Nov. 28, 1939. M. INGWER ET AL 2,181,828

GUARD FOR SEWING MACHINE STITCH REGULATORS

Filed Aug. 1, 1938

Fig. 1

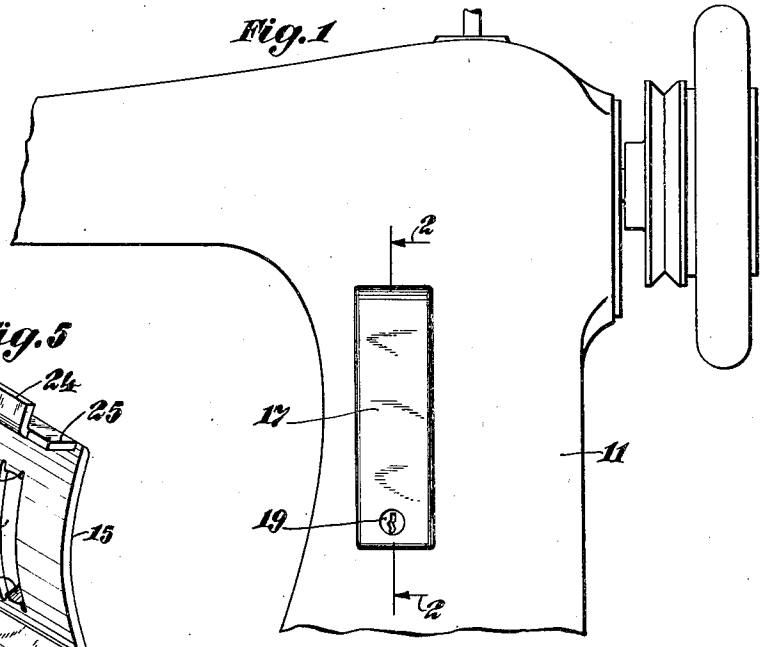


Fig. 5

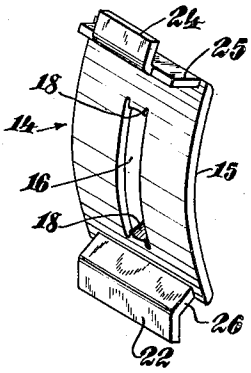


Fig. 2

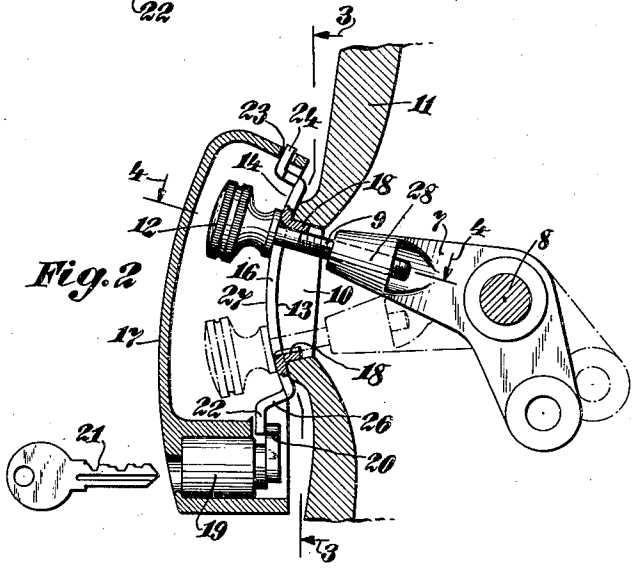


Fig. 3

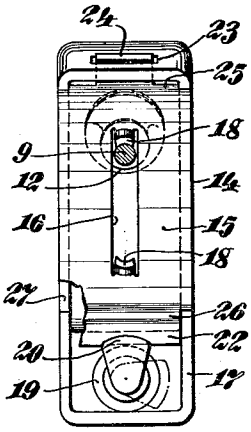
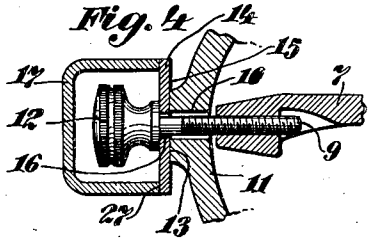


Fig. 4



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GUARD FOR SEWING MACHINE STITCH REGULATORS

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Application August 1, 1938, Serial No. 222,364

10 Claims. (Cl. 112—261)

The invention herein disclosed relates to guards or locks for the stitch regulators of sewing machines.

Special objects of the invention are to provide a guard of simple and inexpensive design, which can be quickly and easily applied to the sewing machine and which will securely protect the stitch regulator against tampering or unauthorized adjustments.

These and other desirable objects are attained in this invention by the novel features of construction, combinations and relations of parts hereinafter described, illustrated in the accompanying drawing and broadly covered in the claims.

The drawing illustrates a practical commercial embodiment of the invention, but it is to be understood that structure may be modified and changed all within the true intent and broad scope of the invention as hereinafter defined and claimed.

Fig. 1 is a broken front view of a sewing machine head having the invention applied thereto.

Fig. 2 is an enlarged broken sectional view as on substantially the plane of line 2—2 of Fig. 1.

Fig. 3 is a broken sectional view as on line 3—3 of Fig. 2.

Fig. 4 is a broken sectional detail as on line 4—4 of Fig. 2.

Fig. 5 is a detached perspective view of the base portion of the device.

In the several views, a sewing machine head and so much of the stitch regulator as necessary to illustrate the application of the present invention, are shown. Thus the lever by which actual adjustment of the feed stroke is determined is indicated at 7, pivoted inside the head at 8, and engaged by a screw 9, which projects out through a slot 10, in the head 11, and has at the outer end an exposed head or enlargement 12, adapted ordinarily to clamp against the arcuate surface 13, in which the slot is formed.

