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M. O. SMITH

OIL GUARD ATTACHMENT FOR SEWING MACHINES

Filed March 17, 1926

Fig. 1.

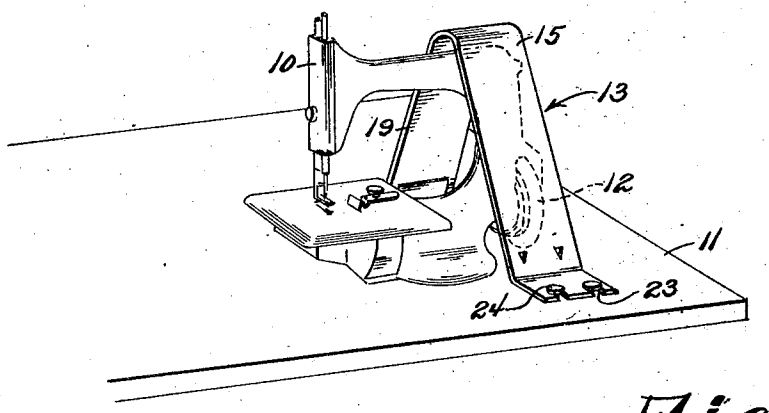


Fig. 2.

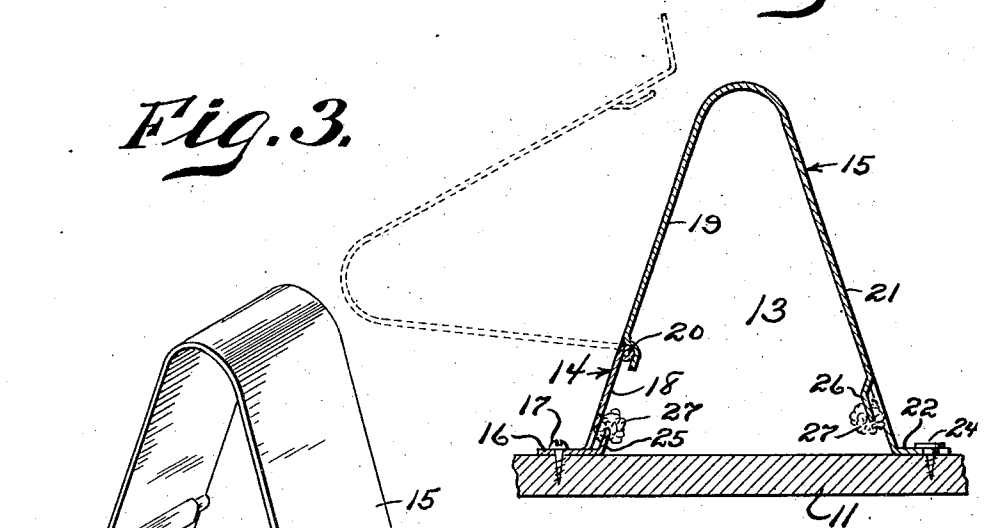
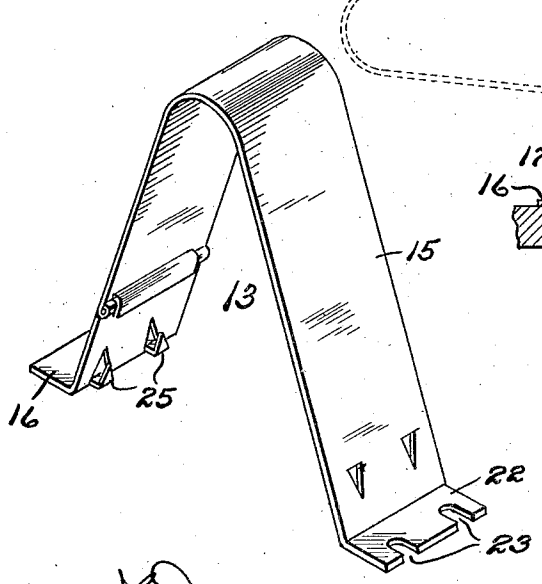


Fig. 3.



Murray O. Smith
INVENTOR

BY Victor J. Evans
ATTORNEY

WITNESS: John Donovan

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MURRAY O. SMITH, OF EAST RUTHERFORD, NEW JERSEY.

OIL-GUARD ATTACHMENT FOR SEWING MACHINES.

Application filed March 17, 1926. Serial No. 95,497.

This invention relates to improvements in oil guard attachments for sewing machines.

The principal object of the invention resides in an attachment for sewing machines for preventing oil from the fly wheel from splashing upon the operator when the machine is in operation and to also protect the goods being worked upon from becoming soiled, as it is a common occurrence in factories using sewing machines to suffer heavy losses due to the soiling of the goods from this oil.

Another object of the invention is to provide an oil guard for sewing machines in which any oil which might be thrown from the fly wheel by centrifugal force is trapped and absorbed.

A further object is the provision of an oil guard which is permanently attached to the table of a sewing machine, and which includes a swingable section which when locked in a closed position serves to enclose the fly wheel, but which section may be readily swung back to thus expose the fly wheel when desired to oil the same or to adjust the thread in the machine.

