

Oct. 3, 1939.

C. P. WAAGE

2,174,609

TAKE-UP DEVICE

Filed Oct. 29, 1938

FIG. 1.

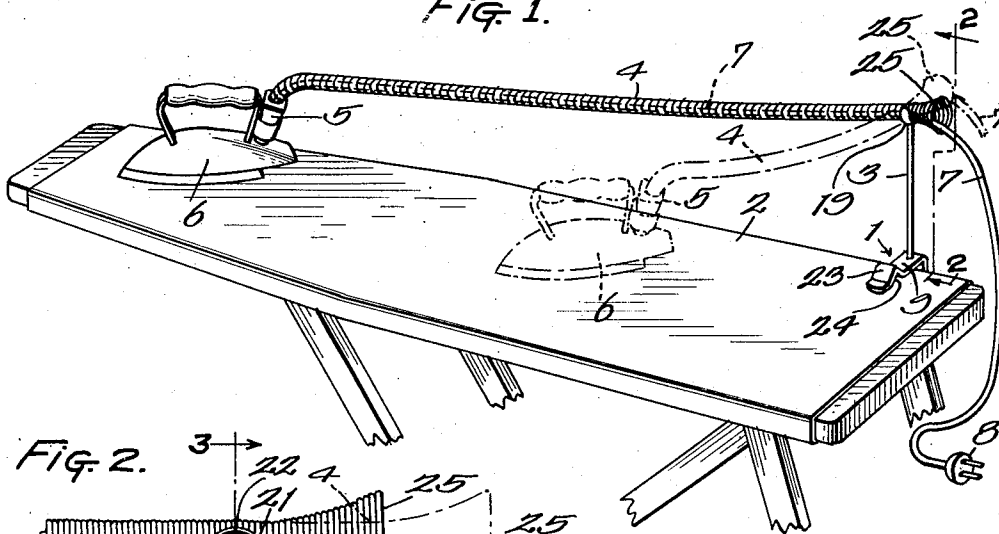


FIG. 2.

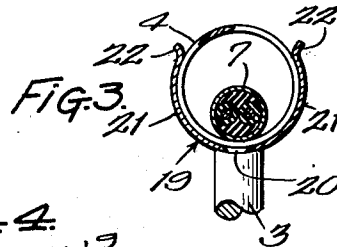
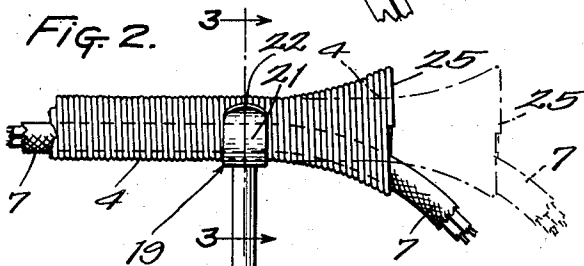


FIG. 4.

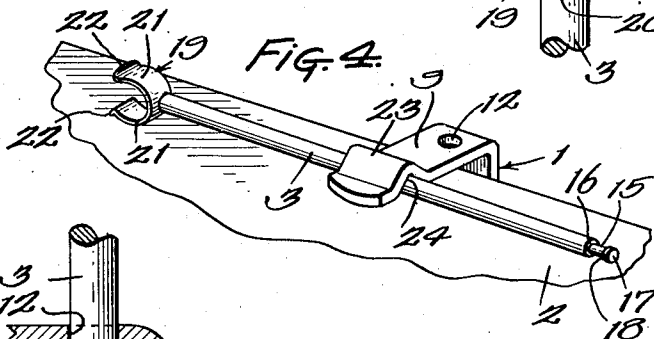
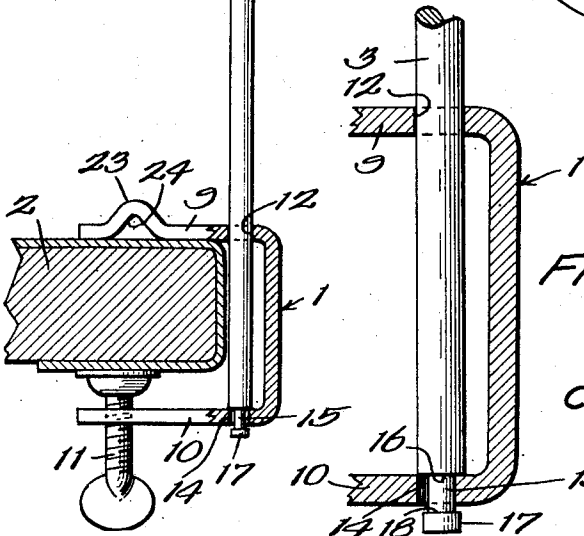


