To all whom it may concern:

Be it known that I, Wyatt C. Starr, a citizen of the United States, residing at Lake Wales, in the county of Polk and State of Florida, have invented a new and useful Self-Tightening Rope Drum, of which the following is a specification.

The device forming the subject matter of this application is adapted to be used in connection with drums on logging devices and the like, which handle a cable often a hundred feet long, or more. It is exceedingly difficult to get the slack out of such a cable, and the present invention aims to provide means whereby this may be done.

It is within the province of the disclosure to improve generally and to enhance the utility of devices of that sort to which the invention appertains.

Although a preferred embodiment of the invention has been shown, it will be understood that a mechanic, working within the scope of what is claimed, may make changes without departing from the spirit of the invention.

In the drawings:

Figure 1 shows in top plan, a device constructed in accordance with the invention.

Figure 2 is a longitudinal section taken through the drum, and

Figure 3 is an end elevation wherein parts are omitted.

The numeral 1 marks a frame wherein is journaled a shaft 2, the numeral 3 designating any suitable means for rotating the shaft 2 either forwardly or backwardly. A drum 4 is secured at 5 to the shaft 2. An extension 6, of annular form is secured at 7 to one end of the drum 4 and is provided with ratchet teeth 8 disposed parallel to the adjacent end of the drum 4. A rotatable member 9 is journaled on the extension 6 between the teeth 8 and the adjacent end of the body of the drum, the member 9 having outstanding arms 10 whereon paws 11 are pivoted at 12, the paws being adapted to cooperate with the teeth 8 on the extension 6 of the drum 4. A flexible element 14 is looped about a distant sheave 15, which is mounted for rotation about a fixed axis, one end of the flexible element being connected at 16 to the body of the drum, and the other end of the flexible element being connected at 17 to the rotatable member 9. One run of the flexible element 14 is provided with any suitable means 25 for carrying a log 26 or the like.

When it is desired to tighten the flexible element 14, most of the flexible element is reeled on the drum 4, as shown in Figure 1. The member 9 is held against rotation, in any suitable way, for instance by means of a prop 18 inserted beneath one of the arms 10 of the rotatable member. The driving mechanism is operated and the drum is rotated, thereby taking the slack out of the flexible element 14, the ratchet teeth 18 of the drum clicking over the paws 11. The prop 18 then may be knocked out from beneath the arm 10 wherewith it is engaged, and the drum 4 and the flexible element 14 may be operated in the usual way.

I claim:

1. In a device of the class described, a drum supported for rotation and including a reduced extension provided with a ratchet spaced from one end of the drum, a rotatable member journaled on the extension and held by the ratchet in close relation to said end of the drum, the rotatable member having an outstanding arm, a pawl pivoted to the arm and cooperating with the ratchet, a removable prop engaging the arm, and a looped flexible element having its ends connected respectively to the drum and to the rotatable member.

2. In a device of the class described, a drum supported for rotation and including a reduced extension provided with a ratchet spaced from one end of the drum, a rotatable member journaled on the extension and held by the ratchet in close relation to said end of the drum, a pawl pivoted to the rotatable member and cooperating with the ratchet, detachable means cooperating with the rotatable member to hold the same against rotation, and a looped flexible element having its ends connected respectively to the drum and to the rotatable member.

3. In a device of the class described, a drum supported for rotation and provided with a ratchet, a rotatable member journaled on the drum and having an outstanding arm, a pawl pivoted to the arm and cooperating with the ratchet, a removable prop engaging the arm, and a looped flexible element having its ends connected respectively to the drum and to the arm.

4. In a device of the class described, a drum supported for rotation and provided
with a ratchet, a rotatable member journaled on the drum, a pawl pivoted to the rotatable member and cooperating with the ratchet, a removable prop constituting means for holding the rotatable member against rotation, the rotatable member having means for engaging the prop, and looped flexible element having its ends connected respectively to the drum and to the rotatable member.

5. In a device of the class described, a drum, a rotatable member journaled on the drum, a pawl and ratchet connection between the rotatable member and the drum, a flexible element having its ends connected respectively to the drum and to the rotatable member, and a removable prop constituting means for engaging the prop. In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

Wyatt C. Starr.

Witnesses:

J. F. Bradley,

J. F. Du Bois.