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FLY TYING VISE

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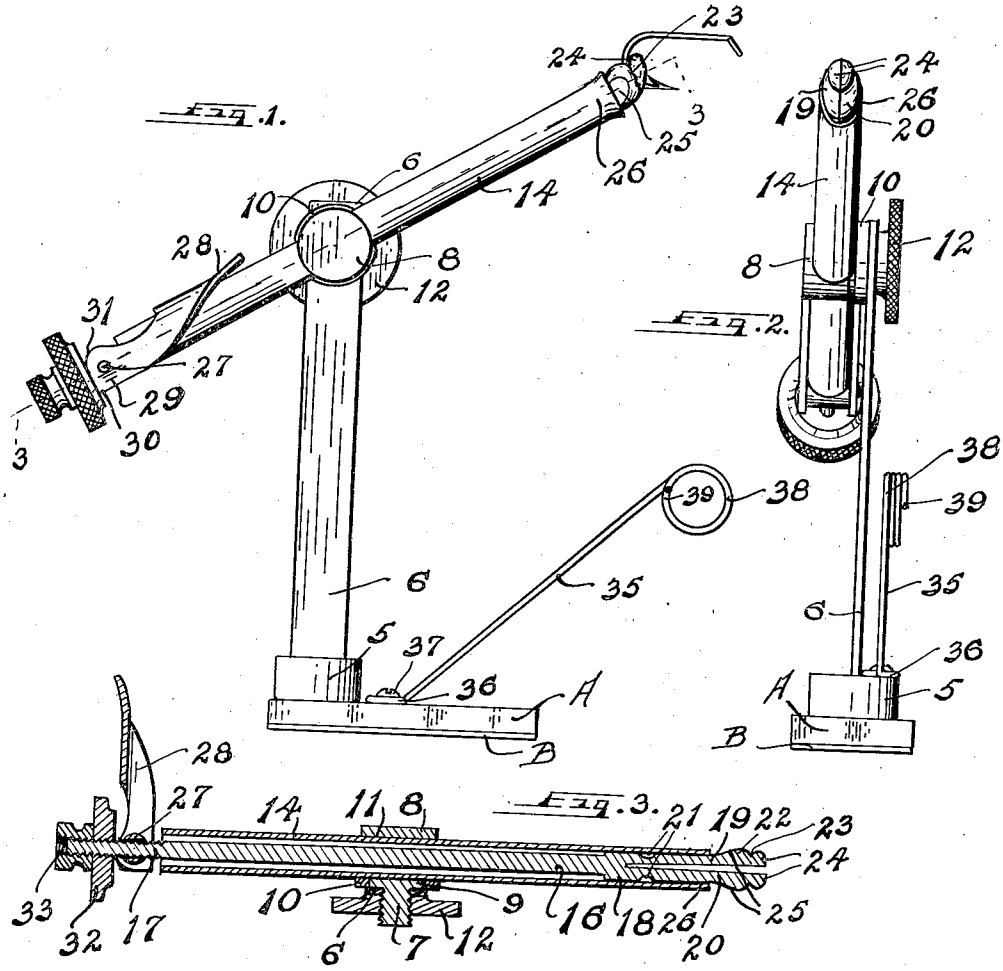

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FLY TYING VISE

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5 Claims. (Cl. 43—1)

My invention relates to small vises and has for its object to provide a new and highly efficient fly tier's vise.

A further object is to provide a new fly tier's vise which will be more efficient, will not slip, will provide less cumbersome area around which to work and which will have the engaging head or gripping jaws formed to the greatest advantage for tying small or large flies for fishermen.

A still further object is to provide a vise which may be adjusted to any angle or position desired by the one tying the flies with the jaws reversible either up or down.

A still further object is to provide a vise which may be used, instantly released, or may be operated in the conventional screw manner as desired by the operator.

These and other objects I accomplish with the device illustrated in the accompanying drawing in which similar numerals and letters of reference indicate like parts throughout the several views and as described in the specification forming a part of this application and pointed out in the appended claims.

In the drawing,

Figure 1 is a side elevation of the device as used shown holding a bare hook ready for tying.

Figure 2 is an end view of Figure 1 with the hook removed.

Figure 3 is a section on line 3—3 of Figure 1, with the hook removed and the jaws released and open.

In the drawing I have shown the device as having a base A, having a pad B thereunder, which base may be secured to any table by a small clamp (not shown) or which if desired may be made in the form of a clamp. Vertically from a boss 5 on the top of the base A I provide a standard 6 which standard has a transverse hole through the top end to receive the main parts of the vise. Through this hole the stub shaft 7 of the adjustable body clamp 8 is passed. This stub shaft is formed as an integral part of the body clamp 8 and the body 8 is provided with a round body having a shoulder 9 thereon, said shoulder to carry a clamping ring 10. Transversely through the body 8 there is a bore 11 through which the cylinder 14 of the main body of the fly holding vise is carried and the threaded shaft carries a thumb nut or knurled locking wheel 12 by which the cylinder 14 may be locked in fixed relation to the vertical standard 6 at any angle or position desired by the user. Thus, the angle of the cylinder 14 may be changed as and when desired, simply by loosening the wheel 12 on the shaft 7 and the cylinder set in the position desired and the wheel again tightened.

