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Atkin

[11] **3,794,280**

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[54] **FLY TYING DISPOSAL APPARATUS**

[76] Inventor: **Darwin R. Atkin,** 354 N. York St., Porterville, Calif. 93257

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[52] **U.S. Cl.** **248/99,** 248/95, 248/291, 269/15

[51] **Int. Cl.** **B65b 67/12**

[58] **Field of Search** 248/95, 99, 100, 101, 291; 269/15

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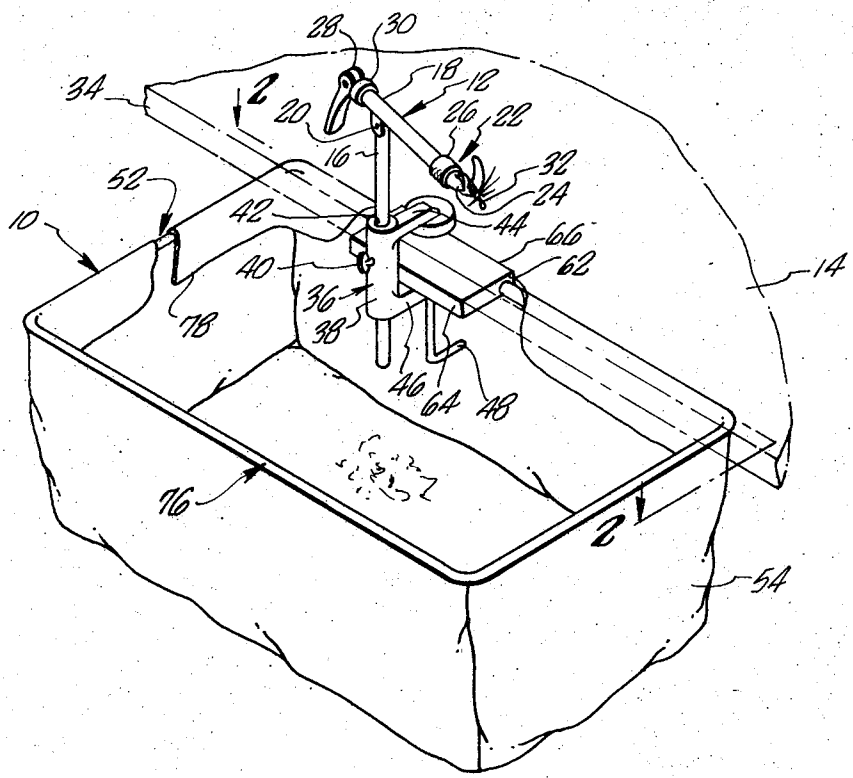
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Primary Examiner—Roy D. Frazier
Assistant Examiner—Rodney H. Bonck
Attorney, Agent, or Firm—Lyon & Lyon

[57] **ABSTRACT**

A fly-tying disposal apparatus for use with a fly-tying vise is suitable for both right and left hand tiers and includes a support for disposal bags which is adjustable to maintain the bag in a proper and non-interfering position and work level with respect to the working end of the vise for the collection of waste material and which is movable without dismounting to an inoperative position.

