

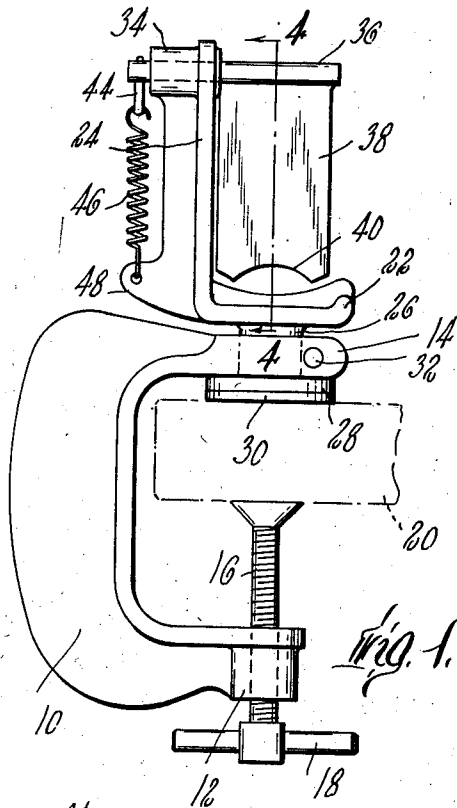
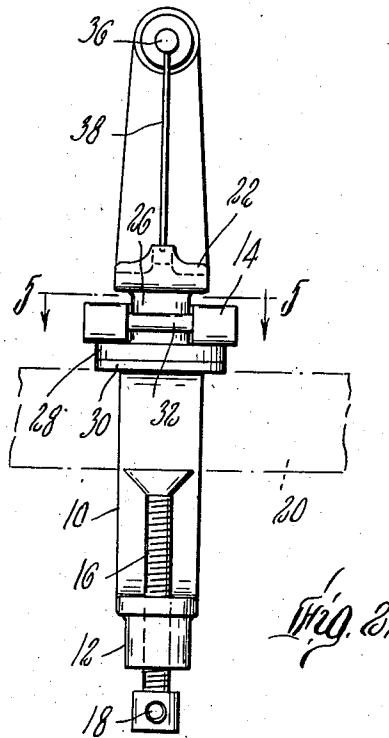
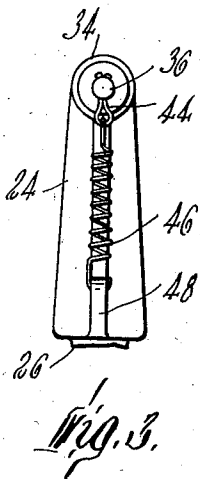
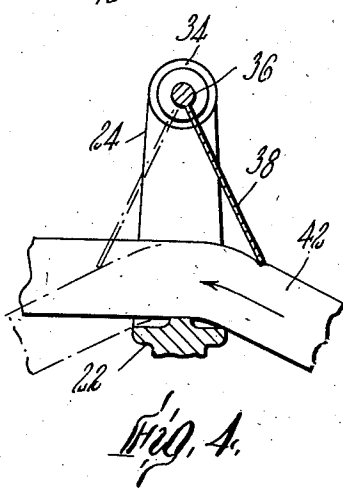
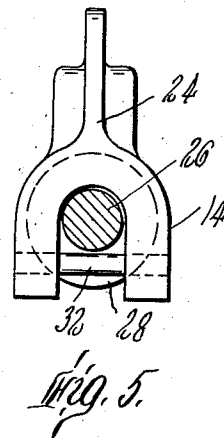
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CATCH DEVICE FOR FLEXIBLE STRAND

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2,817,993

CATCH DEVICE FOR FLEXIBLE STRAND

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1 Claim. (Cl. 87—33)

This invention relates to a catch device or one-way gripping means to hold a plaited strand against the pull of an operator who is engaged in plaiting smaller strands to form the plaited strand. The device is swivelly mounted on a clamp by which it can readily be mounted on the margin of a table. According to the invention the gripping device which can be turned about a vertical axis to face in any desired direction becomes fixed when the clamp is tightened to secure the device firmly to a table-top.

For a more complete understanding of the invention, reference may be had to the following description thereof and to the drawing of which—

Figure 1 is a front elevation of a device embodying the invention;

Figure 2 is a side elevation of the same;

Figure 3 is a fragmentary elevation of the other side of the same;

Figure 4 is a section on the line 4—4 of Figure 1; and Figure 5 is a section on the line 5—5 of Figure 2.

The device illustrated comprises a screw clamp consisting of the usual U-shaped member 10 having two arms 12 and 14. A screw 16 is threaded through the arm 12 and projects toward the arm 14. The lower end of the screw 16 is preferably provided with a finger piece 18 by which the screw may be turned to advance its upper end toward the arm 14 whereby to clamp a supporting object such as a table top 20 between the end of the screw and the arm 14.

Swivelly attached to the arm 14 is a gripping device which, as shown, may comprise an L-shaped frame having a horizontal gripping portion 22 and a standard 24 rising from an end of the gripping portion 22. A neck 26 projects downward from the gripping portion 22 through the clamp arm 14 to a base 28 which may consist of a disc having a felt pad 30 on its bottom face to bear on the table top. In the device illustrated, the L-shaped frame, the neck 26 and base 28 are a single casting. For convenient assembling, the arm 14 of the clamp is bifurcated to receive the neck 26 as indicated in Figures 1 and 2. A pin 32 is employed to keep the neck 26 in place.

At the upper end of the L-shaped frame is an enlarged bearing portion 34 in which is journaled a horizontal rock-shaft 36. This shaft projects out over the gripping portion 22 of the frame, and from it depends a gripping flap 38. This flap extends down nearly to the gripping

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portion 22 and its lower edge may be given a concave contour as at 40 the better to engage a plaited strand 42 as indicated in Figure 4.

If desired, a spring may be employed to bias the flap 38 to its downward depending position. For this purpose an eye 44 may project from the shaft 36 in the same direction as does the flap 38. A tension spring 46 extends down from the eye 44 to a fixed lug 48 at the base of the standard 24. When a plaited strand 42 is to be caught by the device, the flap is swung away sufficiently to admit the strand between the flap and the gripping element 22. The spring 46 assists gravity in causing the flap to engage the strand 42 so as to grip the strand. Tension on the strand intensifies the gripping action in a manner well understood.

An advantageous feature of the device is that when the screw clamp is not firmly attached to a table top or the like, the neck 26 can turn in the arm 14 of the clamp so that the gripper can be oriented as desired. When the screw 16 is tightened against the underface of the table top, the upper arm 14 of the clamp binds the base 28 against the table top so that the gripper is then fixed in its angular position. The flap may thus be made to face in any desired direction and held in such position.

I claim:

A device of the class described comprising a base having a transverse horizontal gripping element thereon, said base comprising a horizontal disk of substantial area and a neck extending upward from said disk to said gripping element, a standard extending upward from an end of said element, a horizontal rock-shaft journaled in the upper end of said standard, a gripping flap extending down from said shaft to proximity with said gripping element, the lower end of said flap having a concave contour, an element having an eye projecting downward from said shaft, a tension spring extending from said eye downward to a point near the base of said standard, and means for clamping said device to a table, said clamping means comprising a U-shaped member having upper and lower arms, said upper arm being bifurcated to straddle said neck and to bear on said disc, said lower arm having a screw threaded therethrough and aligned with said disc and neck.

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