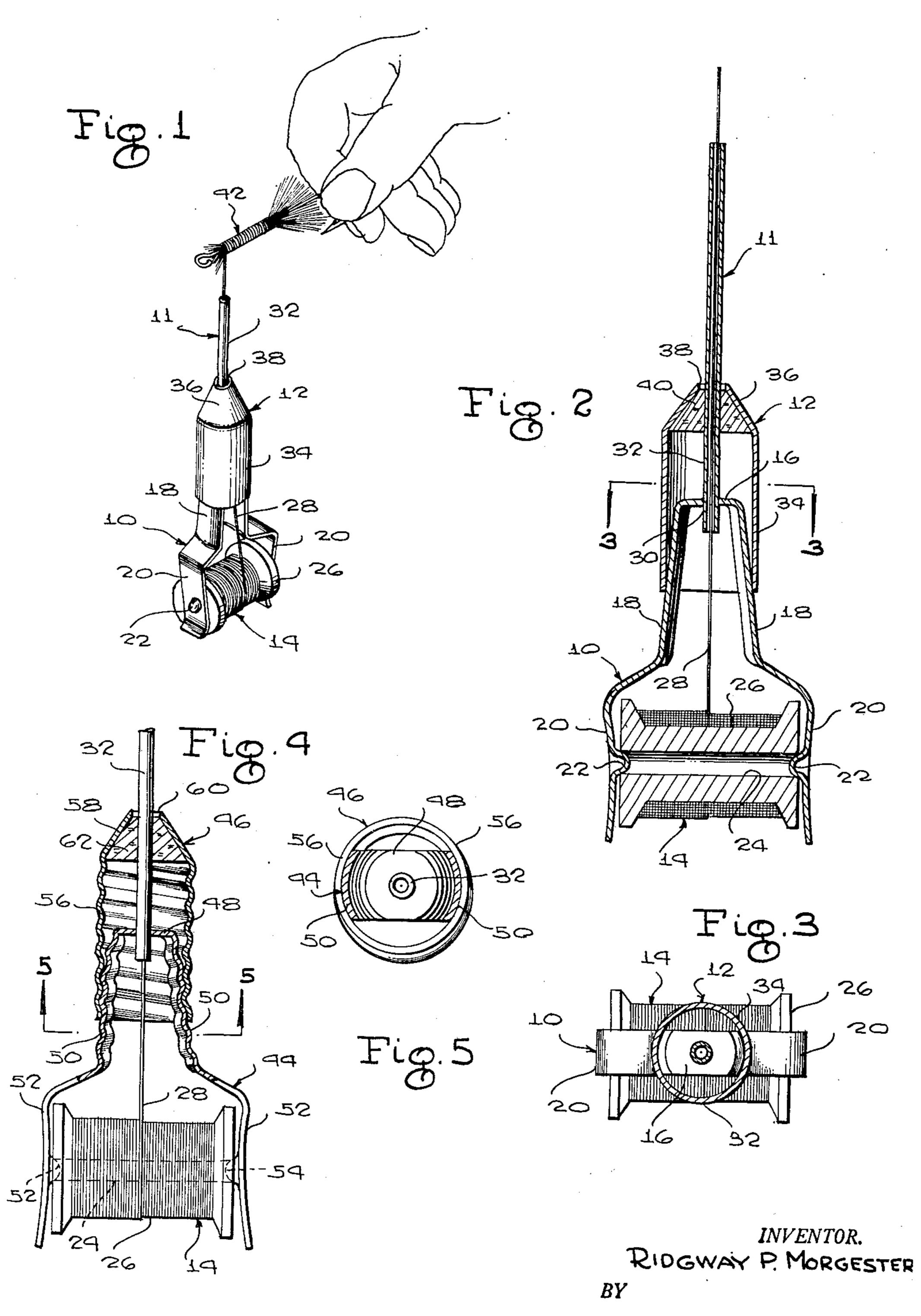
FLY TIER'S BOBBIN

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FLY TIER'S BOBBIN

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3 Claims. (Cl. 242—140)

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This invention relates to a fly tier's bobbin. The tying of artificial flies for fishing is an art in which considerable skill is required. The winding of the thread during the formation of the fly must be so carried out as to cause said thread to be tensioned to the exact extent desired, if the fly is to be properly formed. In this connection, it is further desirable that any device whereby the winding of the thread upon the lure can be effected, should be so formed as to insure not only that the thread will be properly tensioned, but also that the thread will be wound with desired rapidity.

