

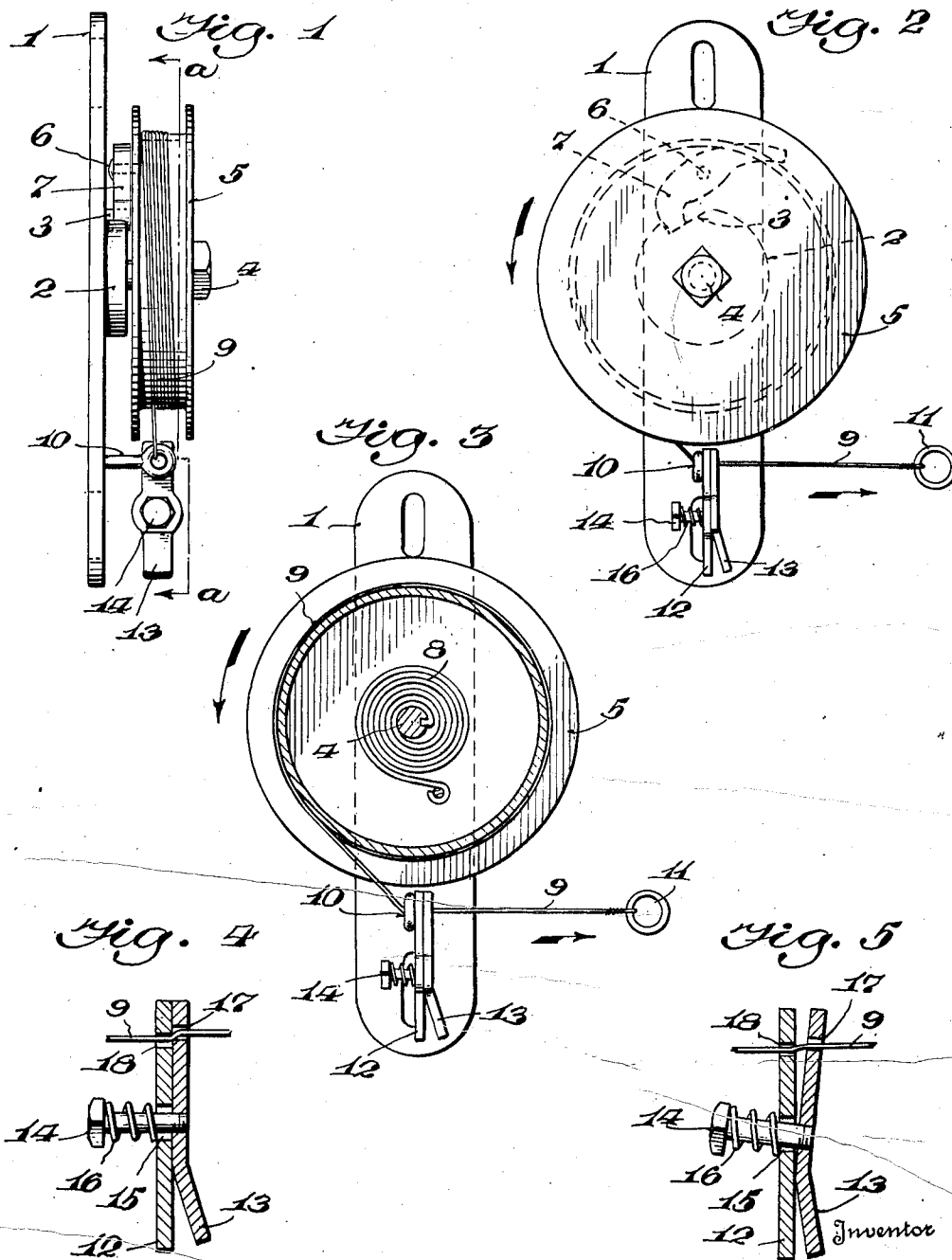
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BINDING CLAMP TO HOLD LINES WOUND ON TO ROLLS

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BINDING CLAMP TO HOLD LINES WOUND
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2 Claims. (Cl. 188—65.1)

Spring drums are known on which a line is wound, the drum being rotated under the action of a spiral spring put under tension during unwinding, and held in various positions by a ratchet pawl which prevents the unwinding of the line by engaging a notch in a fixed part of the article. When the pawl is in gear with the notch, the line cannot be unwound by pulling it. To release the pawl and effect the unwinding, a small length of the line must first be rewound, after which it can again be unwound by a quick pull on the line. When the sufficient length of line has been thus unwound, the line should be slowly pulled by which the pawl will again be able to engage the notch. If the whole length of the line is wound up on the drum, so that a limiting part, generally a ring at the end of the line, strikes a guide eye for the line, it may happen that the pawl simultaneously engages the notch. As it is not possible to wind up a further small length of line to release the pawl from the notch, because the ring is up against the guide eye, the line cannot be unwound.

