No. 682,505. Patented Sept. 10, 1901.

A. B. STRONG.

ATTACHMENT FOR PLOWS.

(Application filed Mar. 11, 1901.)

(No Model.)

Fig. 1.

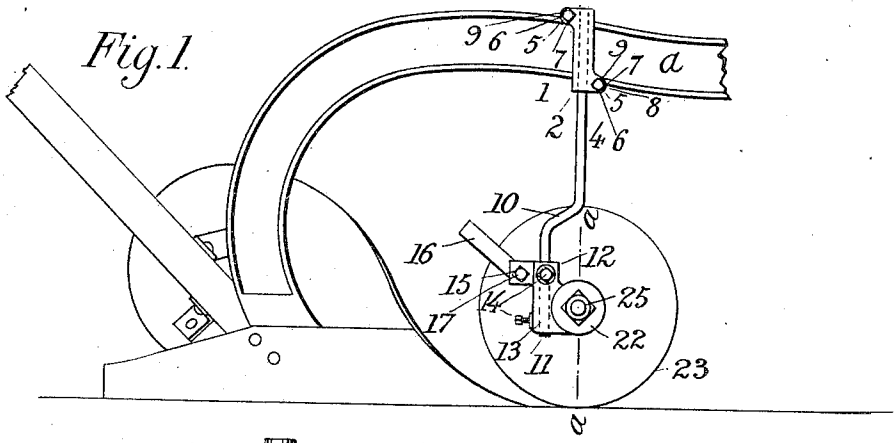


Fig. 2.

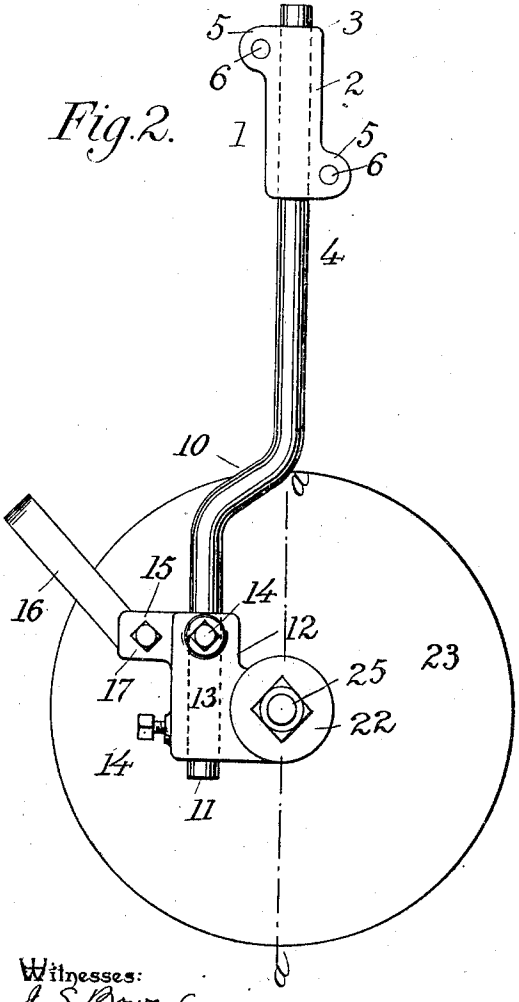
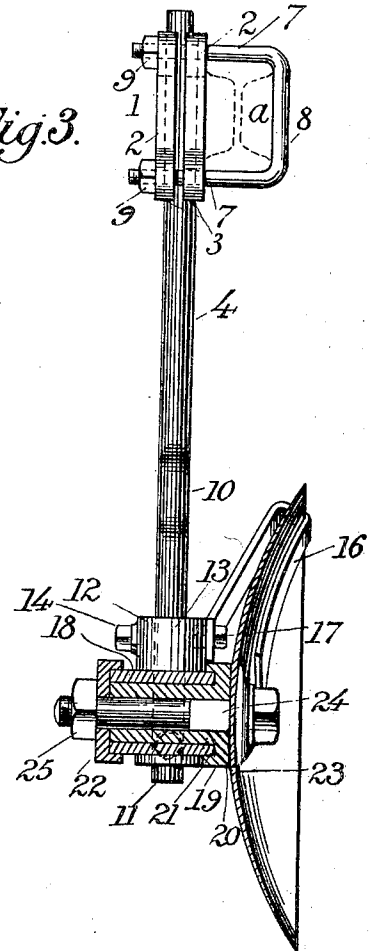


Fig. 3.



Witnesses:
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ASA B. STRONG, OF PERRYDALE, OREGON.

ATTACHMENT FOR PLOWS.

SPECIFICATION forming part of Letters Patent No. 682,505, dated September 10, 1901.

Application filed March 11, 1901. Serial No. 50,712. (No model.)

To all whom it may concern:

Be it known that I, ASA B. STRONG, a citizen of the United States, residing at Perrydale, in the county of Polk and State of Oregon, have invented a new and useful Disk Attachment for Plows, of which the following is a specification.

