

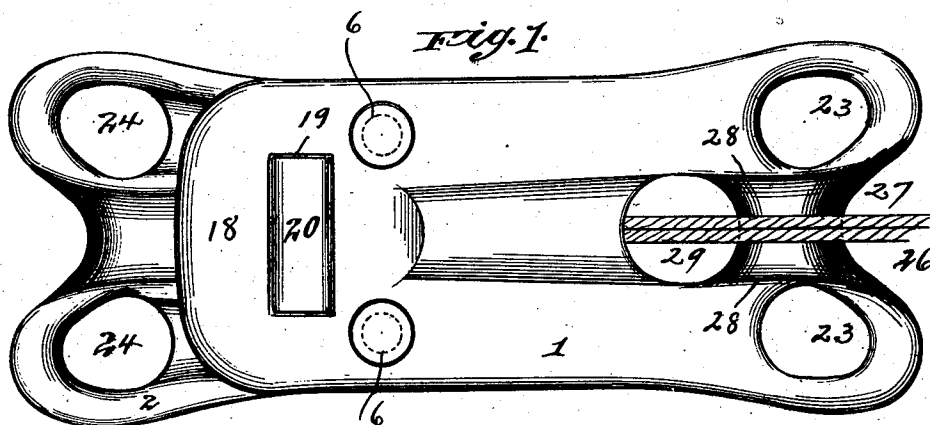
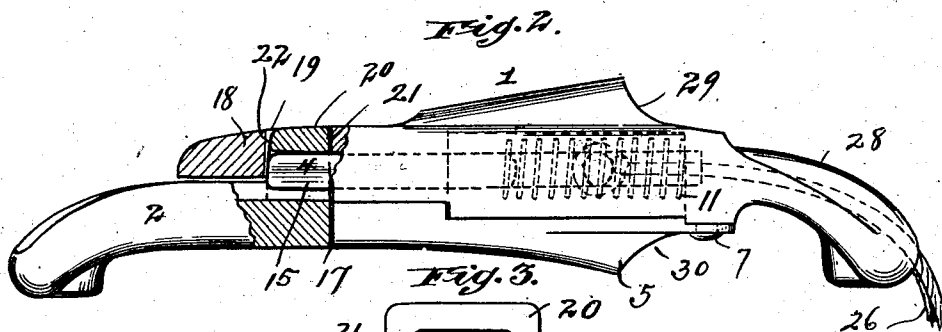
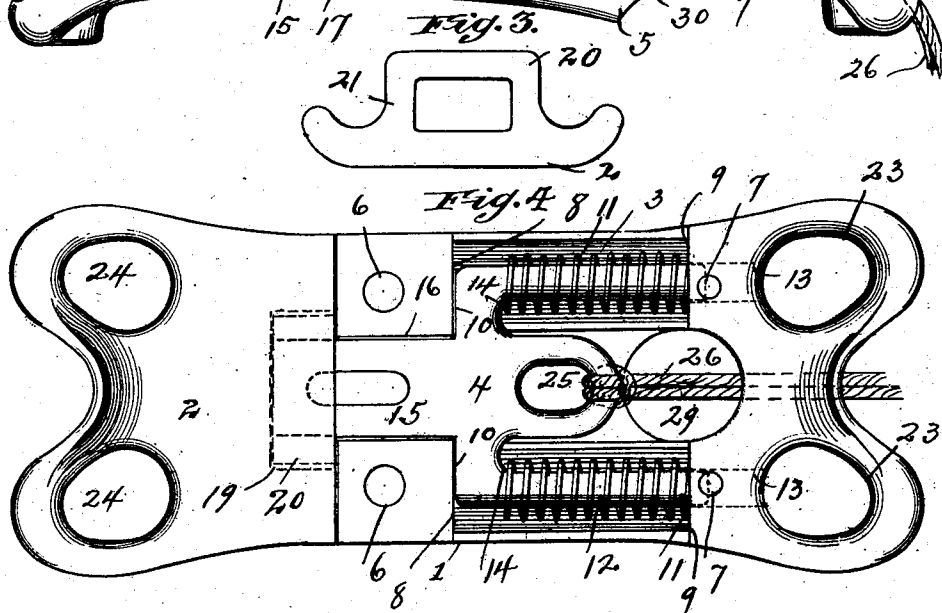
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PATENTED DEC. 8, 1903.

