

T. G. POOL.
SHOCK BINDER.

APPLICATION FILED MAR, 31, 1909.

934,012.

Patented Sept. 14, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

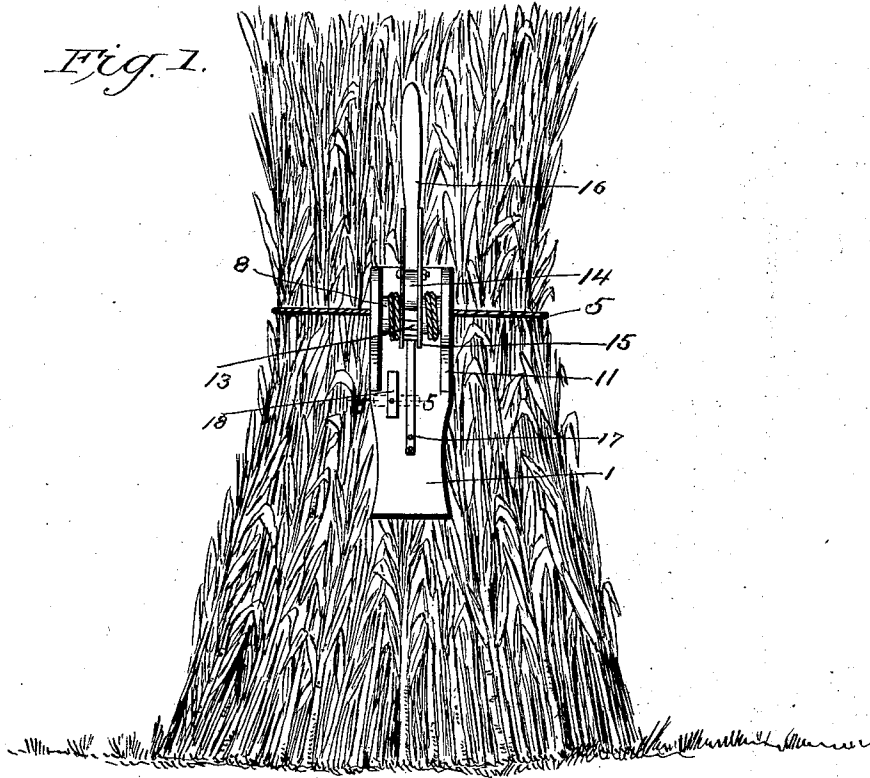
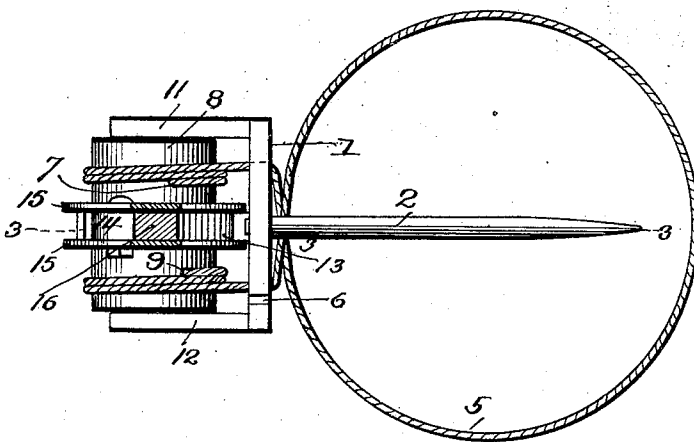


Fig. 2.