In view of the above, the main object of the present invention is to provide a generally improved fly tier's bobbin, which will be novelly formed in a manner to permit exact adjustments to be made so far as the freedom of rotation of the thread spool is concerned, thus to permit the device to hang from the lure while the lure is being wound, with the weight of the device and the means for adjusting the spool rotation cooperating to effect the desired tension during the winding operation.

Another object of importance is to provide a fly tier's bobbin as stated wherein the adjustments referred to above can be varied minutely, to achieve an exact ratio between the weight of the suspended bobbin and the freedom of rotation of the spool.

Still another object is to provide a fly tier's bobbin as described wherein the desired fine adjustments can be effected with speed and ease.

Yet another object is to provide a fly tier's bobbin wherein the above stated objects will be achieved, without increasing materially the cost of the bobbin over other bobbins already in use.

Still another object is to provide a bobbin of the character referred to wherein one spool of thread can be swiftly substituted for another.

Yet another object is to provide a bobbin wherein there will be incorporated a construction requiring a minimum of parts simply arranged in a manner whereby they will not readily get out of order.

Other objects will appear from the following description, the claims appended thereto, and from the annexed drawing, in which like reference characters designate like parts throughout the several views, and wherein:

Figure 1 is a perspective view of a bobbin formed in accordance with the present invention, as it appears when in use during the tying of an artificial fly;

Figure 2 is an enlarged longitudinal section through the bobbin;

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Figure 3 is a transverse sectional view taken on line 3—3 of Figure 2;

Figure 4 is a view similar to Figure 2, show-ing a modified form; and

Figure 5 is a transverse sectional view taken on line 5—5 of Figure 4.

The form of the invention illustrated in Figures 1 to 3 inclusive will first be described. In this form of the invention, there are provided three main parts, said parts comprising a spool housing designated generally at 10, a thread tube designated generally at 11, and a tension-adjusting cam sleeve designated generally at 12.

A spool of thread has been designated generally at 14, and it will be understood that said spool does not, per se, constitute part of the present invention.

The housing 10 will first be described, and as best shown in Figure 2, said housing is formed from a single piece of flat, spring metal material formed approximately to a U-shape, having a bight 16 and a pair of fork arms converging in the direction of and secured integrally to opposite ends of the bight. The fork arms are of identical, though opposite construction, and include inner end portions 18 converging toward the bight, said inner end portions being offset outwardly at their divergent ends, and being integral with approximately parallel outer end portions 20. The outer end portions 20 of the fork arms are integrally formed, intermediate their ends, with in-struck, rounded nodes 22 engaging in opposite ends of the axial bore 24 of the spool body 26, on which body the thread 28 is wound.

The spool body is rotatably mounted between the outer end portions 20, and it will be readily appreciated that movement of said outer end portions toward one another will increase the frictional engagement of the nodes 22 in the opposite ends of the bore 24. Conversely, movement of the end portions 20 away from one another decreases the degree of frictional engagement of the nodes 22 with the spool ends. The housing 10, it may be noted, is so tensioned as to cause the outer end portions 20 to normally spring outwardly, away from the opposite ends of the spool body.

Formed in the bight 16, midway between the opposite ends of the bight, is an opening 30, receiving the inner end of a tubular member 32, said member forming the thread tube designated generally at 11. The tubular member 32 can be frictionally engaged with the edge of the opening 30, so as to normally prevent movement of the tube relative to the housing 10 on which it is supported. Or, if desired, the tube can be

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fixedly connected by any suitable means to its associated bight 16.

The thread 28 extend fully through the tube, as shown in Figure 2.

Considering the construction of the sleeve 12, 5 said sleeve includes a cylindrical body 34 at one end, said body, at the other end of the sleeve having a frusto-conical end wall 35 having a center opening 38 at its smaller end.

A cork insert 40 is formed complementarily to 10 and is seated within the tapered end wall 36, and has a center bore gripping the wall of the tubular member 32, so that the tubular member guides the cam sleeve 12 when the cam sleeve is shifted longitudinally of the tube 11 and hous- 15 ing 10.

That end of the cylindrical body 34 of the cam sleeve remote from the end wall 36 is formed open, and receives the convergent inner end portions 16 of the housing arms. Accordingly, 20 whenever the cam sleeve 12 is shifted in the direction of the spool 14, it will cam the fork arms of the spool housing inwardly toward one another, to increase the degree of frictional engagement of the nodes 22 with the spool ends. This 25 controls the freedom of rotation of the spool within the housing.

Movement of the cam sleeve in an opposite direction will, of course, decrease the degree of frictional engagement, permitting the spool to 30 rotate more freely within the housing.