F. B. STRICKLER.
HAY SLING LOCK.

APPLICATION FILED JUNE 11, 1900.

NO MODEL.



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UNITED STATES PATENT OFFICE.

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HAY-SLING LOCK.

SPECIFICATION forming part of Letters Patent No. 746,197, dated December 8, 1903.

Application filed June 11, 1900. Serial No. 19,817. (No model.)

To all whom it may concern:

Be it known that I, FRANK BOWMAN STRICKLER, of Janesville, in the county of Rock and State of Wisconsin, have invented certain
5 new and useful Improvements in Hay-Sling Locks, of which the following is a specification.

This invention relates to improvements in hay-sling locks; and it has among its principal objects to provide a simple, strong, and cheap construction in which all of the working parts are effectively closed against clogging or interference by the filaments of hay or other commodity for conveying which the device is used, to so construct and arrange
10 the parts as to secure a more direct application of pull upon the latching-bar and to guard the operating-cord from being interfered with by the load, to provide a construction all of the parts of which can be cheaply and conveniently cast and of such form as to require the minimum amount of finishing in order to insure accurate fitting together, and in general to provide an improved device of
15 the character referred to.

To the above ends the invention consists in the matters hereinafter described, and more particularly pointed out in the appended claims, and the same will be readily understood from the following description, reference being had to the accompanying drawings, in which—

Figure 1 is a top plan view of a hay-sling lock embodying a preferred form of my invention. Fig. 2 is a side elevation of the same, parts being shown in longitudinal section to disclose more clearly the construction of the locking mechanism. Fig. 3 is an inner end view of the latching member. Fig.
20 4 is a bottom plan view of the lock with the removable side casing removed.

Referring first to Figs. 1 to 4, inclusive, wherein is shown a preferred embodiment of the invention, 1 designates as a whole the main body or principal member of the sling-lock, and 2 the latching member or part adapted to be detachably engaged with the main body. Said main body in the preferred embodiment shown herein consists of a relatively flat casting or forging suitably recessed or hollowed in one of its sides, as indicated
25 at 3, to receive a reciprocatory locking-bar 4, the cavity within which the said locking-bar is arranged being closed by a separate side plate 5, which in the completed device
30 is held in position by means of suitable rivets or securing-bolts 6 and rivet-studs 7, as best indicated in Figs. 1 and 4.

In the preferred embodiment now being described the locking-bar cavity 3 has abrupt end walls at each end, as indicated at 8 9, respectively, which serve to limit the throw of the locking-bar in either direction, the shoulders or end walls 8 at the forward end of the device, or that end toward which the
35 locking-bar is projected when in locking engagement with the opposite member, forming stops against which shoulders 10 upon the said locking-bar engage, while the rear end walls 9 form abutments against which the ends of
40 coiled springs 11, which are arranged to act upon the locking-bar to project the latter, rest. As a convenient construction whereby the coiled springs 11 are held in operative relation to the locking-bar and the latter is
45 at the same time guided to reciprocate properly within the cavity the said locking-bar is provided with parallel longitudinally-extending arms 12, projecting inwardly from the main body thereof and arranged to en-
50 gage at their ends guide-apertures 13, formed to extend rearwardly out through the end wall of the cavity, the coiled springs being arranged to encircle said arms and interposed between the shoulders 14, formed at the jun-
55 ture of the arms with the body of the locking-bar, and the abutting end wall portions 9, as hereinbefore described. The locking end portion or strike 15 of the locking-bar is of reduced width and is arranged to extend out
60 through a guide-passage 16, forming an extension of the main cavity.

The forward end of the device in the preferred construction shown takes the form of a transversely-extending rabbet 17, the per-
65 pendicular wall of which is shown in the present instance as formed coincident with the end margin of the removable plate 5. Within the extension or lip portion 18 of said rabbet at a point in longitudinal alinement
70 with the strike of the locking-bar is formed a locking-recess 19, shown in the present in-
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stance, although not necessarily, as extended entirely through the lip and of rectangular contour and the length of the strike being such that when the locking-bar is projected
 5 said strike will extend within and overlies a portion of the locking-recess, as clearly indicated in Fig. 2.