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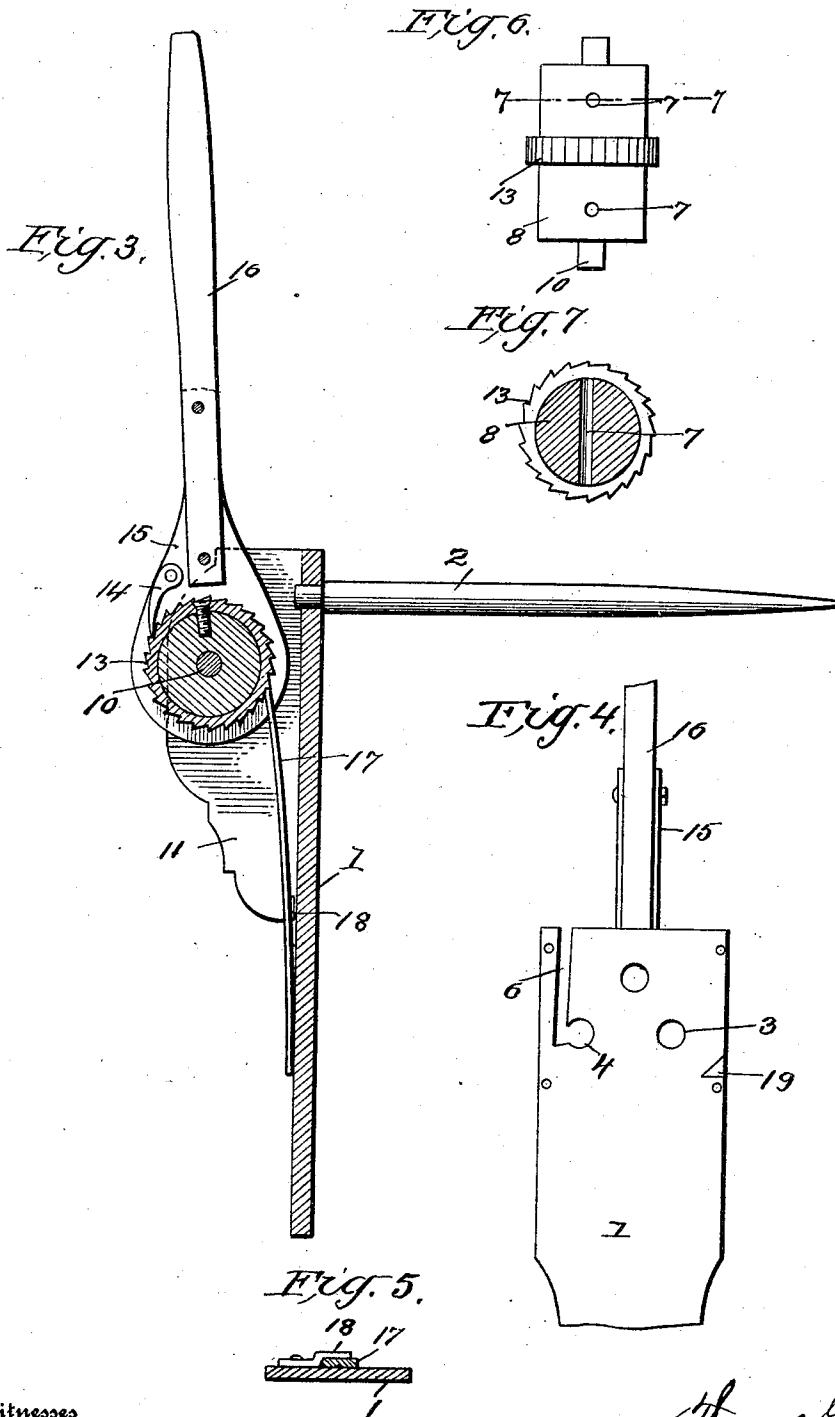
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UNITED STATES PATENT OFFICE.

THOMAS G. POOL, OF VIRGINIA, VIRGINIA.

SHOCK-BINDER.

934,012.

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To all whom it may concern:

Be it known that I, THOMAS G. POOL, a citizen of the United States, residing at Virgilina, in the county of Halifax and State of Virginia, have invented certain new and useful Improvements in Shock-Binders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in shock binders, and particularly to shock binders having a drum for drawing a rope or cord tightly around the shock upon which the binder is placed.

An object of the invention is the arrangement of the drum, and operating means upon a base having a retaining member projecting therefrom which engages the shock in such a manner as to permit the drawing up or tightening of the rope or cord around the drum at both ends of the cord so as to more evenly distribute the strain upon the rope and the squeezing action on the shock.

Another object in view is the arrangement in the shock binder of a drum and ratchet mechanism for moving the same, together with a base formed with apertures for leading the rope or cable from each end of said drum around the shock to which the binder is applied.

With these and other objects in view the invention comprises certain novel constructions, combinations and arrangement of parts as will be hereinafter more fully described and claimed.

In the accompanying drawing: Figure 1 is a front view of the shock binder applied to a shock. Fig. 2 is a top plan view of the binder removed, the handle of the binder shown in sections. Fig. 3 is a longitudinal vertical section through the binder partially on line 3—3 of Fig. 2. Fig. 4 is a fragmentary rear elevation of the structure shown in Fig. 2. Fig. 5 is a section through Fig. 1 approximately on line 5—5. Fig. 6 is a top plan view of the drum and ratchet. Fig. 7 is a section through Fig. 6 on line 7—7.