9 Claims, 6 Drawing Figures



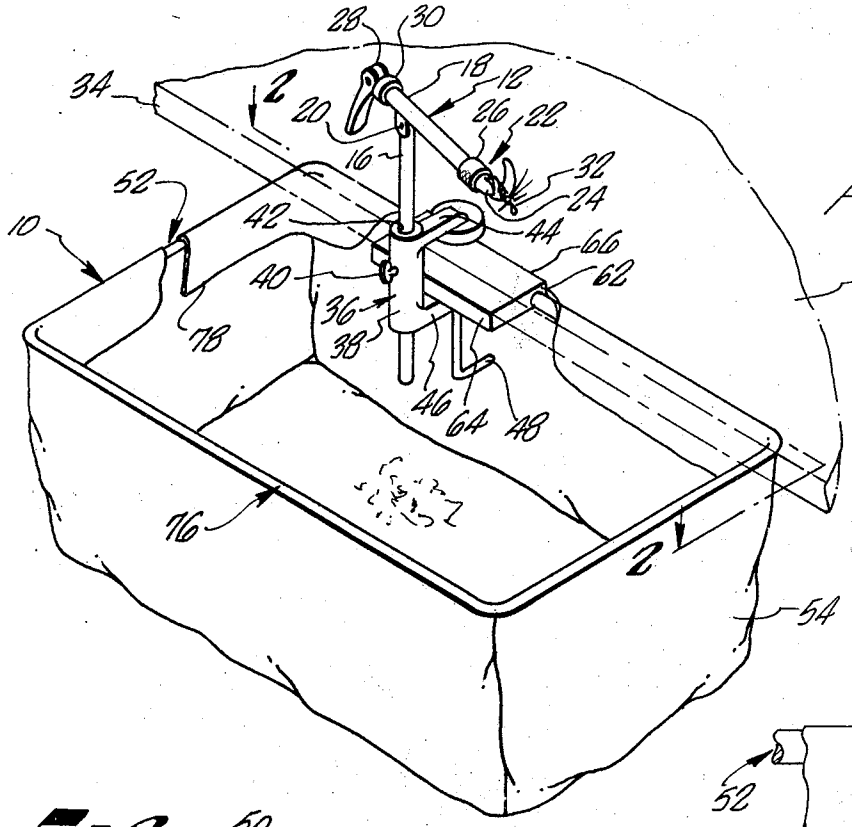


FIG. 1

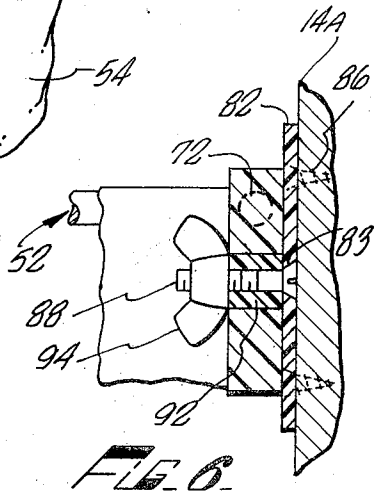


FIG. 6

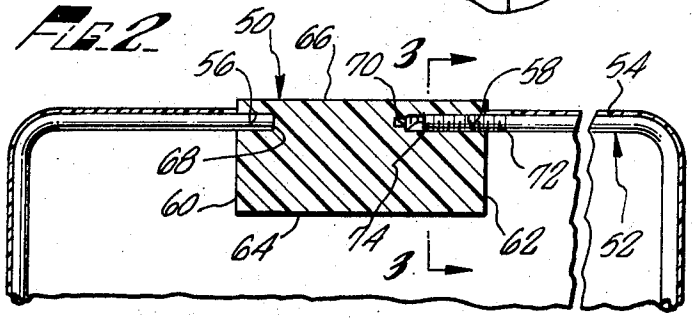


FIG. 2

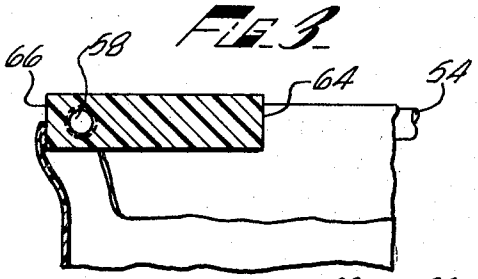


FIG. 3

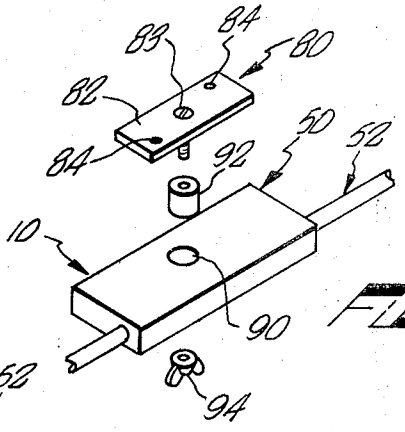


FIG. 4

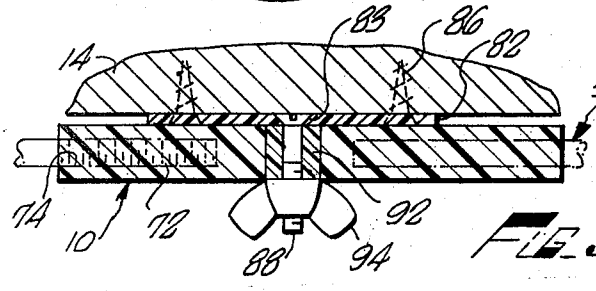


FIG. 5

FLY TYING DISPOSAL APPARATUS

This invention relates to an apparatus for use in fly-tying and more particularly relates to an apparatus which will collect and control fly-tying waste material.

Just as the sport of fly fishing has increased in popularity, so has the hobby of making the flies to catch the fish. Flies are made in a multitude of sizes, forms and colors requiring several different materials, including materials provided by animals and birds, such as fur, hair and feathers.

When making a fishing fly, the hook is first securely clamped into a special type vise and then during separate stages material is wrapped and tied onto the hook to form the tail, body and wings of the artificial fly. Between each stage it is generally necessary to clip and prune the material after it has been secured to the hook to properly shape the fly. This clipping and pruning results in a considerable amount of waste material. Conventionally, it has been the practice to allow this material to fall to the floor where it is later swept up or otherwise removed and disposed of. This practice is undesirable in several respects.

One problem associated with the practice of allowing the waste material to fall freely to the floor relates to the mess created. Fly-tying is an outdoor hobby and more often than not it is done in the room of a house, such as a den, where the mess created by fly-tying cannot be tolerated and therefore must be cleaned up after each fly-tying session. This clean up is not a particularly easy task, particularly in a room which is carpeted. These waste materials, particularly the fur, hair, and feathers which are relatively small and lightweight, tend to stick in the carpeting and generally resist any vacuum or sweeping operation. Even when a protective covering is placed on the floor or on the lap of a tier beneath the fly-tying operation it is difficult to adequately catch these materials since the fallout area is rather large and even when they fall onto the covering they are