This invention relates to improvements in fisherman's lures, and it comprises both the process of making the lure as well as the finished article.

One of the foremost objects of the invention is to carry out a process of making artificial flies, the steps of which are applicable to the manufacture of a variety of bugs, a particular feature being the use of such material that will both give the body a life-like appearance in the water and retain in the hackle the quality of standing out as intended and not clinging to the body when wet.

A further object of the invention is to carry out the step of weaving the body whereby the underpart of the fly or bug is given a color different from the top or back thereby causing the fly to look more natural and approximately the same as certain kinds of bugs.

A further object of the invention is to make a liberal use of hair in the manufacture of the body and hackle, this having the qualities of utmost durability and of inherent stoutness to stand out from the body when put to the respective uses.

A still further object of the invention is to provide a fly comprising a body of woven thread and hair and a hackle of hair.

In the drawings:

Figure 1 is an elevation of a fishhook illustrating the preparatory step of winding on a binding thread in order to secure a colored silk or other thread to the shank of the fishhook.

Figure 2 illustrates how the binding thread has been wound on the shank from the eye to a point opposite the barb in order to secure the colored thread.

Figure 3 illustrates the step of adding a wisp or tail of hair preparatory to its affixation to the winding of binding thread.

Figure 4 illustrates how the binding thread has been reversely wound toward the eye of the hook thereby to affix one end of the hair tail.

Figure 5 illustrates the step of alternately winding the tail and colored thread to produce an interwoven body in which the hair and thread are interwoven or clinched, the hair comprising the top or back of the fly body and the colored thread comprising the underpart of the body.

Figure 6 illustrates the completed body of interwoven hair and thread.

Figure 7 illustrates the step of applying the hackle.

Figure 8 is a view of the completed fly or bug. Figure 9 is a detail view illustrating how the hackle is made.

The successful use of artificial flies in the fishing for trout and other game fishes depends in a large measure on the natural appearance of the bug or fly. Natural insects such as the Green drake, Cinnamon stone-fly, Orange stone-fly, Stone-fly creeper or trout-heiligrammite, etc. generally have bright underparts which have a degree of glitter when the insect wriggles either on or in the water, thus attracting the fish from considerable distances. These insects also retain their natural shapes and pose both when drawn along the surface and when submerged.

The purpose of the invention is to manufacture an artificial fly which will simulate the natural insect food of trout and other game fish, an outstanding purpose being to preserve the natural appearance to such an extent that the fish will not hesitate to strike for it. Attention is first directed to the following process of making the artificial fly:

A hook 1 of the desired size and type, equipped either with or without a gut 2 in its eye 3, has one end of a colored silk thread 4 applied to its shank 5 approximately in the manner shown in Figure 1. The end of this thread can be held against the shank 5 in any convenient way preparatory to winding on a binding thread 6.

The binding thread 6 is wound on, for example in the direction of arrow a (Fig. 1), starting at the eye 3 and ending at the point 7 (Fig. 2) approximately opposite to the barb 8. The binding thread is generally of a dark color, but the thread 4 is of a brighter color, for instance orange. It is preferably composed of silk, because of the sheen and durability of this material although any suitable equivalent can be substituted and still keep within the intention and spirit of the invention.

When the preliminary winding of the binding thread 6 has been completed as described (Fig. 2), a wisp or tail of horsehair 9 (Fig. 3) is applied at one end as at 10. This is held in position in any convenient way, usually by the fingers of one hand, whereupon the remainder of the binding thread 6 is reversely wound on the end 10 (Fig. 4) in order to permanently secure the wisp or tail 9 to the first layer of binding thread. After the reverse winding of the latter is completed, the end is secured by knotting or otherwise as at 11 at a point adjacent to the eye 3. The thread 4 and wisp 9 are herein regarded as stranded materials dissimilar in substance and color, the use of hair and silk thread being specified as preferable, but conveniently substituted by other materials which have the same desired characteristics.
Thus far the fly comprises the hook with the free ends of the silk thread 4 and hair wisp 9 extending therefrom in a general direction away from the barb 8. The important step of interweaving the thread 4 and wisp 9 is now begun. The interweaving is accomplished by alternate wrappings of the thread 4 (arrow b, Fig. 5) and wisp 9 (arrow d, Fig. 5) in the common direction by which the wrap is to be completed to a back or top 12 of hair (Fig. 6) and an undert 13 of 8right silk thread the wrapping of the thread 4 and wisp 9 produces the body which is generally denoted by 14 in Figures 6, 7 and 8.

The wrapping is carried out from the point 7 to the eye 3, the erstwhile free end of the hair wisp 9 being secured adjacent to the eye by several final wrappings of the thread 4 with a possible knotting or other mode of securing as at 25 (Fig. 6). In addition to this function of producing a bright undert 13 (Fig. 6), the thread 4 serves to keep the hair 9 from loosening and pulling off the hook.

The next step comprises the addition of a hackle 16. This hackle comprises a strand of hair 17 which are close looped, knotted or otherwise affixed at 18 to a suitable thread 19. This thread is without kinks, etc., of any kind and therefore unhindered so that the loops 18 can be slid or pushed along it into close formation as desired. The addition of the hackle is begun by securing one end of it (Fig. 7) to the body 14 near the eye 3 by means of another binding thread 20. A short length of this thread is wound on and secured in any appropriate way near the eye 3, the resulting contour 21 (Figs. 7 and 8) simulating what is herein known as the head.

