No. 639,904.

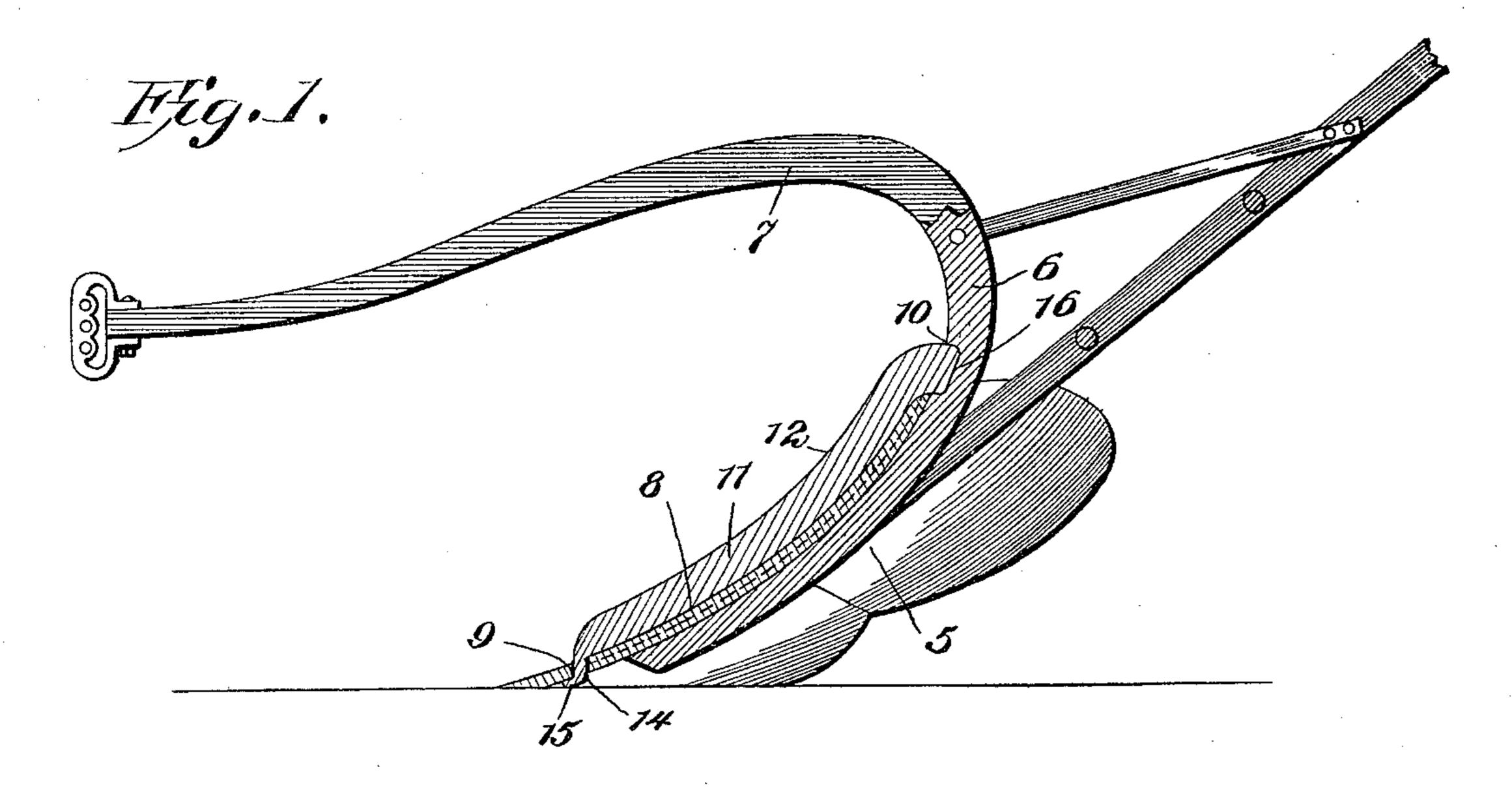
Patented Dec. 26, 1899.

F. M. NEFF & J. W. MAPLE.

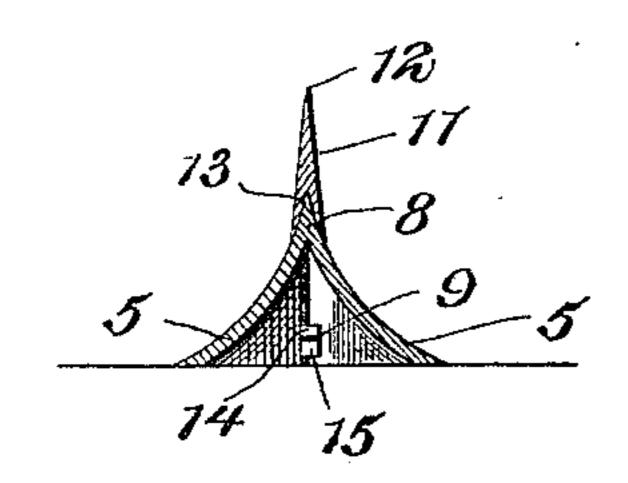
COLTER.