easily blown or otherwise drift from the covering. Moreover, this waste material tends to cling to the clothing of tier if not caught before and is thereafter spread from room to room of a home or shop. Other means more proximate the working level of the fly-tying operation have been tried, but such efforts have been generally unsuccessful either because they do not provide an adequate catch for the material or because they interfere with the fly-tying. In addition, these past efforts to collect this waste material normally required a separate set up with the beginning of each fly-tying session.

Another drawback associated with the general practice of permitting the clipped material to fall to the floor is that it substantially prohibits the reclaiming of any of the material for further use. In the past this has not been as significant as it is today and will probably become more important in the future. Since several of the materials for fly-tying are supplied by animals and birds, such as deer, caribou and pheasant, these materials are becoming more and more scarce and the more prudent practice of fly-tying suggests an efficient use of these materials and this includes the use of materials heretofore disposed of whenever possible. Such a practice requires an efficient collection of the cut material, but in addition would probably be more practical if a particular type material for a fly could be collected and thereafter be maintained separate from the other non-reusable waste.

Therefore, it is a primary object of the present invention to provide an apparatus for use with a fly-tying vise which efficiently collects and controls the cut and waste material from fly-tying without otherwise interfering with the fly-tying operation.

Another important object of this invention is to provide a fly-tying disposal apparatus which is adjustable to provide various working positions and to provide a non-operating position to avoid both interference with other fly-tying operations and dismounting between fly-tying sessions.

Still another object of the present invention is to provide fly-tying apparatus for efficiently collecting cut fly-tying material whereafter material from one type fly is collected and thereafter removed the apparatus is easily and quickly set up for the collection of cut material from another type fly.