A still further object of the invention is to construct an oil guard which may be applied to machines now in use without altering the construction of the same, and which is simple in construction, inexpensive of manufacture, and efficient for the purposes intended.

With these and other objects in view, the invention resides in certain novel construction and combination and arrangement of parts, the essential features of which are hereinafter fully described, are particularly pointed out in the appended claims, and are illustrated in the accompanying drawing, in which:—

Figure 1 is a perspective view of my improved oil guard in position upon a sewing machine.

Figure 2 is a vertical sectional view therethrough showing in dotted lines the position of the guard when moved to permit access to the fly wheel.

Figure 3 is a perspective view of the oil guard per se.

Referring more particularly to the drawing, the reference numeral 10 designates a portion of a sewing machine which includes a table 11 and above which the usual fly wheel 12 is disposed. The fly wheel is driven in the usual manner and it is the object of this invention to prevent oil used for lubricating purposes from being thrown from the fly wheel and on to the goods being worked upon, as the wheel rotates.

My improved oil guard is constructed of flat resilient material and is designated in its entirety as at 13 and comprises what I shall term a stationary part 14 and a swingable part 15. The stationary part 14 comprises a horizontally disposed flange or foot 16 through which fastening elements in the nature of screws 17 are passed and which enter the table 11. Extending upward from the flange is an angularly disposed leg 18.

The part 15 is inverted V-shaped in side elevation and comprises a relatively short leg 19 which is hingedly connected to the leg 18 of the stationary part as at 20. The other diverging leg 21 of the part 15 terminates in an angularly disposed flange 22 provided with notches 23 extending inwardly from the outer edge, and which receives and coacts with headed studs 24 projecting from the table top.

From the description thus far, it will be seen that the guard is disposed in alignment with respect to the fly wheel so as to surround the same thereby to prevent the splashing of oil during rotation of the wheel. In the event that it should be desired to oil the fly wheel or adjust the thread in the machine, the section 15 may be swung back upon the hinge 20 as shown in dotted lines in Figure 2 of the drawing, to expose the fly wheel and permit uninterrupted access thereto. To allow the part 15 to swing back, it is first necessary to push in upon the leg 21 which flexes the same until the notches 23 are free of the studs 24. The part 15 may now be swung about its hinge joint and is supported in its backward position by resting upon the table 11.

For the purpose of collecting any oil which might be thrown upon the inner faces of the guard, I provide a set of prongs 25 on the leg 18 which are bent from the material and are upturned, while a set of downturned prongs 26 are stamped and bent inward from the leg 21. These prongs support oil waste or other absorbent material 27 for absorbing or sucking up any oil which may tend to pass down the inner walls of the guard. When the waste 27 becomes soaked, the same may be removed and replaced by a fresh supply.

While I have described what I deem to be

the most desirable embodiment of my invention, it is obvious that many of the details may be varied without in any way departing from the spirit of my invention, and I therefore do not limit myself to the exact details of construction herein set forth nor to anything less than the whole of my invention limited only by the appended claims.

What is claimed as new is:—

1. In combination with the supporting table of a sewing machine, an oil guard of inverted V-shape in configuration and adapted to receive the entire fly wheel of a sewing machine, means for swingably mounting said oil guard upon said table, and co-acting means between said guard and said table for locking the former against swinging movement.

2. In combination with the supporting table of a sewing machine, an oil guard of inverted V-shape in configuration and adapted to receive the fly wheel of a sewing machine, means for swingably mounting said oil guard upon said table, a flange provided on the free end of said guard and co-acting means between said guard and said table for locking the former against swinging movement, said co-acting means including spaced studs extending from said supporting structure for reception in respective notches provided in said flange.

3. In combination with the supporting table of a sewing machine, an oil guard of inverted V-shape in configuration and adapted to receive the fly wheel of a sewing machine, means for swingably mounting said oil guard upon said table, and co-acting means between said guard and said table for locking the former against swinging movement, and means provided on the opposed walls of said oil guard for supporting an absorbent material.

4. An oil guard for sewing machines comprising a pair of parts, one of said parts adapted to be securely fastened to a portion of a sewing machine, the other of said parts being hingedly connected to the first mentioned part and substantially inverted V-shape in configuration, and spaced notches in the free edge of said last part adapted to receive spaced elements carried by said sewing machine.

5. An oil guard comprising a pair of divergent walls adapted to house the fly wheel of a sewing machine and having supporting flanges at the free ends thereof, and prongs extending inwardly from said walls for supporting an absorbent material thereon.

6. An oil guard comprising a pair of hingedly connected yieldable diverging walls, supporting flanges at the free ends of said walls adapted to lie flat against a supporting structure, one of said parts adapted to be fixedly connected to a supporting structure to permit the other of said parts to be swung with respect thereto, and notches provided in the flange of said swingable part for co-action with elements adapted to extend from the supporting structure.

In testimony whereof I have affixed my signature.

MURRAY O. SMITH.