July 1, 1930. W. DUBERVILL 1,768,894

RETURN BLOCK

Filed July 27, 1929

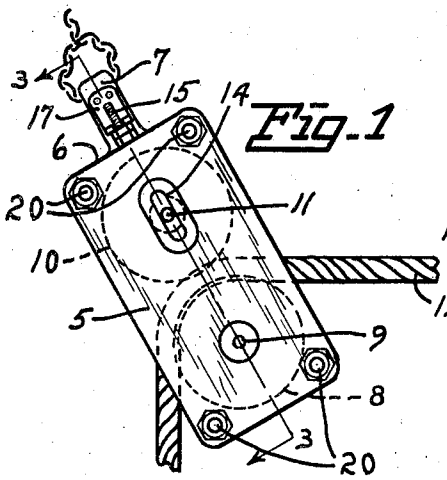


Fig. 1

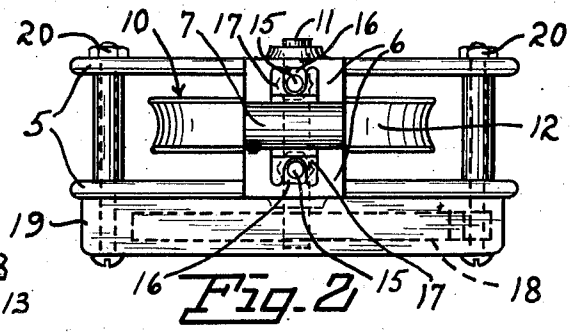


Fig. 2

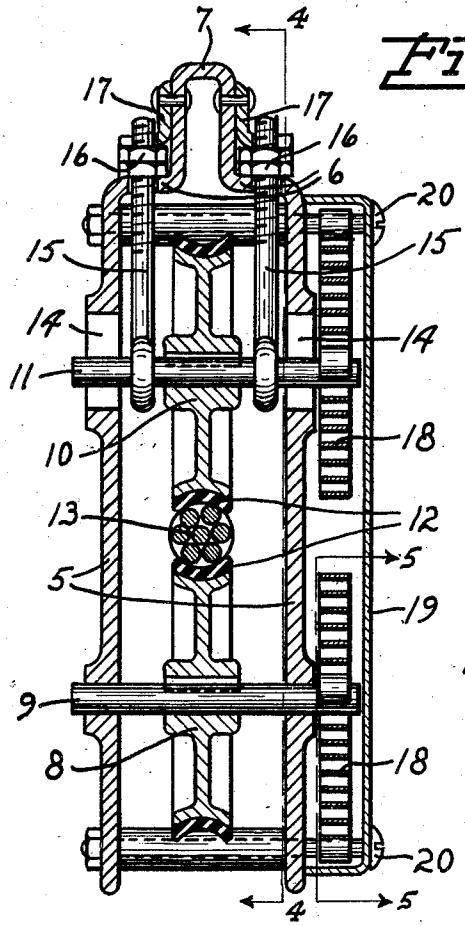


Fig. 3

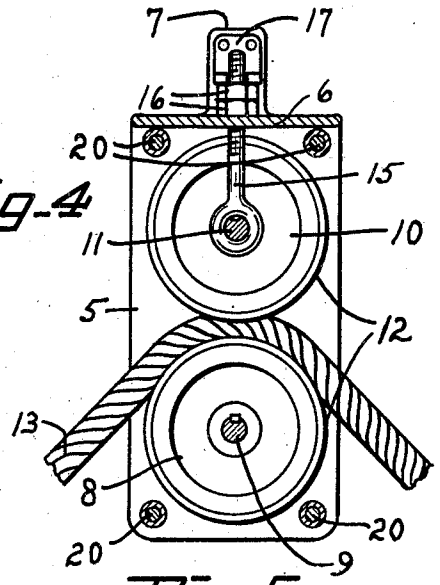
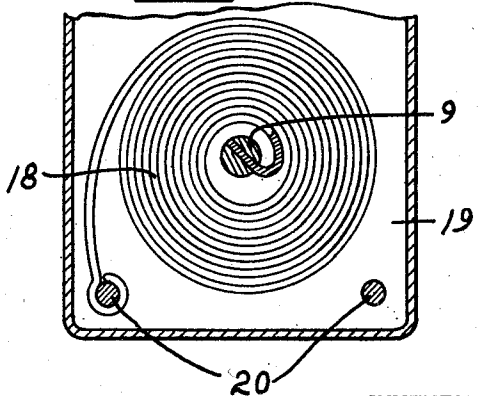


Fig. 4

Fig. 5



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UNITED STATES PATENT OFFICE

WELLINGTON DUBERVILL, OF DESMET, IDAHO

RETURN BLOCK

Application filed July 27, 1929. Serial No. 381,429.

