Feb. 5, 1935. T. SATO 1,990,135

WIRE HANDLING DEVICE

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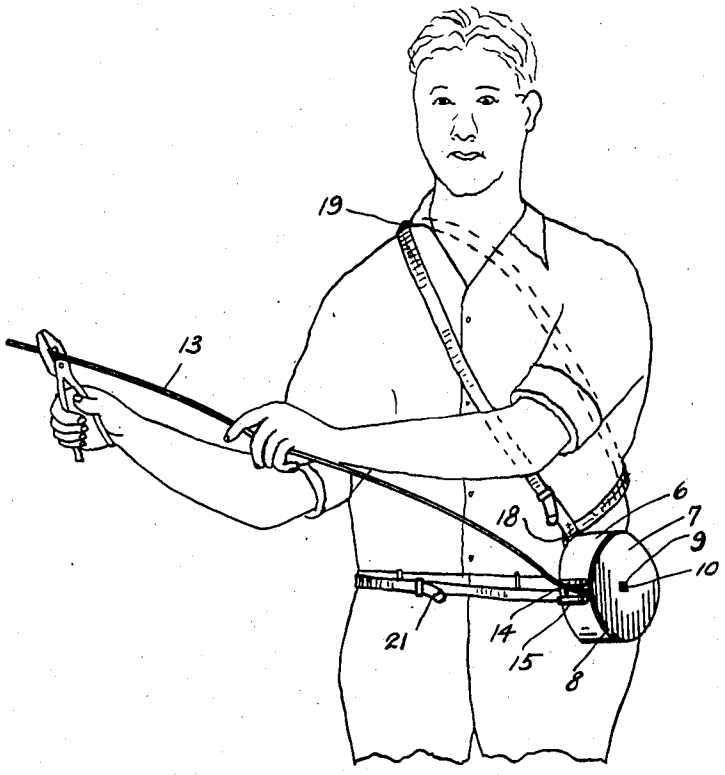

Fig. 1.

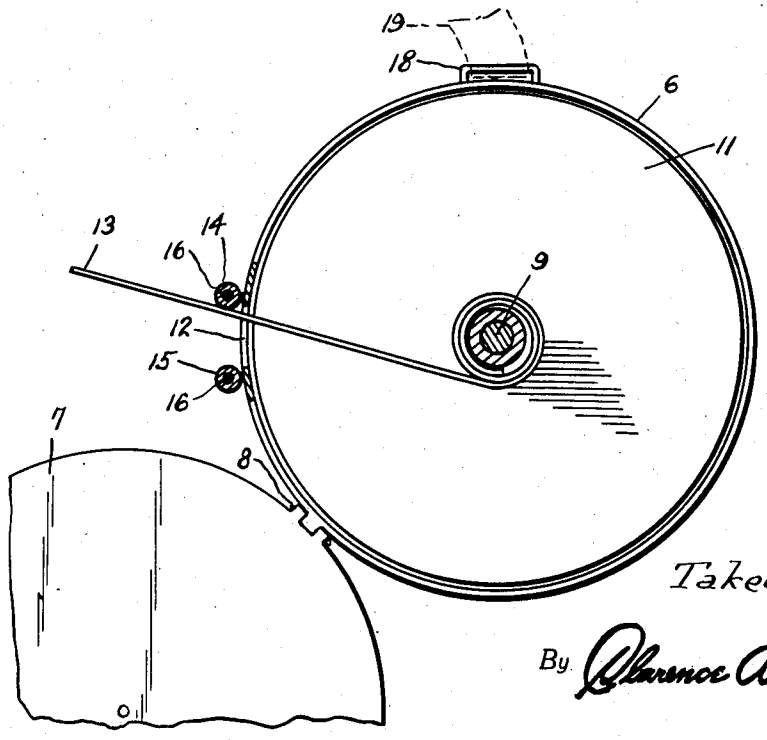

Fig. 2.

