H. T. LAUTERBACH.

DISK COLTER.

APPLICATION FILED JAN. 30, 1913.

1,097,339. Patented May 19, 1914.

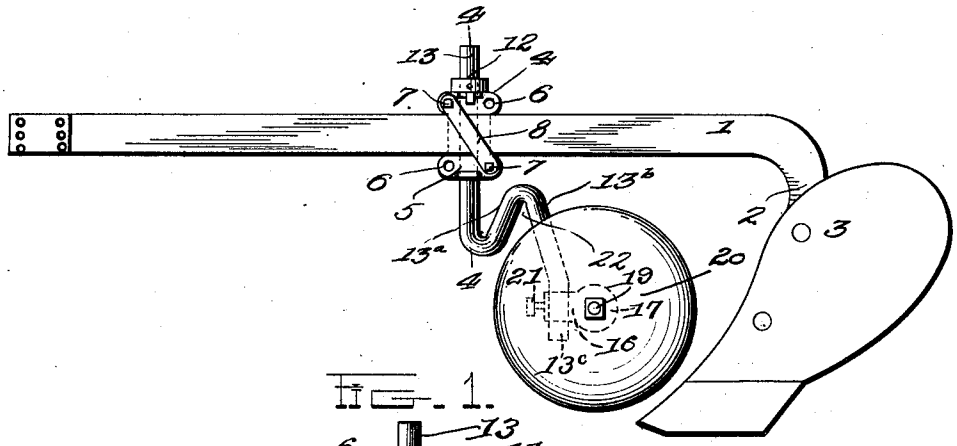


FIG. 1.

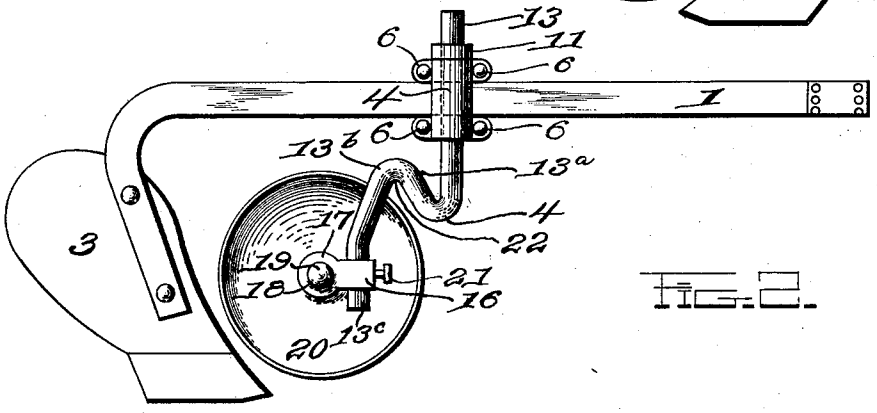


FIG. 2.

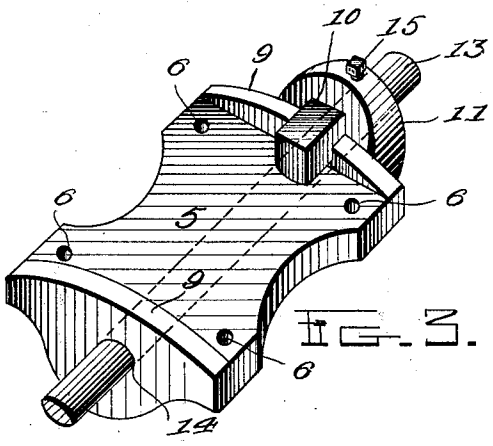


FIG. 3.

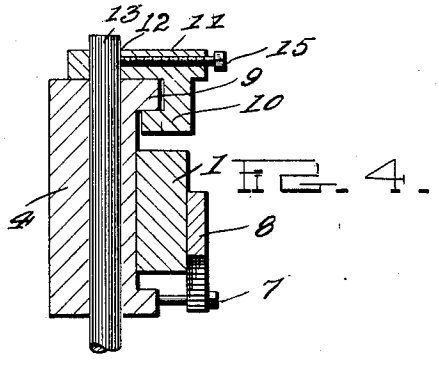


FIG. 4.

Witnesses

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DISK COLTER.

1,097,339. Specification of Letters Patent. Patented May 19, 1914.

Application filed January 30, 1913. Serial No. 745,160.