In the binding of shocks of grain, as for instance, corn, means must be provided for squeezing or drawing tightly together the shock previous to applying the retaining or binding cord. Various means have been provided for accomplishing this purpose

with more or less success, and the present invention relates to this class of devices.

Referring to the accompanying drawings in which one embodiment of the invention is disclosed 1 indicates a base to which a retaining pin 2 is secured, which pin is designed to pierce or enter the shock until base 1 rests against the shock. Base 1 is also provided with apertures 3 and 4 through which a rope or cable 5 is adapted to pass, and from thence around the shock. Leading from aperture 4 is a slot 6 through which one end of the rope may be passed if desired, and when applying the rope or cable 5 one end of the same is passed through an aperture 7 in drum 8, and is led from thence through opening 3 across base 1, and from thence around the shock, as shown in Fig. 2, back to opening 4 where the rope may be drawn as tight as possible and then slipped through slot 6 until the rope rests in aperture 4. The end of rope 5 may be inserted into opening 9 in drum 8. When in this condition the rope or cable 5 is ready to be wound upon drum 8 for squeezing or drawing together the shock. As will be clearly seen in Fig. 2 the rope is crossed immediately after the same leaves apertures 3 and 4 so that upon rotation of drum 8 the squeezing action will be utilized to the fullest extent for properly drawing the shock together and receiving the binding cord.

Drum 8 is mounted upon a shaft 10 which in turn is journaled in flanges or uprights 11 and 12. Secured to drum 8, preferably centrally thereof, is a ratchet 13 which is engaged by pawl 14 carried by handle receiving guides 15. The handle receiving guides 15 are preferably formed of sheet material and arranged with an aperture therethrough for accommodating drum 8 so that the guides may be freely rotated around drum 8 but on opposite sides of ratchet 13. A handle 16 is rigidly secured to the guides 15 so as to afford an ample lever for pawl 14 for causing the same to rotate drum 8. A spring 17 is arranged to engage ratchet 13 in order to prevent any reverse movement thereof, so that as the drum is rotated and rope 5 brought under tension, the same is held under such tension until the rope is properly released. When it is desired to release the tension of rope 5 or to prevent spring 17 from engaging ratchet 13, a clamping member 18, which is pivotally secured in position

upon base 1, is turned in the position shown in dotted lines in Fig. 1 for depressing spring 17, as shown in Fig. 5, whereby the spring will be held positively out of engagement with ratchet 13. This will permit the free rotation of drum 8 so that one end of the cord or rope 5 may be removed therefrom and from around the shock. However, previous to removing the binding cable or rope 5 an ordinary cord or binding twine is passed around the shock and preferably held in place by having one end thereof engaging notch 19 until the cord is placed entirely around the shock. After the binding cord or twine has been tied ratchet 13 is released and the binder is removed from the shock, and the binding twine left thereon will be sufficient to hold the shock properly together after the same has once been squeezed in its proper shape by the binder.

The arrangement of rope 5 is shown in Fig. 2 as being crossed, which is preferable, but it will be evident that the same need not be crossed unless desired. In addition it will be observed that the drum 8 is so arranged that lever 16 operates in a plane at right angles to the general direction of the shock, which will not cause any twisting or side movement of the shock, and especially by the pulling of the rope at both ends the strain on the shock will be even and consequently the shock squeezed together properly without deranging the same.

What I claim is:—

1. In a shock binder, a base designed to engage a shock flatwise and extend vertically when in position against the shock, said base being formed with a plurality of apertures for accommodating a rope, a drum mounted on said base crosswise thereof and opposite said apertures, a cable secured to said drum and passing through said apertures and from thence around said shock, said cable extending from said base substantially parallel with the axis of said drum, a rack secured to said drum, a lever pivotally connected with said drum, a pawl for connecting said lever and said rack, whereby upon the movement of said lever said drum will be rotated, a spring arm for preventing reverse rotation of said drum, and means for holding said spring arm out of engagement with said drum.

2. In a shock binder, a base, a rotating drum mounted thereon, a cable arranged to pass around the shock and to engage said drum and to be brought under tension thereby, means for rotating said drum, means for preventing a reverse rotation of said drum, and a latch for throwing out of operation and holding out of operation said last mentioned means.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS G. POOL.

Witnesses:

M. W. PLEASANTS,
CAMMIE POOL.