In accordance with these and other objects, the present invention includes a mounting bracket suitable for either temporary or permanent mounting which is adapted to cooperate with any type fly-tying vise and a support pivotally secured to the bracket which is adapted to releasably support the open end of a disposal bag about its circumference. The bracket and support together form a closed loop which is adjustable to provide a variety of working positions, each of which is substantially proximate the working level and properly centered with respect to the working end of the vise, and the bracket and support also provide a hidden inoperable position which avoids dismounting during non-use.

A still further object of this invention is to provide an apparatus which is equally suitable for both right and left hand fly-tying.

Other and further objects and advantages of this invention will be made readily apparent from the following detailed description and the accompanying drawings wherein:

FIG. 1 is a perspective view of the apparatus illustrating its use with one type fly-tying vise.

FIG. 2 is a fragmentary top view partially in section taken substantially on the lines 2—2 of FIG. 1 and illustrating the connection between the mounting bracket and the support of the apparatus.

FIG. 3 is a side view partially in section taken along the lines 3—3 of FIG. 2.

FIG. 4 is a fragmentary perspective view illustrating a modified form of the mounting bracket of the apparatus.

FIG. 5 is a front sectional view of the modified mounting bracket showing it affixed to the underside of a working surface.

FIG. 6 is a side sectional view of the modified mounting bracket showing it affixed to a vertical support member of the working surface.

Referring now in detail to the drawings and in particular to FIG. 1, the fly-tying disposal apparatus, generally designated **10**, is shown in connection with a fly-tying vise, generally designated **12**. The apparatus **10** is mounted to a working table or tying bench **14** by means hereinafter described.

The vise **12** includes an adjustable vertical standard **16** which supports a sleeve **18** mounted for pivotal movement about a horizontal axis **20**. The standard **16** is rotatable about a vertical axis to permit adjustment

of the vise working end, generally designated 22. A collet, not shown, extends concentrically within the sleeve 18 and is adapted to move axially therein. At the working end 22 of the vise are a pair of jaw members 24 connected to one end of the collet. The jaws 24 are drawn into a throat member 26 to close the space between the jaws 24 by a cam member 28 operably connected to the other end of the collet and bearing against a collar 30.

When mounting a fly hook 32 in the vise 12, the hook end is placed between the jaw members 24 which are withdrawn into the throat 26 to clamp the hook 32 therebetween by the cam member 28. The working end 22 of the vise 12 is then adjusted to the proper working position. This working position varies according to the desires of the tier, but the working end 22 is generally positioned over the edge 34 of the tying bench 14 to one side of the standard 16 depending on whether the tier is a right handed or left handed tier.

The particular fly-tying vise 12 shown in FIG. 1 includes a table clamp, generally designated 36. While this is generally the most popular type vise, there are other vises which include a pedestal base which secures the vise to the top of the tying bench 14. In this regard, it should be noted that the fly-tying disposal apparatus of the present invention can be used with either type vise, the modified form of the invention shown in FIGS. 4 and 5 being particularly suitable for a vise with a pedestal base as will be hereinafter described. Returning however, to the vise illustrated in FIG. 1 and the use of the disposal apparatus therewith, it is noted that the table clamp includes a vertical sleeve section 38 within which the standard 16 is concentrically mounted for axial movement therein. A thumbscrew 40 extending into the cylindrical bore 42 of the sleeve section 38 locks the standard 16 in its desired position. Extending horizontally from the upper end and the lower end of the cylindrical section 38 are clamp arms 44 and 46, respectively. When mounting the vise 12, the edge 34 of the bench 14 extends into the space between the clamp arms 44 and 46 and a screw member 48 threadably connected to the lower clamp arm 46 is screwed vertically upward to normally engage the underside surface of the bench 14. However, as will become apparent from the following discussion, this is not the case when the vise with the table clamp is used in conjunction with the fly-tying disposal apparatus 10.