To all whom it may concern:

Be it known that I, HENRY T. LAUTERBACH, a citizen of the United States, residing at Earlville, in the county of La Salle and State of Illinois, have invented certain new and useful Improvements in Disk Colters, of which the following is a specification.

My invention relates to improvements in disk colters, and one object of my invention is the provision of a colter which will be capable of all adjustments required and which may be used in connection with right or left moldboards of any desired shape.

Another object of my invention is the provision of a disk colter which will adapt or adjust itself to conditions, which will free itself from contact with rocks to prevent injury and which will turn to accommodate itself to the turning of the plow.

Another object of my invention is the provision of a disk colter which in addition to possessing the requirements stated will be capable of production at a low price; will be simple, strong, and durable in construction and thoroughly efficient and practical.

With these objects in view my invention consists of a disk colter embodying novel features of construction and arrangement of parts for service substantially as disclosed herein.

In the drawings: Figure 1 is a side view of a plow equipped with my colter. Fig. 2 is a similar view taken from the opposite side of the plow. Fig. 3 is a perspective view on an enlarged scale of the casting mounted on the plow beam and receiving the hanger with disk, and Fig. 4 is a sectional view on line 4—4 of Fig. 1.

Referring by numeral to the drawings in which similar references denote corresponding parts in all the views, the numeral 1 designates the plow beam formed with the standard 2, to which is secured the plow or moldboard, 3 of any desired construction. Upon the beam and at a suitable place in advance of the plow is placed the casting 4, having the flat face 5, to fit against the beam and having at each corner an opening 6, which receives the fastening bolts 7, which serve to retain the securing plate 8, which as shown engages the other face of the beam and clamps the casting in place. The purpose of having four openings in the casting is to permit the use of a single clamping bar or plate with two openings and to permit the casting to be placed on either side of the beam, as circumstances require. The casting is formed at its upper edge with a curved flange 9, which forms a means for guiding the hook shaped lug 10, depending from the collar 11, which is formed with the opening 12, to receive the upper end 13, of the hanger or support. The hanger has its vertical portion 13 passing through a passage 14, in the casting and is retained in vertical axial adjustment in the casting and collar by means of a set screw 15, mounted in the collar and engaging the hanger. From this construction it will be observed that the hanger has a vertical and lateral or axial adjustment in the casting and collar and also that the hanger has a slight movement or play upon the casting by reason of the guide and flange on the casting, this movement allowing the hanger to turn to clear a rock or obstruction or to permit the turning of the plow at the end of the row, in either a right or left hand direction.

The hanger is of novel and peculiar shape being formed at the lower end of its vertical arm 13, with an upward bend 13^a, an angular downward bend 13^b, and a vertical lower end 13^c, which lower end fits the sleeve 16, on the plate 17, having an axle bearing 18, for the axle or journal 19, of the disk 20, and the disk is adjustable laterally upon the end 13^c, of the hanger by means of a set screw 21. The construction of the hanger permits the use of either flat or concaved disks and every possible adjustment necessary is obtainable by reason of the disk connection with the hanger and the hanger mounting in the casting and also a proper freedom or play of the disk is insured. The bends of the hanger form an arch 22, in which the disk fits and the arch is of a size to receive a flat or curved disk.

The advantages of my improvements will be readily understood and appreciated by all skilled in the use or practice of such inventions and further comment is deemed unnecessary.

I claim:

1. In combination with a plow beam, a casting fitted upon and secured to the beam, a hanger having an upper vertical arm oscillatingly mounted in said casting and having a lower arched portion terminating in a vertical end, a disk adjustably mounted

on said lower vertical end, and means carried by the hanger and engaging the casting for regulating the oscillation of said hanger.

2. In combination with a plow beam, a casting fitted upon and secured to said beam, a pair of curved flanges on one face of the casting, and a pair of lateral lugs provided with openings on the other face of said casting, a hanger having its upper portion movably mounted in the openings of the lugs, a disk mounted upon the lower end of the hanger, a collar fitting on the upper portion of the hanger, a binding screw for securing the collar upon the hanger and a hook carried by the hanger and fitting upon one of the curved flanges of the casting for guiding and retaining the hanger in its movements.

3. In combination with a plow beam, a casting clamped upon said beam, a hanger having its upper portion oscillatingly mounted in said casting at one side thereof, a disk carried by the hanger, and means adjustably mounted upon the hanger and engaging the other side of the casting for guiding the oscillation of said hanger.

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

HENRY T. LAUTERBACH.

Witnesses:
NICHOLAS LAUTERBACH,
EDITH B. LYTTON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."