The guard consists, in the present disclosure of a two piece casing, which is secured immovably in protective position over the head of the stitch adjusting screw.

The two parts of the guard are shown as a base plate 14, curved longitudinally at 15, to fit over the curved boss 13, of the sewing machine head and slotted at 16, to register in such relation, with the slot 10, and a cap or cover 17, which is secured and preferably locked to the base plate.

The base plate may be secured in fixed relation over the slot in the head in various ways. In the illustration, this is accomplished by the provision of two lugs 18, at the opposite ends of slot 16, positioned to enter and engage opposite ends of slot 10, in the machine head and by utilizing the screw head 12, as a means for clamping the plate so positioned.

The shape and form of the cover may vary. In the present disclosure, it is shown as a hollow cap fitting closely to the base and secured in such relation by a key operated lock. This lock may be of the pin tumbler type as indicated at 19, having a rollback 20, adapted to be turned by a key 21, into and out of engagement with a securing flange or ledge 22, on the lower end of the base plate.

At the upper end, the cover is shown caught to the base plate by having an opening 23, in its upper end, which will hook over a lug 24, projecting from the upper end of the base plate. This last mentioned hook lug and the lock flange 22 are both offset or raised in respect to the base plate by angularly projecting supporting walls 25, 26, which as shown in Figs. 3 and 5, are of less width than the base, such as to pass within the cover and so by engagement with the side walls of the cover to position and secure the cover against sidewise movement on the base. These side wall portions of the cover are shown in Figs. 2 and 3 as curved at their inner edges at 27, to fit closely over the curved edge portions of the base plate.

The guard is applied by simply unscrewing the adjusting screw 9, from the lever 7, placing the base plate in engagement over the arcuate slotted boss 13, with the positioning lugs 18, entered in said slot and then inserting screw 9, through the registered slots 16 and 10, into engagement with its screw seat 28, in lever 7—this then fixedly secures the base plate in any position of feed adjustment in which the screw may be set; after which the cover is hooked over the top lug 24 and the lock turned to secure it to the bottom lug 22, of the base plate. The feed adjustment screw is then wholly inaccessible and for all practical purposes locked in its position of desired adjustment. On removal of the cover, the head of the screw is freely accessible and can be released, adjusted in either direction and secured in the exact position desired. The cover is easily engaged and locked in position on the base plate and when so secured fully protects the feed adjustment screw and prevents any tampering therewith.

The plate 15 serves as a mounting and as an anchorage for the cover and also as part of an enclosure preventing access to the stitch regulating screw. The lugs 18 in addition to engaging

the ends of slot 10, may be of only slightly less width than said slot, substantially as indicated to thus hold the plate immovably over the slotted portion of the head.

What is claimed is:

1. A guard for a stitch regulator of the type in which a screw is adjusted in a slot in a sewing machine head and is secured in adjusted relation by means of a head on the outer end of the screw which can be turned down into clamping engagement with the outer face of the sewing machine head, said guard comprising a base plate slotted to match the slot in the sewing machine head and thereby adapted to pass the shank of the screw and to be secured by the head of the screw, a cover for the screw head and means for locking said cover to said base plate, including a movable locking element.

2. A guard for a stitch regulator of the type in which a screw is adjusted in a slot in a sewing machine head and is secured in adjusted relation by means of a head on the outer end of the screw which can be turned down into clamping engagement with the outer face of the sewing machine head, said guard comprising a base plate slotted to match the slot in the sewing machine head and thereby adapted to pass the shank of the screw and to be secured by the head of the screw, a cover for the screw head, means for locking said cover to said base plate, including a movable locking element and a key controlled lock for shifting said locking element.

3. The guard of claim 1 with means for securing the base plate against shifting in respect to the slot in the sewing machine head.

4. The guard of claim 1 with projections on the back of the base plate at the ends of the slot therein positioned to engage the ends of the slot in the sewing machine head.

5. The guard of claim 1, in which said movable locking element is located at one end of said cover and cooperating interlocking elements between said base plate and cover are provided at the opposite end of the cover.

6. The guard of claim 1, in which the base plate has projections at opposite ends, the cap has a socket to receive one projection and the movable locking element is on the cap in position to interlock with the other projection.

7. The guard of claim 1, in which the base plate has end projections of reduced width and in which the cover rests on the base plate and fits over said end projections, said cover having an opening receiving and interlocking with one end projection of said base plate the locking element being mounted on the cap in position to engage the other end projection of the base plate.

8. A guard for a sewing machine stitch regulator of the type in which regulation of the stitch is effected by means of an adjustable thumb screw, said guard comprising a removable cover for housing the thumb screw and releasable locking means for locking said cover in covering relation over said thumb screw, said locking means including parts for anchoring the cover in fixed position relative to the stitch adjusting screw, concealed by the cover when the latter is in the guarding position, and a key operated tumbler lock by which the cover is removably secured in such relation.

9. In combination with a sewing machine head having a slot therein, an adjustable stitch regulating screw exposed through said slot, a cover for preventing access to said adjustable stitch regulating screw and means for supporting and securing said cover in protective relation over said screw and including elements engaged with said sewing machine slot for definitely positioning and anchoring said cover in protective position over the stitch regulating screw.

10. In combination with a sewing machine head having a slot therein, an adjustable stitch regulating screw exposed through said slot, a cover for preventing access to said adjustable stitch regulating screw, means for securing said cover in protective relation over said screw, including a mounting plate for the cover and means in part cooperable with said slot in said sewing machine head for securing said mounting plate in immovable relation over said slotted portion of the sewing machine head.

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