The essential features of my invention are in the jaws and the form of that portion of the device and these consist of a long shaft 16 threaded at one end 17 and having the other end enlarged at 18 and slotted or bifurcated to form two jaws 19 and 20. A semi-oval groove 21 is cut through the outside edge of each jaw portion near the end of the slot to give greater flexibility to the jaw action and increase the life of the jaw material. The end 22 of each jaw is increased in size or of an enlarged area made semi-oval in form so that when the jaws are drawn together they form an oval end with a small groove 23 formed in the oval end leaving a bulbous end 24 thereon, the latter groove being to make the tying of flies quicker and easier.

The two outside faces of the jaws are flattened at 25 and the end of the cylinder 14 is also flattened on each side at 26 to engage the flattended faces 25 of the jaws and draw them together when they are drawn down into the cylinder.

On the threaded end of the shaft 16 there is carried a pivot bar 27 said bar having a hole transversely therethrough in which the shaft 16 is passed and carried and the ends of the pivot bar support and carry the sides of a quick release lever 28. This lever 28 has the lower end formed bifurcated with legs 29 spanning the bar 16 and carried on the pivot bar 27 with the end of the legs formed with one edge 30 square at the corner and the other corner 31 cut away on an arc to provide a bearing surface over which the lever is moved when being actuated to release the jaws.

Onto the end of the shaft 16 a knurled nut or small wheel 32 is screwed and a lock nut 33 is screwed onto the outside of the wheel on the shaft to provide means for drawing the jaws together and locking them. The nut and wheel being locked in fixed relation to the shaft and cylinder. Thus when the operator desires to use the quick release he need only flip the end of lever 28 to release the hook or to reengage the jaws, as the case might be.

As a means to hold the thread while tying flies, I provide a spring member 35 having one end formed into a ring 36 to be secured to the base A by a screw 37. The other free end is formed into a coil 38 with the end 39 bent out slightly to permit the thread to be inserted between the coils and held in stretched relation to the fly until

secured or while the person tying the fly strips more hackle, feathers or picks up other parts to be used in finishing the fly, at which time the thread may be again released and the tying process continued.

Having thus described my invention I desire to secure by Letters Patent and claim:

1. In a fly tier's vise, the combination of a base; a standard secured therein; an adjustable clamp mounted on the top of said standard; a cylinder passed through said clamp and held in fixed relation to said standard by said clamp; said cylinder having one end flattened on two sides thereof; a long shaft extending through said cylinder; means on one end of said shaft to draw it through said cylinder against the flattened sides on the opposite end thereof; hook holding jaws formed on the end of said shaft, said jaws having at their ends curved formations and adapted to be engaged together by the engaging of the outside faces of the jaws with the flattened sides of said cylinder end.

2. Jaws for fly tier's vise comprising, a bifurcated shaft with the bifurcated ends formed into oval bodies to act as the jaws and with a groove around the outside surface to partially divide the jaw portions into two areas to facilitate tying of the flies with a groove cut from the outside edges of the bifurcated ends to permit contraction of the jaws together.

3. In a fly tier's vise the combination of a base having a boss formed on the top side thereof; a flat vertical standard set in said boss; a transverse stub shaft passed through the top end of said standard said stub shaft having an enlarged head provided with a transverse bore therethrough; a clamp nut carried on said stub shaft adapted to draw the head toward the vertical standard to adjustably clamp the head to the standard in any desired radial position relative to said stub shaft; a cylinder passed through said head and held in longitudinal position by the clamping action of the clamp nut; a long shaft passed entirely through said cylinder with one end of said shaft bifurcated by a tapered slot with the outside of the shaft enlarged in curved jaws to form a fly tying clamp and with the other end of the shaft threaded; and a pair of threaded wheels to draw the jaws into the end of the cylinder to clamp the fly therebetween and lock same in rigid position.

4. A device as set out in claim 3 including a threaded pivot bar carried on said long shaft said bar having the ends extended; and a quick release lever pivoted on said ends to instantly draw the gripping jaws of the long shaft into fixed rigid position or instantly release them.

5. In a fly tier's vise the combination of a shaft having one end bifurcated to form spaced jaws; a transverse groove in the outside surface of each leg of said jaws near the end of the bifurcation to permit flexing of the ends of the jaws together to grip a fly hook with each end of each jaw formed identical with a large bulbous body terminating in a smaller bulbous nose piece with the nose piece turned upwardly and spaced from the large bulbous body; a cylinder having opposed sides flattened to engage the outside surface of the large bulbous body of the shaft; and means to draw the shaft into the cylinder until the sides of the cylinder have drawn the two jaws together.

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