FIG. 5.



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TAKE-UP DEVICE

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3 Claims. (Cl. 248—51)

This invention relates to take-up devices for flexible electric conductors, and more particularly pertains to that class of devices employed in connection with electric cords for electric irons, and that are adapted to be anchored to a supporting surface or ironing board.

Some of the objects of the invention are to provide such a device that will be simple in construction; that will be durable; that will not be liable to get out of order; and that will be inexpensive.

Another object is to provide such a device that will have the least number of permanently connected parts to expedite the manufacture thereof.

Another object is to provide such a device having the simplest form of anchorage for anchoring same to an ironing board, and other operating parts of the simplest form that may be detachably connected with the anchorage in such a manner as to be locked in assembly therewith during operation of the device.

Other objects and advantages will become apparent by reference to the specification and the accompanying drawing, in which:

Fig. 1 is a view in perspective illustrating the device of the invention as applied to an ordinary ironing board.

Fig. 2 is an enlarged sectional detail of the device as may be taken on the section line 2—2 of Fig. 1.

Fig. 3 is an enlarged detail section taken on the section line 3—3 of Fig. 2.

Fig. 4 is an enlarged detail in perspective of certain parts as seen in Fig. 1 with other parts in changed position.

Fig. 5 is an enlarged detail of Fig. 2 showing certain parts in changed position.

The device as illustrated forms only one embodiment of the invention, for the reason that many changes or alterations may be made without departing from the spirit of the invention. Also the device may be adapted for use in connection with electric appliances or tools other than electric irons without departing from the invention.

Referring to the drawing, the device includes an anchorage or base 1 adapted for attachment to one edge of an ordinary ironing board 2 near an end thereof. Detachably mounted on the base is an upright bracket 3 upon whose top end is detachably secured one end of an elongated longitudinally resilient electric-cord-receiving casing or sheath 4. The casing is in the form of a coil spring of the tension type with closely wound coils so as to be capable of stretching to

a considerable length. The other end of the casing is secured to an ordinary electric terminal plug 5 connected in the usual manner with the electric iron 6. Connected in the usual manner with the plug 5 is a flexible electric conductor or cord 7 which passes freely through the casing 4 with a portion continuing therebeyond and provided at its end with an ordinary terminal plug 8 adapted for connection with the usual type of electric outlet or socket.

The sheath or casing 4 is so constructed that it will stretch and contract to hold the cord spaced above the ironing board during movements of the electric iron thereover away from and toward the bracket 3.

In accordance with the invention, the bracket is detachably mounted on the base for rotation in an upright position to permit of a swinging movement of the casing over the board to prevent bending of the coils of the casing at the bracket when the electric iron is in use on the board. To this end, the base is in the form of a U-shaped clamp composed of heavy strip material having upper and lower parallel leg portions 9 and 10, respectively, adapted to receive the edge of the board therebetween, with the board being clamped between the top leg 9 and a clamping screw 11 threaded in the leg 10. The bracket 3 is in the form of a rod whose lower portion extends through and is rotatably mounted in aligned or registering bearing apertures 12 and 14 provided in the leg portions 9 and 10 respectively.