Inventor

Takeo Sato

By Clarence A. O'Brien

Attorney

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Fig. 3.

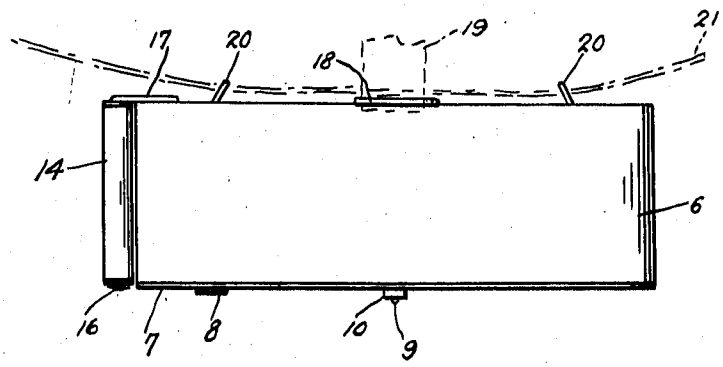


Fig. 4.

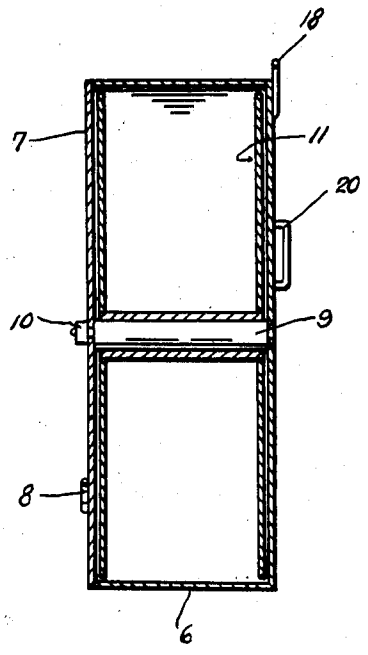
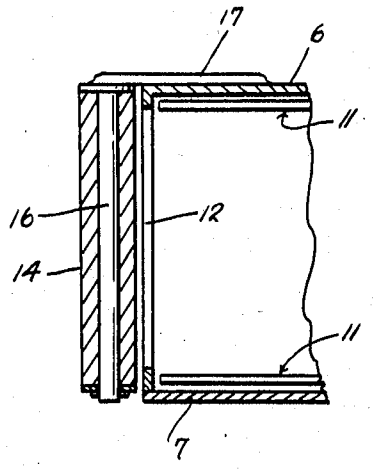


Fig. 5.



Inventor

Takeo Sato

By Clarence O'Brien

Attorney

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WIRE HANDLING DEVICE

Takeo Sato, Honolulu, Territory of Hawaii

Application December 12, 1933, Serial No. 702,086

1 Claim. (Cl. 242—97)

This invention relates to a reel equipped device expressly designed for aiding in the handling of wire such as is used in reinforced steel work and metal lath work.

In these lines of endeavor it is now the customary practice for workmen to drape a roll of wire over one shoulder and around the waist underneath the opposite arm so that it can be unwound for convenient attaching, splicing and clipping, etc. This present day method of handling the wire is cumbersome, unhandy, time consuming and otherwise objectionable in that it requires consumption of excess time accompanied by certain laborious results.

Having repeatedly encountered the difficulties experienced in this method of wire handling, I have discovered the need for the adoption and use of mechanical means constructed with a view toward overcoming these objections and promoting the acomplishment of more satisfactory results.

Stated otherwise I have evolved and produced an ingenious assembly of features dominated by the adaptation and use of a reel equipped casing, and a double strap harness permitting the casing to be fastened on the person at a point allowing the wire to be expeditiously paid out in a highly satisfactory manner so as to considerably enhance the utility of the workman handling it.

Other features and advantages will become more readily apparent from the following description and drawings.