The fly-tying disposal apparatus 10, as best seen in FIGS. 2 and 3, generally comprises a mounting block or bracket, generally designated 50, and a peripheral elongated support member, generally designated 52. The mounting block 50 is generally rectangular and preferably plastic and in the form shown in FIGS. 1 through 3, is adapted to be mounted adjacent the edge 34 of the bench between the underside surface of the bench and the screw member 48 of the vise 12. The support member 52 is preferably in the form of an elongated cylindrical metal rod so as not to form any sharp edges and is bent into a generally rectangular shape which extends in a flat plane. The support member 52 is adapted to support the open end of a plastic bag 54 about its circumference.

The mounting block 50 includes bores 56 and 58 in parallel alignment which extend inwardly from its lateral sides 60 and 62, respectively, in a direction substantially parallel to its longitudinal sides 64 and 66. It should be noted that the axial centerline of these bores 56 and 58 is offset from the longitudinal centerline of the block 50 and substantially adjacent to the longitudinal side 66 for purposes which will be hereinafter described.

The ends 68 and 70 of the support member 52 extend in parallel alignment with a space intervening the ends. The support member ends 68 and 70 are received by the bores 56 and 58, respectively, to thereby connect the support member 52 to the mounting block 50 while permitting relative pivotal movement therebetween about an axis which is in parallel alignment with the extension of the support member 52 within the block 50. Preferably, the end 70 of the support member 52 is provided with external threads and the bore 58 of the block 50 provided with matching internal threads 74 whereby relative pivotal movement of the block 50 with respect to the support 52 moves the end 70 axially within the bore 58 and thus adjusts the overall size of the elongated rectangular closed loop, generally designated 76, formed by the support 52 and the mounting block 50.

Thus, when using the disposal apparatus 10, the open end of the plastic bag 54 is fitted around the support member 52 with its edge 78 overlapping the loop 76. In order to secure the bag to the apparatus, it may be necessary to increase the size of the loop 76 which will stretch the open end of the bag about the support member 52. This is accomplished by pivoting the block 50 with respect to the support member 52 in a direction which will move the threaded end 70 axially and outwardly from the bore 58. When the bag 54 is secured to the support 52, its open end will be below, but significantly proximate to the working end 22 of the vise 12. It should be noted that the mounting block 50 is located in the loop 76 at one of the longitudinally extending sides of the loop offset from the lateral centerline or minor axis of the elongated loop 76. This is important because the apparatus 10 when mounted properly centers the opening of the bag with respect to the working end 22 of the vise. In this regard, it should also be noted that the apparatus 10 is reversible and can thus be flipped over from the position shown in FIGS. 1 and 2 when mounted to properly center the opening of the bag with respect to the working end 22 of the vise when the working end is positioned for the other hand tiers.

As pointed out earlier, the bores 56 and 58 and thus the axis about which the support member 52 pivots are significantly closer to the rear side of the mounting block. Thus, when the apparatus 10 is mounted to the underside of the bench 14 with the forward side 64 of the block generally adjacent the edge 34, the loop 76 is overlapped by the bench thereby preventing cut material from falling outside the rear edge of the loop 76.

Of further note, is the fact that the threaded connection between the mounting block 50 and the support 52 provides a frictional engagement therebetween which permits the loop 76 and thus the open end of the bag to be adjusted about its turning axis while maintaining the loop in position once it has been adjusted. Moreover, the loop 76 together with the bag 54 may be swung back to a position completely underneath the bench 14 out of view where it will remain between fly-tying sessions or between various other operations of the fly-tying which might require more space than when the bag 54 is directly underneath the working end 22 of the vise. Moreover, the loop 76 and the bag 54 can be swung to this inoperative position with material within the bag without the fear of having some of the

material dropping out of the bag since the bag will be automatically closed when it is swung back underneath the bench **14.**

A still further feature relating to the apparatus **10** is the easy mounting an dismounting of the bag **54** on the support **52** thereby permitting a quick and easy change-over of bags whenever it is desired to change bags either because the bag is too full or because it is desirable to use a new bag to collect certain particular materials associated with the tying of a fly.