My invention is an improved disk attachment for plows, by means of which a disk may be readily attached to a plow, vertically adjusted, and also obliquely adjusted, as may be required; and my invention consists in the peculiar construction and combination of devices hereinafter fully set forth and claimed.

In the accompanying drawings, Figure 1 is an elevation of a plow, showing my improved disk attachment in operative position thereon. Fig. 2 is a detail view of my improved disk attachment, showing the same disconnected from the plow. Fig. 3 is partly an elevation of the same and partly a section taken on a plane indicated by the line *a a* of Figs. 1 and 2.

In the embodiment of my invention I provide a clamp 1, which comprises the plates 2, which are preferably of the form shown, are matched, and on their opposing sides are provided with vertical partially-cylindrical grooves 3, which receive the standard 4, the latter passing between the said plates 2 and being vertically adjustable between the same. The said plates 2 are provided at their upper and lower ends on their front and rear sides with lugs 5, in which are matched openings 6 for the horizontally-disposed shanks 7 of a U-shaped clip-bolt 8, which embraces the beam *a* of the plow, as shown, and secures the clamp 1, and hence the standard 4, to the plow-beam, while admitting of the ready detachment thereof from the plow-beam and of the longitudinal adjustment thereof on the plow-beam. The threaded extremities of the shanks 7 are provided with nuts 9, which bear against the outer side of the outer plate 2. Said nuts and said clip-bolt serve to clamp the plates 2 to the plow-beam and also to clamp the upper portion of the standard 4 between the said plates, as hereinbefore indicated. At a suitable distance from its lower end the said standard 4 is provided with a rearward-extending offset 10, below which depends the vertical foot 11 of the standard. A block 12, which is preferably of the form here shown, is vertically adjustable on the depending foot 11 of the standard and is also adapted to be turned on said standard to adjust the said block obliquely thereto, as may be required. The said block has a vertical bore 13, through which the foot 11 of the standard extends, and said block is provided with set-screws 14, which are disposed, preferably, at right angles to each other and one above the other, as shown, the said set-screws serving to clamp the block firmly to the foot of the standard to secure the same thereon at any desired vertical or oblique adjustment. At the upper portion of the block 12 and extending rearward therefrom is formed a lug 15, which is adapted for the attachment of a scraper 16 by means of a bolt 17. At the front portion of the block 12, near the lower side thereof, is formed a horizontal bearing 18. A tubular cylindrical journal 19 revolves in the said bearing and fits snugly therein. At the inner end of said tubular journal is formed a cap or head 20, which bears against the inner end of the said bearing 18 and is provided with an annular flange 21, which overlaps the inner cylindrical end of said bearing 18, thereby effectually covering the joint between said bearing 18 and said tubular journal and excluding grit from the said joint. A cap 22, which is removable and is otherwise identical in construction with the cap 20, is disposed at the outer ends of the bearing 18 and tubular journal 19 to cover the joint between the same and exclude foreign substances therefrom. The central portion of the disk 23 is disposed against the inner end of the tubular journal. A bolt 24, which passes through the tubular journal, through a central opening in said disk, and through the removable cap 22, in connection with a nut 25 on the threaded outer end of said bolt, secures the said disk to the said tubular journal and also secures the journal, together with the cap 22, firmly in the bearing 18 and prevents them from working loose in and on said bearing. The scraper 16 is arched over the disk and cooperates with the concaved face thereof to prevent earth from adhering to the disk, as will be readily understood.

It will be understood that any disk of the usual construction can be used in connection

with my improved attachment. While the disk, together with the block 12, may be adjusted vertically to some extent on the foot 11 of the standard 4, the latter is adjusted vertically in the clamp 2 when it is desired to raise or lower the disk to any considerable extent. The foot 11 does not extend to any considerable extent below the block 12, and hence does not gather trash.

Having thus described my invention, I claim—

1. The combination of a standard, means to secure the same to a plow-beam, a block secured to and adjustable on said standard, said block having a horizontal bearing, a tubular journal in said bearing having a cap at its inner end overlapping the inner end of said bearing, a detachable cap at the outer ends of said bearing and said tubular journal, said detachable cap overlapping the outer end of said bearing, a disk having its central portion disposed against the inner end of said tubular journal and a bolt passing through said disk, through said tubular journal and through said detachable inner cap, said bolt securing said disk to said journal and securing the latter, together with the detachable cap against endwise movement in the said bearing, substantially as described.

2. The combination of a standard, having a bearing at its lower end for a revoluble disk, with a clamp comprising a pair of plates having matched grooves on their opposing sides to receive said standard, the latter being adjustable vertically between said plates, and a U-shaped clip-bolt passing through matched openings in said plates, said clip-bolt securing the said plates to a plow-beam and also clamping said standard between said plates, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ASA B. STRONG.

Witnesses:
G. N. TOWNSEND,
W. A. KEYT.