In the drawings:

Figure 1 is a view in elevation showing the manner in which the harness is worn by an operative or workman and illustrating the manner in which the wire is withdrawn and cut off in sections for use.

Figure 2 is a side elevational view, with the door or cover swung open and with certain features shown in section for clearness of illustration.

Figure 3 is a rim elevational view looking downwardly on the reel containing casing.

Figure 4 is a central vertical sectional view through the casing and reel assembly with the wire removed.

Figure 5 is an enlarged fragmentary sectional view showing the outlet slot and an adjacent guiding and friction reducing roller.

Referring now to the drawings by detail reference characters, it will be observed that 6 designates a substantially circular or disk like casing which is open on one side. This open side is covered by a disk like cover plate or door 7 hingedly attached in place as indicated at 8. The numeral 9 in Figure 4 designates an axle forming pin mounted rigidly and centrally in the casing and having a reduced screw threaded end portion carrying a retaining nut 10. The reduced threaded end extends through an aperture formed in the center of the cover 7 and the nut 10 is placed on the outside of the cover to hold the cover in closed position.

The numeral 11 designates the wire-containing reel whose hub portion is mounted for rotation on the axle 9. At a predetermined point the rim of the casing is provided with a slot 12 as shown in Figure 5 which permits the wire 13 to be conveniently drawn out. As shown in Figure 2 I provide guiding and friction reducing rollers 14 and 15 on the exterior of the rim above and below the slot 12. This obviously facilitates unreeling and withdrawing of the wire from the reel in the casing. In Figure 5 it will be observed that each roller is mounted on a pintle 16 carried by an attaching bracket 17 secured to the closed side of the casing.

As shown in Figure 3 the casing is provided on the permanently closed side and at the top with an attaching loop 18 to which the shoulder strap 19 is connected. At somewhat diametrically opposite points are additional fastening loops 20 which serve to accommodate the waist or body encircling strap 21. These straps are fastened around the body of the user as shown in Figure 1 thus providing a harness to permit the reel-equipped casing to be conveniently fastened on the workman at a readily convenient and accessible place. These straps are adjustable through means of the usual buckles, as shown in Figure 1.

Novelty is predicated upon the provision of a wire holding and reeling device comprising a casing containing a rotary reel for the wire wherein the casing is provided in its rim with a slot to permit the wire to be conveniently fed out for use, the rim of the casing being provided adjacent said slot with upper and lower spaced parallel rollers allowing the wire to be expeditiously unwound from the reel and pulled out the desired distance for cutting, fastening, or for whatever task is being performed at the time. An additional feature of novelty is based on the aforesaid reel equipped casing which is open on one side to permit removal of the reel for replenishment with wire, said open side being covered by a hinged closure plate. Specific novelty is thought to reside in provision of the reel-equipped casing having the axle forming pin 9 provided at one end with a reduced screw threaded portion which ex-

tends through a central aperture in the cover 7 to accommodate a cover retaining nut 10.

Then too, stress is placed on the use of the two straps, that is the shoulder strap and waist or body encircling strap wherein these are conveniently fastened to the reel casing to provide dependable means for retaining the casing at a point convenient of access to promote expeditious results.

A careful consideration of the foregoing description in conjunction with the illustrative drawings will enable the reader to obtain a clear understanding of the purpose, features and advantages, the explicit construction, and the invention as hereinafter claimed.

It is to be understood that minor changes in shape, size, relative proportions, and materials may be resorted to in practice without departing from the spirit of the invention or the scope of the invention as now claimed.

Having thus described my invention, what I claim as new is:

In a wire handling device, a casing, a reel therein on which the wire is wound, a loop connected to the top portion of one end of the casing, a shoulder strap passing through said loop, a pair of loops extending outwardly from the said end of the casing and in alignment with each other, the last mentioned loops being located in a horizontal plane slightly above the horizontal diameter of the casing and a belt strap passing through said last mentioned loops.

TAKEO SATO.