Referring now to the embodiment shown in FIGS. **4, 5** and **6,** it is noted that the apparatus **10** is substantially similar except for the provision of a mounting bracket, generally designated **80,** which will serve to mount the apparatus **10** to the underside of the bench **14** when a vise with a pedestal base is used. This embodiment of the invention may in fact be preferred because of its greater versatility. The mounting bracket **80** includes a mounting plate **82** having a central opening **83** and a plurality of holes **84.** The holes **84** are adapted to receive wood screws **86** which are screwed into the underside of the bench **14** as shown in FIG. **5,** or to the side of a vertical support member **14***a*, as shown in FIG. **6,** to secure the plate **82** thereto and the hole **83** is adapted to carry a bolt or threaded member **88** which extends downwardly from the plate. The block **50** in this embodiment of the invention includes a vertical bore **90** which extends transversely therethrough and received concentrically therein a preferably plastic sleeve member **92.** This sleeve member **92** facilitates relative rotational movement of the block **50** with respect to the mounting plate **82** thereby permitting the two mounting arrangements of FIGS. **5** and **6.** When this form of the apparatus **10** is mounted, the bolt **88** extends through the sleeve **92** and is engaged by a wing nut **94** which affixes the mounting block **50** against the plate **82.**

The present invention provides an apparatus for efficiently collecting and controlling the materials cut during fly-tying and thereby avoids the previously objectionable mess and clean up heretofore associated with the fly-tying hobby. Moreover, collection of the materials is accomplished without interfering with the other fly-tying operations and is so simple and efficient it permits the reuse of materials otherwise wasted. The apparatus can also be permanently mounted without creating an unsightly nuisance between fly-tying sessions.

Having fully described my invention, it is to be understood that I do not wish to be limited to the details herein set forth, but my invention is of the full scope of the appended claims.

I claim:

1. A fly-tying disposal apparatus, comprising:

a mounting block adapted to be secured to a substantially permanent support structure adjacent a working surface with a pair of bores therein extending inwardly from opposite sides thereof;

an elongated rod having ends adapted to support the open end of a disposal bag about its circumference and arranged in a flat substantially rectangular shape with each end of said rod extending into one of said bores, said rod and said block forming a closed elongated loop, said loop having a minor and major axes, said rod adapted to move pivotally with respect to said block about an axis extending between said rod ends, thread means provided in at least one of said bores and on said rod end extending therein whereby pivotal movement of said rod with respect to said block provides for axial movement of said threaded end within said bore and means cooperating with said other end prevent axial movement of said other end in the same direction of axial movement of said threaded end during the pivotal movement of said support with respect to said block which thereby effects an adjustment in the size of said loop; and

said block being offset to one side of the minor axis of said elongated loop wherein said loop is adapted to be properly positioned for both left and right hand typing when said block is secured to the support structure.

2. The apparatus of claim **1,** wherein said axis between said rod ends is offset from the centerline of said block whereby a portion of said loop overlapped by the edge of the working surface when said block is secured adjacent the edge is maximized to prevent waste from falling outside of said loop.

3. The apparatus of claim **1,** wherein means rotatable with respect to said mounting block are provided for mounting said mounting block to the underside of the working surface when desired and a vertical support structure adjacent said working surface when desired.

