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STEEL MEASURING TAPE WITH HANDLE WITH ANCHOR HOOK

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3 Claims. (CI. 33—137)

This invention relates to steel measuring tapes,

and more in particular to an improved end fix-

ture or handle for such tapes.

An object of this invention is to provide an improved handle or end fixture for a measuring tape having a hook for anchoring the end of the tape during a measuring operation. A further object is to provide such a handle having a hook which may be moved from its operative position into an inoperative position wherein it does not 10 become damaged and wherein it does not damage - objects with which it comes into contact. A further object is to provide for the above with structure which is inexpensive to manufacture, sturdy and lightweight in construction, efficient and de- 15 pendable in use, and practical in every respect. These and other objects will be in part obvious and in part pointed out below.

The invention accordingly consists in the features of construction, combinations of elements, 20 and arrangements of parts as will be exemplified in the structure to be hereinafter described and the scope of the application of which will be in-

dicated in the following claims.

In the drawing: Figure 1 is a perspective view of the end of a measuring tape constituting one embodiment of

the invention. Figure 2 is a top plan view of the device of Figure 1:

Figure 3 is an enlarged view of the lower portion of Figure 2:

Figure 4 is a sectional view on the line 4—4 of Figure 3 showing the hook in operative position; Figure 5 is an elevation from the left of Figure $_{35}$ 4; and,

Figure 6 is a perspective view of the tape and reel.

With measuring tapes such as steel tapes which are wound on a reel, it is desirable to provide means for attaching one end to a fixed object and to then unwind the tape along the course to be measured. For this purpose end attachments or handles have been provided in the form of a somewhat round or rectangular loop 45 which may be hooked over a nail or other projection to hold or anchor the end of the tape. Furthermore, some attachments of this type include a hook-like portion or member which may be projected along a surface transverse of the direc- 50 tion which the tape extends and holds or anchors the end of the tape. It is an object of the present invention to provide a device of the above character which avoids certain of the difficulties which have been encountered with similar de- 55 vices in the past.

Referring particularly to Figure 1 of the drawing, a tape 2 has attached to its free end 3 an end loop or handle 10 held by an end clip 4. The ends of end clip 4 extend along the top surface or face 5 of the tape and the bottom thereof and these ends are held by two rivets 6. End clip 4 has a barrel portion 3 positioned in alignment with the end of the tape which provides a hinge connection for handle 10 which is formed of sheet metal and is channel-shaped in cross-section so that (see Figure 4) it has two side walls 12 and 14 and a top wall 16. Handle 10 has longitudinal portions 18 and a transverse portion 20 and its ends 22 are reduced to cylindrical form and they project toward each other into the ends of barrel 3. Thus, the handle is attached to the

end of the tape so that it swings freely.

Pivotally mounted in the transverse portion 20 is a sheet metal hook member 24 which (see Figure 4) projects through a slot 25 in the top wall 15 and is pivotally held at its center by a rivet pin 28. The central portion of the hook is held against side wall 12 by a washer 30 which is positioned on pin 28 adjacent wall 14, and the rivet pin has its end beaded over at 32. When the hook member is in its operative position of Figure 4, its hook end 34 projects downwardly so as to hook over a ledge or the like, and the extreme end is bent to provide a relatively sharp hook tooth 36. This hook tooth may be caused to engage and become somewhat embedded in a surface 38 as indicated, while the bottom surface of handle 10 is positioned along a surface as shown in the plane of the tape. The upper end of hook number 24 carries a tab 40 which is adapted to be engaged by the finger for moving the hook member between its operative and inoperative positions.

When in the inoperative position (see Figures 3 and 5) the tab 40 of the hook member projects from the top wall 16 and the remainder of the hook member is positioned within the channel between walls 12 and 14 and beneath the top surface of wall is. When positioned in this manner the hook tooth 36 (Figure 3) rides with resilient pressure against the surface of wall 14 whereas the hook member rides against wall 12 for substantially its entire length. This provides substantial friction between the hook member and walls 14 and 16 which holds the hook member in its retracted or inoperative position. However, this friction may be easily overcome and the hook member moved to its operative position by exerting pressure on the tab 40. With the hook member in its inoperative position it is totally enclosed except for its tab 40 which is so shaped

that it does not hook or catch onto objects and it does not scratch or otherwise damage objects; and by being thus protected the hook member is not subjected to actions which would damage it.

When the hook member is in its extended or 5 operative position, the user may position the end of the tape along a horizontal surface to the vicinity of a vertical ledge or other transverse surface; and, then, even at a somewhat remote position he may shake the tape and cause 10 the end handle 24 to assume the position of Figure 4 wherein the hook portion 34 projects downwardly along the transverse ledge or surface. The user then may tighten the tape and thereby cause the hook tooth 36 to engage and 15 become affixed to the transverse surface. Thus, it is seen that a hook is provided which is easily moved to its operative position and is then easily attached.

The structure of handle 10 and the hook is 20 sufficiently sturdy to withstand even extreme abuse during use. At the same time, the hook is light in weight so that it is easily manipulated, for example, as described above.

Furthermore, the handle is commensurate in 25 size and weight to the tape itself and it is adaptable to various conditions of use.

As many possible embodiments may be made of the above invention and as many changes might be made in the embodiment above set 30 forth, it is to be understood that all matter hereinbefore set forth, or shown in the accompanying drawing, is to be interpreted as illustrative and not in a limiting sense.

I claim:

1. In a measuring tape of the character described, the combination of, a sheet metal loop handle hinged at one side to the end of a tape with a hinge axis transverse of the side edges of the tape and having an elongated slot at 40 its other side, said handle being channel-shaped and said elongated slot being a portion of the space within said channel and an opening through the top wall of the channel, and an elongated hook member rockably mounted with- 45 in said elongated slot and adapted to move between an inoperative position wherein it is substantially enclosed within said slot and an operative position wherein a hook portion projects

downwardly from the bottom of said loop handle, said hook member being adapted to frictionally

engage the sides of said slot whereby it is re-

tained in its inoperative position.

2. Apparatus as described in claim 1 wherein said hook member is an elongated sheet metal bar having a hook tooth on one end and a tab portion on the other end which is adapted to be engaged by the finger, and wherein said apparatus includes a pivot pin projecting through the walls of said handle and the central portion of said hook member.

3. In apparatus of the character described, a steel measuring tape having a free end which may project from a case, a loop handle formed of a sheet metal channel which opens downwardly so as to provide side and top walls, said loop handle having diverging arms each of which has an integral transverse projection by which the loop handle is hinged to the tape, said loop handle also including a transverse portion connecting said arms, means fixed to the tape providing the hinge connection with said transverse projections, said loop handle having an elongated slot in its top wall extending from the central portion thereof toward the end of one of said arms. and a hook member pivoted at the center of said transverse portion of the loop handle with one end being a hook portion and having its other end projecting through said slot and having an operating projection extending from its extreme end, said hook member being adapted to be snugly received within the channel of said transverse portion whereby it is rendered inoperative 35 and is protected and is swingable to an operative position wherein its hook portion projects downwardly from the loop handle and is adapted to anchor the end of the tape.

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