My invention relates to return blocks and more particularly to a block that is used to return the rope on a hay fork when hay is drawn into the mow by horse power. Certain objects of the invention are to provide spring means for causing the return of the rope together with adjustable and frictional means for the sheaves or pulleys whereby they are adapted to fit and engage ropes of different sizes.

With the above and other objects in view which will appear as the description proceeds, the invention consists of the novel construction, adaptation, combination and arrangement of parts hereinafter described and claimed. These objects are accomplished by devices illustrated in the accompanying drawings, wherein:—

Figure 1 is a view in side elevation of the return block;

Fig. 2 is a top plan view of the same;

Fig. 3 is a view in transverse vertical section taken substantially on a broken line 3, 3 of Fig. 1;

Fig. 4 is a view in vertical section taken on a broken line 4, 4 of Fig. 3; and

Fig. 5 is a fragmentary view in vertical section taken on a broken line 5, 5 of Fig. 4 and showing one of the springs in side elevation.

Referring to the drawings throughout which like reference numerals designate like parts, the numeral 5 indicates the main frame casing which is open at its lower end and contracted at its upper end to form shoulders 6 and a loop 7 for the insertion of fastening means for securing the device to a fixed object as will be understood.

A sheave or pulley 8 is keyed to a shaft 9 whose ends are journaled through the lower side portions of the casing 5, and a sheave 10 keyed to a shaft 11 is mounted in the upper portion of said casing. Said sheaves are provided with tires 12 that are made of rubber or other flexible material for the purpose of increasing their frictional engagement with a rope 13 as clearly shown in the drawings.

The end portions of the shaft 11 are slidably mounted in corresponding slots 14 provided in the sides of the casing 5. Eyebolts 15 have their eye ends passed over said shaft and their threaded ends passing through the shoulders 6 of the casing. Jam nuts 16 for said bolts bear against the exterior sides of said shoulders and slotted brackets 17 secured to the loop 7 bear against said jam nuts.

Referring to Fig. 3 of the drawings, it will be obvious that engagement of the rope 13 between the sheaves 8 and 10 may be increased or decreased by manipulating the jam nuts 16. The bolts 15 which support the axle 11 are ordinarily used to increase the frictional engagement of said sheaves with said rope by manipulating said jam nuts, and the brackets 17 in engagement with said jam nuts prevent any thrust movement of the bolts as will be understood.

The means for causing a return movement of the rope 13 comprises spiral springs 18 whose inner ends are respectively fixed to the shafts 9 and 11 and whose outer ends are fixed to a housing 19 or other stationary part of the device as clearly shown in Fig. 5 of the drawings. Said housing may be secured to the casing frame 5 by bolts 20 provided with sleeves that retain the sides of said casing in spaced relation.

It will now be obvious that when the rope 13 is properly engaged between the sheaves 8 and 10 and is drawn therebetween said sheaves will rotate and thus wind up both the springs 18. It will likewise be apparent that when said rope is released the recoil movement of said springs will rotate said sheaves in the opposite direction and thus carry the rope back to its original position.

Although many other usages may be found for my device, it is particularly adapted for use in moving hay as hereinbefore set forth.

Having thus described my invention, it being understood that minor changes may be resorted to in its construction without departing from its scope and spirit, what I claim and desire to secure by Letters Patent of the United States is:

1. A return block comprising a frame casing, a pair of juxtaposed sheaves mounted for rotation within said casing, a flexible line disposed between said sheaves and frictionally

engaged by both, a spiral spring for each of said sheaves arranged to be wound up when said line is moved in one direction, and said springs adapted to cause said line to move in the opposite direction when said line is released.

2. A return block comprising a frame casing, a pair of juxtaposed sheaves mounted for rotation within said casing, a flexible line disposed between said sheaves, friction tires for said sheaves, means for adjusting one of said sheaves with respect to the other, a spiral spring for each of said sheaves arranged to be wound up when said line is moved in one direction, and said springs adapted to cause said line to move in the opposite direction when the line is released.

In testimony whereof I affix my signature.

WELLINGTON DUBERVILL.