(No Model.)

N. R. DOAN.

PLOW COLTER.

No. 356,306. Patented Jan. 18, 1887.

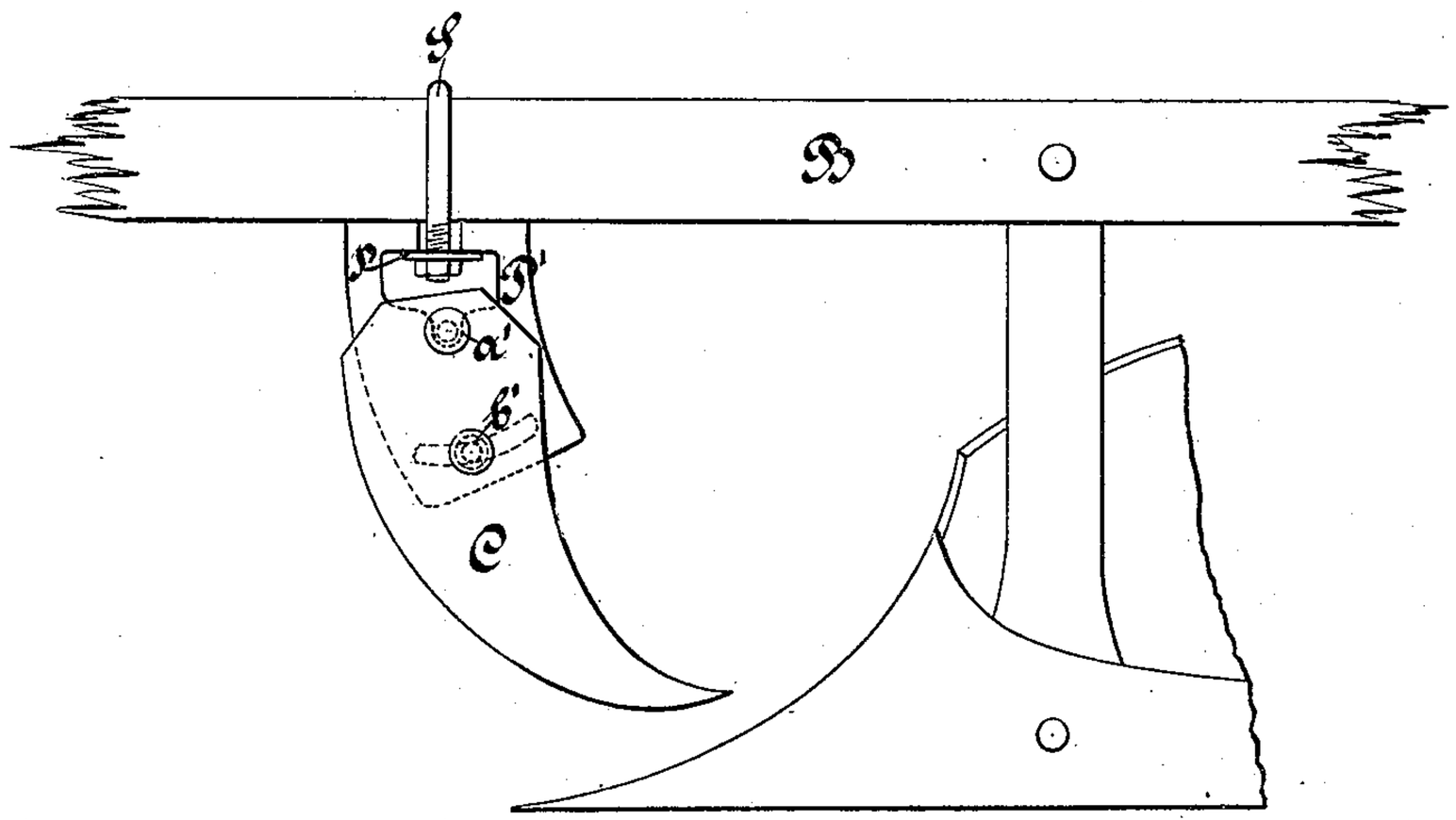

Fig. 1.

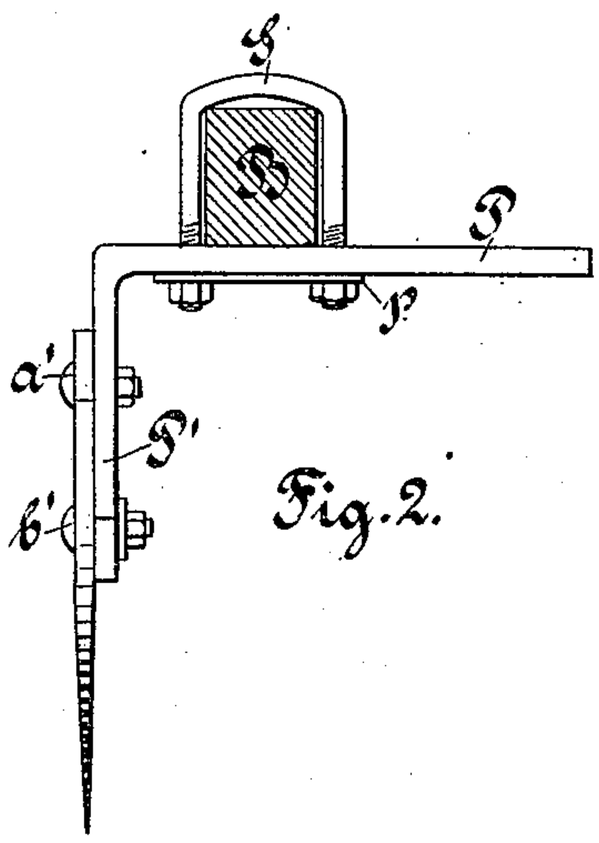

Fig. 2.