Describing now the latching member 2, the latter is desirably of suitable conformation
 10 to form when engaged with the main body an extension of the latter and is provided at its meeting end with a depending suitably-shaped loop 20 of external conformation adapted to fit easily within the locking-recess
 15 19 of the main body and internally constructed to receive the strike portion of the locking-bar when the latter is projected. Preferably and as shown in the present instance the end margin of the latching member
 20 and the side margin 21 of its loop 20 are formed in the same plane, so that when brought into engagement with the end of the rabbit the loop will be thereby guided to
 25 move more readily into engagement with the locking-recess, and in order to still further facilitate such engagement the opposite side 22 of the loop is rounded slightly, so as to enter more freely.

Each member of the sling and lock is provided with suitable means whereby a cable
 30 or rope may be attached, preferably and as shown in the present instance such means comprising pairs of eyes 23 24 at the end of each member, through which the cable may
 35 be passed in a well-understood manner. As a special feature of improvement, however, that portion of the end of the main body through which the eyes 23 are formed is deflected downwardly, as best indicated in Fig.
 40 2, so that the guide-apertures 13 may be formed or drilled out by means of a tool inserted from the outside without interfering with the said eye portions of the device.

In order to retract the locking-bar to disengage the members, said bar is provided
 45 with an eye 25, with which a suitable operating-cord may be engaged, as indicated at 26, and in order that the pull upon the locking-bar may be in direct longitudinal alignment with the latter, regardless of the particular direction in which the cord is trained
 50 from the sling-lock to the operator, that portion of the outer end of the device between the apertured ears thereof is formed into a guide-groove 27, over which the cord may slide freely, the side walls of this guide-curve being extended up to a sufficient height to form
 55 guards 28, which effectively prevent the hay or other commodity being transported by the device from bearing upon the cord in such manner as to interfere with its free operation. It is further to be noted in this same connection that the cords or cables which are
 60 extended through the eyes 23 of the sling-lock will further protect the operating-cord 26 from interference by the load.

In order to facilitate the attachment of the operating-cord to the locking-bar, the body of the sling-lock is provided with finger-apertures 29, 30, extending into the cavity thereof
 70 from the opposite sides, the lowermost aperture 30 serving also as a discharge-aperture through which dust and filaments of hay or the like which may chance to enter the cavity will be discharged by the reciprocation of
 75 the locking-bar.

The operation of the device has been sufficiently indicated in connection with the foregoing description and need not, therefore, be
 80 repeated.

I claim as my invention—

1. A sling-lock comprising a main body provided at one end with a pair of securing-eyes and at its opposite end with a transversely-extending rabbit, a locking-recess
 85 formed in the lip member of said rabbit, a spring-pressed locking-bar mounted to reciprocate within said main body and provided with a strike portion adapted to be projected opposite said locking-recess, parallel guide-arms upon said locking-bar, coiled springs
 90 mounted upon said arms and arranged to normally project the locking-bar, an eye formed in the locking-bar at a point between said guide-arms, a guide-groove formed in said
 95 main body at a point between the attaching-eyes thereof, a separate side casing adapted to be secured to the main body to inclose the locking-bar, and a latching member constructed at one end to fit within the rabbit
 100 of the main member and provided with a locking-loop formed externally to fit within the locking-recess and internally to receive the strike of the locking-bar, and provided at its opposite end with a pair of attaching-eyes,
 105 substantially as and for the purposes set forth.

2. In a sling-lock, the combination of the main body 1 provided with a locking-bar cavity 3, the locking-bar 4 mounted to reciprocate within said cavity, and provided with the parallel guide-arms 12 arranged to engage
 110 at their rear ends the guide-apertures 13, the coiled springs 11 mounted upon said guide-arms and arranged to normally project the locking-bar, the operating-cord eye 25 formed in the locking-bar, the cord-guide 27 arranged in alignment with the path of reciprocation of the locking-bar, the separate side casing 5 secured to the main body to inclose and confine the locking-bar, the transversely-extending rabbit formed at the end of the main
 115 body, the locking-recess formed therein, the latching member 2 provided with the locking-loop 20 adapted to engage said locking-recess, and the attaching-eyes 23, 24, at the respective ends of the sling-lock, substantially as described.

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