The above mentioned drawback is prevented by the present invention, which provides a binding clamp adapted to grip the line wound on to the drum. The clamp can be placed at a greater or smaller distance from the end ring, so that, when the line is to be unwound, it is possible to free enough length of line between the eye and the clamp to allow the drum to be rotated slightly in the direction to wind up the line, whereby the pawl is released from the notch and unwinding be effected normally.

The clamp according to invention consists of two bars, connected by a bolt with a spring arranged around it and so arranged that one of the bars can rock slightly on the other, one end of each bar having a hole through which the line is passed, and the hole in one bar being slightly out of register with the hole in the other bar whereby the line can be jammed between the edges of the two holes when the clamp is closed.

The drawing shows:

Figs. 1 and 2 a spring drum structure with a binding clamp according to the invention in side-view and top-view respectively,

Fig. 3 a section on the line *a-a* in Fig. 1, and

Figs. 4 and 5 a longitudinal section of the binding clamp and showing the clamp in two different positions, drawn to a larger scale.

The spring drum shown in the drawing, which is of known construction, comprises a base 1 which can be hung on a wall or the like. On the base 1 is fixed a post 2 with a notch 3, therein and carry-

ing a pin 4 on which is rotatably arranged the drum member 5, on which a ratchet pawl 7 can rock on a pivot 6, said pawl when it lies in the notch 3 preventing rotation of the drum member. Inside the drum member 5 is arranged a spiral spring 8, one end of which is fixed to the post 4, and the other end to the drum member 5. On the drum is wound a line 9, which has been passed through an eye of a swivel 10 on the base 1. At the free end of the line 9 is a ring 11 to be hung on a hook or the like, when the line is to be used for the drying of clothes. Upon unwinding the line from the drum the spring 8 will be tensioned and, when the line is slackened, the spring will rotate the drum and wind up the line. Other known line and drum mechanisms can be used.

To prevent the whole length of the line from being wound on the drum, a binding clamp is placed on the line, which clamp can be moved to different positions.

The binding clamp consists of two bars 12 and 13 interconnected by a pivot 14, which is fixed to the bar 13 and passes through a hole 15 in the bar 12. Round the pivot 14 is arranged a helical spring 16, which holds the two bars together. One end of the bar 13 is bent slightly away from the other bar. In the other end of the bar 13 is a hole 17, and in the bar 12 a hole 18. The line 9 is passed through both these holes, which are located not quite in register with each other, so that, when the clamp is closed as shown in Fig. 4, the line will be jammed between the edges of the two holes. If the end of the bar 13 is pressed slightly, so that it comes into the position in relation to the bar 12 shown in Fig. 5, the line 9 is no longer gripped, and it can therefore run freely through the holes 17 and 18. Before the winding-up of the line commences, the clamp can be placed at a suitable place on the line 9, which can then only be wound up as far as the clamp will permit.

I claim:

1. In a spring drum and line structure, a line clamp comprising, a pair of bars disposed side by side in longitudinal contact with each other over a portion of their length each bar having a hole transversable by said line through the contacting portion, and a spring connection between said bars adapted to allow one bar to rock slightly on the other with separation of the contacting portions, the holes in said portions being positioned sufficiently out of register when the said portions are in contact whereby said line is gripped between the bars, but to allow said line

to run freely through the holes when said bar portions are separated.

2. In a spring drum and line structure, a line clamp comprising, a pair of bars disposed side by side in longitudinal contact with each other over a portion of their length each bar having a hole transversable by said line through the contacting portion, a pin fixed in one of said bars and extending through an opening in the other bar, a spring abutting between said pin and the

5 other bar and pressing said bars together with capacity for limited rocking movement of one bar on the other with separation of the contacting portions, the holes in said portions being positioned sufficiently out of register when the said portions are in contact whereby said line is gripped between the bars, but to allow said line to run freely through the holes when said bar portions are separated.

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