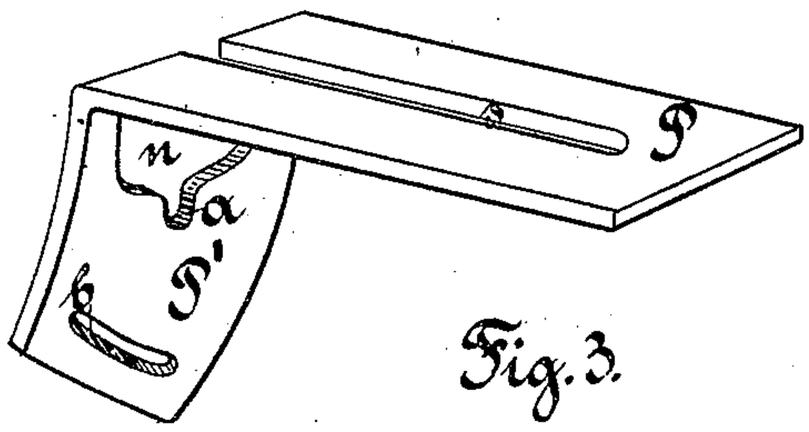

Fig. 3.

WITNESSES:

Storm Bell

Julius E. Olson

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BY

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UNITED STATES PATENT OFFICE.

NELSON R. DOAN, OF RUTLAND, WISCONSIN.

PLOW-COLTER.

SPECIFICATION forming part of Letters Patent No. 356,303, dated January 18, 1887.

Application filed May 8, 1886. Serial No. 201,606. (No model.)

To all whom it may concern:

Be it known that I, NELSON R. DOAN, a citizen of the United States, residing at Rutland, in the county of Dane and State of Wisconsin, have invented certain new and useful Improvements in Plow-Colters; 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 pertains to make and use the same.

The object of my invention is to provide an improved device for attaching a plow-colter to plow-beams, said colter when so attached being adjustable vertically, longitudinally, and transversely with regard to the plow-beam and easily detachable therefrom.

It is further the purpose of my invention to provide a colter that shall prove equally effective and durable both in stubble and in sod, being especially adapted to cut and clear away from the plow-point such materials as are apt to be collected there, especially tobacco-plants, cornstalks, and the like.

Figure 1 is a side view of my device attached to the plow-beam. Fig. 2 is an end view of the same with the plow-beam in cross-section. Fig. 3 is a detail view in perspective, showing the supporting-plate of the colter-blade.

Similar letters where they occur refer to like parts throughout the several views.

B is the plow-beam, P the supporting-plate, and C the colter-blade. The supporting plate P is provided with an end face, P′, at right angles to itself, both consisting, preferably, of one piece of metal. The plate P is slotted longitudinally by the slot *s*, for the purpose of admitting the staple S. The plate *p* is somewhat wider than the slot *s* and of sufficient length to admit the threaded ends of the staple-arms. The colter-blade C is pivoted by an ordinary nut-bolt, *a′*, in the slot *a* of the face P′, and is clamped to any vertical adjustment desired between the limits of the arc-slot *b* by means of the nut-bolt *b′*. By removing this bolt the colter-blade is detached by simply lifting the bolt *a′* from the slot *a*.

The plate P is fastened to the plow-beam by screwing the bolt-heads on the lower ends of the staple-arms against the plate *p*, thereby clamping it against the lower face of the supporting-plate P, at the same time clamping the supporting-plate against the plow-beam.

The supporting-plate P may be disconnected from the plow-beam by loosening the plate *p* and sliding the plate P transversely over it until the bolts on the ends of the staple-arms are cleared through the slot *n* in the end face, P′. Transverse adjustment of the colter-blade with reference to the land side of the furrow is effected in the same manner. Longitudinal adjustment of the colter blade is effected by sliding the staple S forward or backward over the plow-beam, as desired. I have found by experiment that the point of the colter-blade should generally be about four inches to the rear of the plow-point. (See Fig. 1.)

It is often desirable to adjust the colter-blade sufficiently into the land side of the furrow to counteract the opposite tendency of an extra draft-animal. By proper adjustment of the colter-blade, as described, reference being had to the nature of the soil and the number of draft animals employed, the effectiveness of their work may be considerably increased.

What I claim, and desire to secure by Letters Patent from the United States, is—

1. The combination of the longitudinally-slotted bracket P, having a backwardly-curved angular extension provided with a transverse passage through it and a notched offset thereof, and also with a curved slot which is concentric to said offset, a backwardly-curved flat colter-plate clamped to said curved extension, as described, and a staple fastening the bracket to a plow-beam, substantially as described.

2. The combination, with the right-angular bracket P, slotted and provided with a passage, *n*, and an offset, *a*, as described, of the curved colter secured adjustably to said bracket by clamping-bolts and the staple-fastening, which secures the bracket to the plow-beam, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

NELSON R. DOAN.

Witnesses:

FRANK E. PARKINSON,

RUFUS B. SMITH.