(Application filed Sept. 27, 1899.)

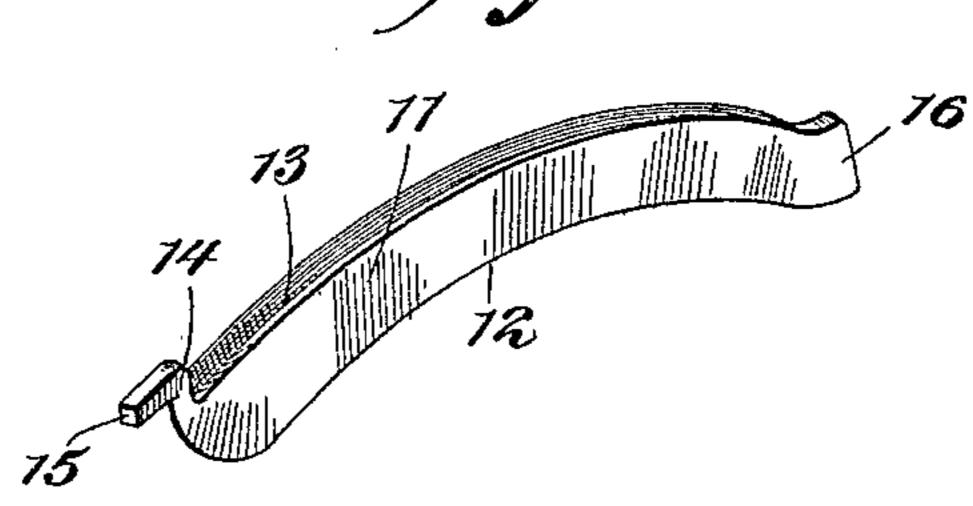
(No Model.)



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By their Attorneys,

F.M. Neff Mannens, J.W. Maple.

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## United States Patent Office.

FRANCIS M. NEFF AND JOHN W. MAPLE, OF BOLTON, MISSOURI.

## COLTER.

SPECIFICATION forming part of Letters Patent No. 639,904, dated December 26, 1899.

Application filed September 27, 1899. Serial No. 731,835. (No model.)

To all whom it may concern:

Be it known that we, Francis M. Neff and John W. Maple, citizens of the United States, residing at Bolton, in the county of Harrison and State of Missouri, have invented a new and useful Colter, of which the following is a specification.

This invention relates to plows in general, and more particularly to colters therefor, and no while the present embodiment of the invention is shown as including a lister it will be readily understood that the colter may be applied to any other style of plow or cultivator to which it is applicable.

The object of the invention is to provide a construction in which the colter may be readily applied or removed and when in place will be held against accidental displacement.

In the drawings forming a portion of the specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a vertical section of a lister and showing the application of the invention thereto. Fig. 2 is a transverse section taken through the colter and adjacent portions of the lister. Fig. 3 is a detail perspective view of the colter.

Referring now to the drawings, 5 represents the blades of a lister, to which is secured the usual shank 6, having connection with the beam 7. In the ridge 8 of the lister and adjacent the lower end thereof is formed a vertical perforation 9, while in the shank 6, directly above the blades of the lister, is formed a recess 10.

A colter 11, having its upper surface concaved and sharpened, as shown at 12, has its lower edge convexed longitudinally and concaved transversely to form a longitudinal slot or groove 13, which receives and fits snugly upon the ridge of the lister. The lower end of the colter is provided with a projection 14, having an angular extension 15, forming a finger, which in the application of the colter to the lister is passed through the perforation 9, after which the colter is rocked rearwardly to lie upon the ridge of the lister, the colter

having a projection 16 at its opposite end, which enters and lies in the recess 10.

When it is desired to remove the colter for 50 sharpening or other reasons, the upper end is lifted and the finger is then withdrawn from the perforation.

It will of course be understood that the specific construction and arrangement shown 55 may be varied and that in applying the colter to an old implement the projections 16 may be omitted or removed and the upper end of the colter secured by means of a suitable clamp. Also the specific shape and the 60 dimensions of the colter may be varied to adapt it for application to different implements.

Having thus described the invention, what we claim is—

1. The combination with a lister and the shank thereof, said lister having a perforation therein, of a recess in the shank, a colter having a downwardly and forwardly projecting finger adapted to enter the perforation in 70 the lister and lie with its extremity behind the lister, and a projection upon the colter adapted to lie in the recess of the shank to hold the colter against upward movement.

2. The combination with a lister and the 75 shank thereof, said lister having a perforation therein, of a recess in the shank, a colter having a downwardly and forwardly projecting finger adapted to enter the perforation in the lister and lie with its extremity behind 80 the lister, a longitudinal groove in the colter adapted to receive and fit upon the ridge of the lister, and a rearward projection upon the colter adapted to lie in the recess of the shank and hold the colter against upward move-85 ment.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

FRANCIS M. NEFF. JOHN W. MAPLE.

Witnesses:

GEO. W. WANAMAKER, JOHN J. WERNINGER.