4. A fly-tying disposal apparatus, comprising:

an elongated peripheral support for supporting the circumference of a disposal bag about the open end, said support arranged in a substantially flat plane and defining the major portion of a flat closed loop with ends extending into a mounting block completing said closed loop wherein said block is connected to each end of said support, said block having at least one bore with one end of said support extending therein; and said block adapted to be secured adjacent the edge of a flat working surface, said block connected to said support with said block and said support adapted for relative pivotal movement therebetween about an axis in said plane and in alignment with the support ends in said block;

wherein said bore and the end of said support extending therein are provided with matching threads wherein relative pivotal movement between said block and said support about said axis provides for axial movement of said end within said bore and means cooperating with said other end of said support to prevent axial movement of said other end in the same direction of axial movement of said end within said bore during the relative pivotal movement between said block and said support which thereby effects an adjustment in the size of said loop; and

said axis being offset with respect to a centerline of said block wherein at least a portion of said loop is adapted to be significantly overlapped by the edge of the working surface when said block is secured adjacent thereto to prevent fly-tying waste from falling outside the exterior edge of said loop,

5. A fly-tying disposal apparatus, comprising:

an elongated peripheral support for supporting the circumference of a disposal bag about the open end, said support arranged in a substantially flat plane and defining the major portion of a flat closed loop with ends extending into a mounting block completing said closed loop and adapted to be secured adjacent the edge of a flat working sur-

face, wherein means are provided to secure said block to the structure forming the working surface, said means including first thread means adapted to be permanently affixed to the structure forming the working surface and extend outwardly therefrom, said block adapted to receive said first thread means, and second thread means to releasably affix said block to said first thread means,

wherein said block includes a bore for receiving said first thread means and a sleeve concentrically positioned about said bore and between the block and said first thread means, a second mounting block for permanently affixing said first thread means, and said sleeve facilitating relative rotational movement between said first mounting block and said second mounting block, and said first block connected to said support with said block and said support adapted for relative pivotal movement therebetween about an axis in said plane and in alignment with the support ends in said block;

said axis being offset with resepct to a centerline of said block wherein at least a portion of said loop is adapted to be significantly overlapped by the edge of the working surface when said block is secured adjacent thereto to prevent fly-tying waste from falling outside the exterior edge of said loop;

6. The apparatus of claim **5** wherein said blocks are plastic.

7. A fly-tying disposal apparatus for use with a fly-tying vise, comprising:

a mounting block adapted to be releasably secured to a fly-tying vise;

an elongated peripheral support for holding the open end of a disposal bag about its circumference, said support being arranged in a substantially flat plane with ends extending into said block completing an elongated closed loop, said loop including a minor and major axes, said support pivotally connected to said block with the pivotal movement therebetween occurring about an axis in said plane and in alignment with the support ends in said block;

said block located along said closed loop offset to one side of the minor axis of said loop in order to properly position said loop and thus the opening of the bag with respect to the working end of the vise irrespective of whether the working end is set up for left hand or right hand tying, and

wherein said block is connected to each end of said support, said block having bore means for receiving said support ends, and at least one of said support ends having threads thereon adapted to cooperate with said bore means whereby pivotal movement of said support with respect to said block provides for axial movement of said threaded end within said bore and means cooperating with said other end prevent axial movement of said other end in the same direction of axial movement of said threaded end during the pivotal movement of said support with respect to said block which thereby effects an adjustment in the size of said elongated loop.

8. The apparatus of claim **7** wherein said support comprises an elongated cylindrical rod.

9. A fly-tying disposal apparatus for use with a fly-tying vise, comprising:

a mounting block adapted to be releasably secured to a fly-tying vise;

an elongated peripheral support for holding the open end of a disposal bag about its circumference, said support being arranged in a substantially flat plane with ends extending into said block completing an elongated closed loop, said loop including a minor and major axes, said support pivotally connected to said block with the pivotal movement therebetween occurring about an axis in said plane and in alignment with the support ends in said block; and

the pivotal axis being offset with respect to a centerline of said block wherein at least a portion of said loop is adapted to be significantly overlapped by the edge of the working surface when said block is secured adjacent thereto to prevent fly-tying waste from falling outside the exterior edge of said loop, and

said block located along said closed loop offset to one side of the minor axis of said loop in order to properly position said loop and thus the opening of the bag with respect to the working end of the vise irrespective of whether the working end is set up for left hand or right hand tying.

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