One end of the hackle 16 having been secured as outlined, the remainder of it is wound around the body 14 and the otherwise free end of the thread 19 is securely tied. Usually one turn of the hackle around the body 14 will provide sufficient outstanding hair (Fig. 8) to complete the fly, but more than one turn may be necessary or may be used for the different sizes of hooks or the amount of hair needed for the particular hackle being formed. Figure 9 illustrates how the hackle 16 is made.

The strands 17 are looped or knotted onto the thread 19 as at 18 wherein the loops or knots are moved together in close formation as in Figure 7. Enough loops of hair will be applied to the thread 19 in the foregoing manner to make the size of hackle wanted. Various quantities of hair are required for the different sizes of hooks. For instance hook size #4 requires between four and five hairs for each strand 17, while a #10 hook requires only three hairs per strand.

At this point it is necessary to understand that the coloring of the hair, especially in the hackle 16 is an important consideration. The wisp 9 comprises a selection of hair which is darkest at the point 22 (Fig. 4) and gradually fades out to a white or near white at the extremity 23. Or the wisp of hair 9 may comprise a selection of colors so as to have, when the hackle is complete, the desired color combination. When this wisp is wound on by interweaving with the thread 4, the darkest portion will come next to the barb 8 while the latter portions are blended along the body 14 toward the eye 3.

A similar selection of hair is made for use in the hackle 16 as well as in its components 17, 18 and 19 (Fig. 9), different colors of hair being used to obtain the desired color effects. The darkest portion occurs in the loops 18 (Figs. 7 and 9). From here the color blends into a white or near white at the free extremities of the hairs. When originally made, the hairs of the hackle 16 are rather long, but the final step of making the fly (Fig. 8) will be to trim off enough of the free ends of the hackle so that the binding hairs are substantially coextensive with the barb end of the hook.

The invention also includes the artificial fly itself. This comprises a body 14 composed of a combination of horse or similar hair and silk or similar thread. The hair constitutes the back 12 of the body while the silk thread constitutes the undert. The silk is thus contrasted against the hair which does not possess any noticeable sheen.

The use of hair in both the body 14 and hackle 16 is preferred because of its durability as well as its ability to stand out as in Figure 8 and not cling to the body of the bug when wet. It gives the fly a life-like appearance when in the water, tending to make it assume a posture closely simulating that of a natural fly either when rested on the surface of the water or when the strands of the hackle are thrown out to make the fly's wings move. It is not desirable to use artificial hackles for this purpose.

While the chief development of the invention lies in fishing flies and the process of making them, yet one of the principles is applicable to other arts. This statement has specific reference to the hackle 16 (Fig. 9). The thread or threads 19, whatever their material or characteristics might be, comprise the foundation on which the hairs 17 are looped as at 18. When the loops are pushed up in close formation the dangling hair produces a very close fringe.

An article made according to this principle is useful in the manufacture of wigs, hair ornaments, trimmings of various kinds such as for wearing apparel and millinery, and can be employed in the general manufacture of hair braid and for a multitude of other purposes.

I claim:

1. The process of making artificial flies consisting of progressively interweaving two stranded materials as applied along the shank of a hook from the barb to the eye to compose a body.

2. The process of making artificial flies consisting of alternately wrapping the respective ones of a plurality of stranded materials around the shank of a hook so as to compose a body in which one of the materials is exposed on the undert and the other is exposed on the back, and securing a hackle to the body a short distance from the eye of the hook.

3. The process of making artificial flies consisting of alternately wrapping a wisp of hair and a colored thread around the shank of a hook thereby to form a body in which the colored thread is exposed on the undert and the hair on the back, and securing a hackle to the body a short distance from the eye of the hook.

4. The process of making artificial flies consisting of securing a colored thread to the shank of a hook by a winding of binding thread, applying a wisp of hair to the winding and reversing the direction of winding of the binding thread to secure the wisp at one end, alternately winding the remainder of the wisp and colored thread to compose a body in which the colored thread is exposed on the undert and the hair on the back, securing one end of the hackle to the body a short distance from the eye of the hook by means of a second binding thread, supporting said thread around the body to the eye to simu-
late a head, and wrapping the hackle around the body and securing the other end thereof.

5. An artificial fly comprising a hook, a body applied to the hook consisting of alternate wrappings of hair and colored thread, the said wrappings of hair being exposed on the back of the body and the wrappings of thread being exposed on the underpart, a hair hackle secured to the body a short distance from the eye of the hook, and a wrapping of dark thread on the body between the hackle and the eye simulating a head.

6. An artificial fly comprising a hook, a body formed on the hook comprising alternate wrappings of hair and colored thread, said wrappings constituting an interwoven structure exposing the hair on the back of the body and the colored thread on the underpart, a hackle of hair secured to the body a short distance from the eye of the hook, and a wrapping of dark thread on the body between the hackle and said eye simulating a head.

7. A fly comprising a hook, a body of thread and hair on the hook shank, the thread being exposed on one side and the hair on the other side of the body, and a hackle on the body spaced from the eye of the hook.

8. A fly comprising a hook, a body of dissimilar materials on the shank of the hook, one of the materials being exposed solely on one side and the other material solely on the opposite side of the body, a hackle spaced from the eye of the hook, and means to secure the hackle to the body, said means covering the body to the eye to simulate a head.

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