearling, or other material in accordance with my application heretofore referred to, the needle is inserted in the joint between the insert or inlay and the section of material, so as to spread the joint and at the same time apply adhesive to the meeting edges of the body and inlay.

As the openings **21** and **22** have their walls concaved, the meeting edges of the inlay or insert and the section of material tend to slip into said openings **21** and **22**, and as the needle is drawn along, the adhesive adheres to said edges, which permits the quick and efficient applying of the adhesive without waste thereof and without ruining the material by an excessive flow of adhesive thereon. Thus, the tool insures the proper coating of the edges of the inlay and section of material.

If desired, the needle adjacent the outlet openings **21** and **22** can be provided with a concavo-convex guard plate **28**, which limits the insertion of the needle in the joint.

The adhesive will readily flow from the receptacle by gravity, but, if desired, the adhesive can be fed by pressure, and this can be accomplished by forcing air under pressure into the receptacle.

The tool is easy to operate, and the hand is placed around the hand grip **16**, with either the thumb or forefinger on the finger piece **25** of the valve **24**, and as the tool is light in weight, the same can be efficiently handled by an operator to permit the needle to follow intricate designs or to make repairs in furs and the like.

Changes in details may be made without departing from the spirit or the scope of my invention, but what I claim as new is:

1. An instrument for applying liquid adhesive simultaneously to the opposite edges of material to form a seam comprising, a hand grip, a hollow needle on the forward end of hand grip, means for supplying the hollow needle with adhesive, said hollow needle having oppositely directed outlet openings therein for the adhesive adjacent its forward end, and a guard disc in front of said hand grip secured to the forward end of the needle adjacent to the outlet openings for sliding contact with one face of the material and for positioning the openings relative to the edges of the material.

2. An apparatus for applying adhesive to furs and the like comprising, a receptacle for the adhesive, a hand tool having a hollow handle, a flexible tube connecting the receptacle with one end of the hollow handle, a needle having a longitudinally extending bore therethrough, and oppositely opening apertures communicating with the bore, a valve casing connecting the hollow handle with the needle, and a finger-operated valve in said casing for controlling the flow of the adhesive from the handle to the needle.

3. An apparatus for applying liquid adhesive to furs and the like comprising, a receptacle for the adhesive, a hand tool including a needle having a longitudinally extending bore therethrough and oppositely opening apertures adjacent one end thereof communicating with the bore, a flexible tube connecting the receptacle with the hand tool, a valve casing connected to the opposite end of the needle from said openings, and a finger-operated valve in said casing for controlling the flow of adhesive to the needle.

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