The rod and bearings are cooperatively formed to provide locking or holding means rendered effective during swing movement or stretching of the casing 4 to lock or hold the rod in assembly with the base during operation of the electric iron on the board. To accomplish this the bearing aperture 14 is smaller in diameter than the bearing aperture 12, with the rod having a reduced bottom end portions 15 insertable through and loosely received within the bearing aperture 14 to permit the rod to slightly tilt or cant out of coaxial alignment with the bearings as lateral strain is exerted at its top end by the various movements of the sheath or casing during operation of the device. It may be stated that the bearing aperture 12 is slightly larger in diameter than the rod so as to permit the rod to swivel therein. The reduced end portion 15 forms an annular shoulder 16 at the lower portion of the rod adapted to rest upon the top edge of the bearing 14 to provide an end support for the rod. The reduced end portion is provided with

an annular groove forming an enlarged portion 17 at its end providing an annular shoulder 18 therebetween adapted to engage the bottom edge of the bearing aperture 14 when the bracket or rod is canted out of alignment with the bearings to hold or lock the bracket in assembly with the base, as best seen in Fig. 5.

For detachably connecting the casing 4 with the bracket, a spring-clip or clamp 19 is provided on the bracket. The clip is in the form of an arcuate U composed of spring strip material and being riveted at its base portion to the top end of the bracket, as at 20. The clip has side portions 21 adapted to snugly conform to and have pressure engagement with the casing sides to hold the casing in rigid connection with the bracket. The tips 22 of the sides of the clip are curved outward so that the casing may be easily snapped into the clip. One of the advantages of the clip is that it enables the bracket to be attached to the casing at any desired point therealong to increase or decrease the effective portion of the casing in accordance with the length of the ironing board employed in connection therewith.

The top leg 9 of the base is provided with an upset portion 23 forming a bracket-receiving recess 24 thereunder extending cross-wise thereof adapted to receive and hold the bracket in a reclining position on the ironing board when the device is not in use, as seen in Fig. 4.

When the bracket is received in the recess of the base, the clip 19 serves as a resilient end support therefor upon the ironing board to resiliently hold the bracket in wedging engagement in the recess.

The coils at the open-end of the casing 4 gradually increase in diameter to form an outwardly flaring end 25 adapted to extend beyond the top end of the bracket so as to be capable of flexing to eliminate or minimize metallic sounds as the cord 7 passes back and forth in said flared end during operation of the device.

Having thus described my invention, I claim:

1. In a take-up device for a flexible electric conductor, a base member having upper and lower portions provided with bearing openings of different diameters respectively, a rod larger in diameter than the smaller bearing but loosely re-

ceived within the larger bearing and having a reduced bottom end portion insertable in and loosely received within the smaller bearing, said reduced end portion being provided with a formation providing a shoulder arranged to engage an edge of the smaller bearing when the rod is canted in the bearings, and means on the rod for supporting the conductor for movement thereon.

2. In a take-up device for a flexible electric conductor, a base member adapted for attachment to a supporting surface and having upper and lower spaced portions provided with axially aligned bearing apertures of different diameters respectively, a rod larger in diameter than the smaller bearing but loosely received within the larger bearing and having a reduced bottom end portion insertable in and loosely received within the smaller bearing, said reduced end portion being provided with a groove forming a shoulder arranged to engage an edge of the smaller bearing when the rod is canted in the bearings to prevent detachment of the rod from the base, and means on the rod for supporting the conductor for movement over the surface.

3. In a take-up device for a flexible electric conductor, a U-shaped clamp adapted to be clamped to the edge of a supporting board and having axially aligned bearing apertures in the leg portions thereof of different diameters respectively, a rod larger in diameter than the smaller bearing but loosely received within the larger bearing, the rod having a reduced bottom end portion insertable in and loosely received within the smaller bearing and forming a shoulder on the rod for engaging the top edge of said bearing to limit downward movement of the rod in the bearings, said reduced end portion being provided with an annular groove forming an annular shoulder arranged to engage the bottom edge of the smaller bearing when the rod is canted in the bearings to prevent detachment of the rod from the clamp, and means on the top end of the rod for supporting the conductor for movement over the board and whereby upon said movement of the conductor the rod will be urged into a canted position in the bearings.

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