It will be appreciated that fine adjustments can be made, by movement of the cam sleeve 12 longitudinally of the housing. As a result, when the bobbin is used in the manner shown in Figure 1, the bobbin will be suspended from the fly, said fly being designated generally at 42. The weight of the bobbin, acting in cooperation with the adjusted rotatable mounting of the spool, permits the user to tension the thread 28 to a desired extent, while winding the thread upon the fly. Further adjustments can be made as desired, so as to cause the weight of the bobbin to assume a particular ratio to the freedom of rotation of the spool, thereby to tension the 45 thread to any extent desired.

Referring to the form of the invention illustrated in Figures 4 and 5, in this form the housing has been designated generally at 44, and is substantially identical to the housing 10 of the 50 first form. However, the housing 44 has a different type of connection to the cam sleeve 46.

The housing 44 is formed with a bight 48, in which the tubular member 32 is engaged, the tubular member being connected to the bight in 55 the same manner as shown in Figure 2.

Integral with the bight are the inner end portions 50 of the housing arms, said inner end portions converging in the direction of the bight, and being integral at their outer ends with outwardly offset outer end portions 52 having nodes 54 engaging the ends of the spool body 26.

The cam sleeve 46 has a cylindrical body 56, said body being formed with threads for its full length, which threads are engageable with thread segments formed in the inner end portions 50. As a result, rotation of the cylindrical body 56 of the cam sleeve is effected to adjust the cam sleeve longitudinally of the housing, thus to adjust the tension with which the spool ends are 70 gripped by the nodes 54.

The sleeve body 56 is integral, at one end, with a tapered end wall 58 having a center opening through which the tubular member 32 extends, the tapered end wall 58 receiving a cork 75

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insert 62 in which the tubular member is slidably engaged.

I believe that within the scope of the appended claims, other variations in construction might well be made, and for example, I might desire to flare the inner end of the tubular member 32 to prevent binding of the thread 28 against the end of the tube during rotation of the spool 14. Further, the tube might be threadedly engaged in the opening provided therefor in the bight of the housing. This change, I believe, is sufficiently obvious as not to require special illustration herein. Still further, I believe that the cork insert might be omitted in commercial embodiments of the invention, without affecting adversely the operation of the device. In each instance, of course, the principle of operation will be the same.

It is believed clear that the invention is not necessarily confined to the specific use or uses thereof described above, since it may be utilized for any purpose to which it may be suited. Nor is the invention to be necessarily limited to the specific construction illustrated and described, since such construction is only intended to be illustrative of the principles of operation and the means presently devised to carry out said principles, it being considered that the invention comprehends any minor change in construction that may be permitted within the scope of the appended claims.

What is claimed is:

1. A fly tier's bobbin comprising: a relatively elongated, U-shaped spool housing having springable fork arms converging toward and integrally connected at one end by a bight, said arms being adapted at their other ends to engage frictionally between them the opposite ends of a spool of thread, to support the spool for rotation in the housing; a thread tube extending through said bight and through which said thread is extendible; and cam means circumposed about the tube and shiftable longitudinally of the housing along the convergent arms to draw the arms against the ends of the spool, thereby to effect adjustments as to the degree of frictional engagement of the arms with the spool, for controlling the freedom of rotation of the spool.

2. A fly tier's bobbin comprising: a relatively elongated, U-shaped spool housing having springable fork arms converging toward and integrally connected at one end by a bight, said arms being adapted at their other ends to engage frictionally between them the opposite ends of a spool of thread, to support the spool for rotation in the housing; a thread tube extending through said bight and through which said thread is extendible; and a cam sleeve circumposed about and slidable along the tube, said sleeve being shiftable longitudinally of the housing in engagement with the convergent arms to draw the arms against the ends of the spool, thereby to effect adjustments as to the degree of frictional engagement of the arms with the spool, for controlling the freedom of rotation of the spool.

3. A fly tier's bobbin comprising: a relatively elongated, U-shaped spool housing having springable fork arms converging toward and integrally connected at one end by a bight, said arms being adapted at their other ends to frictionally engage between them the opposite ends of a spool of thread, to support the spool for rotation in the housing; a thread tube extending through said bight and through which said

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thread is extendible; and a cam sleeve circumposed about the tube, said sleeve having an end wall at one end formed with a center opening in which the tube is slidably engaged, said sleeve being guided by the engaged tube longitudinally of the housing and having its other end in camming engagement with the convergent arms to draw the arms against the ends of the spool, thereby to effect adjustments as to the degree of frictional engagement of the arms with the spool ends, for controlling the freedom of rotation of the spool.

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