

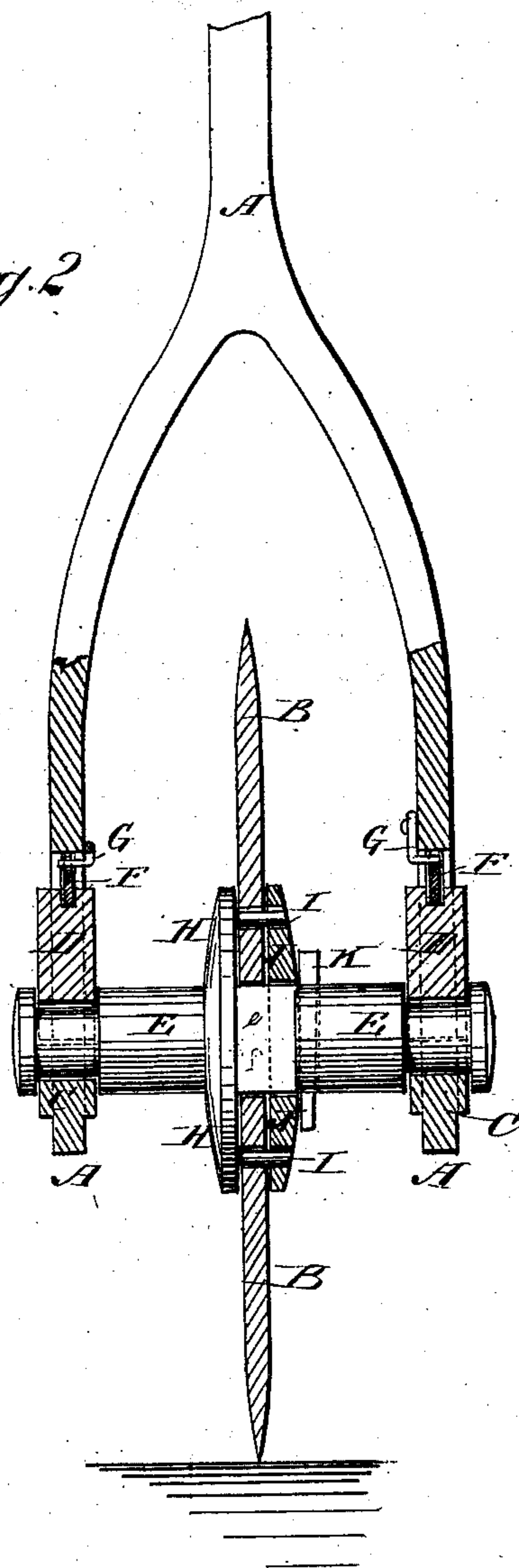
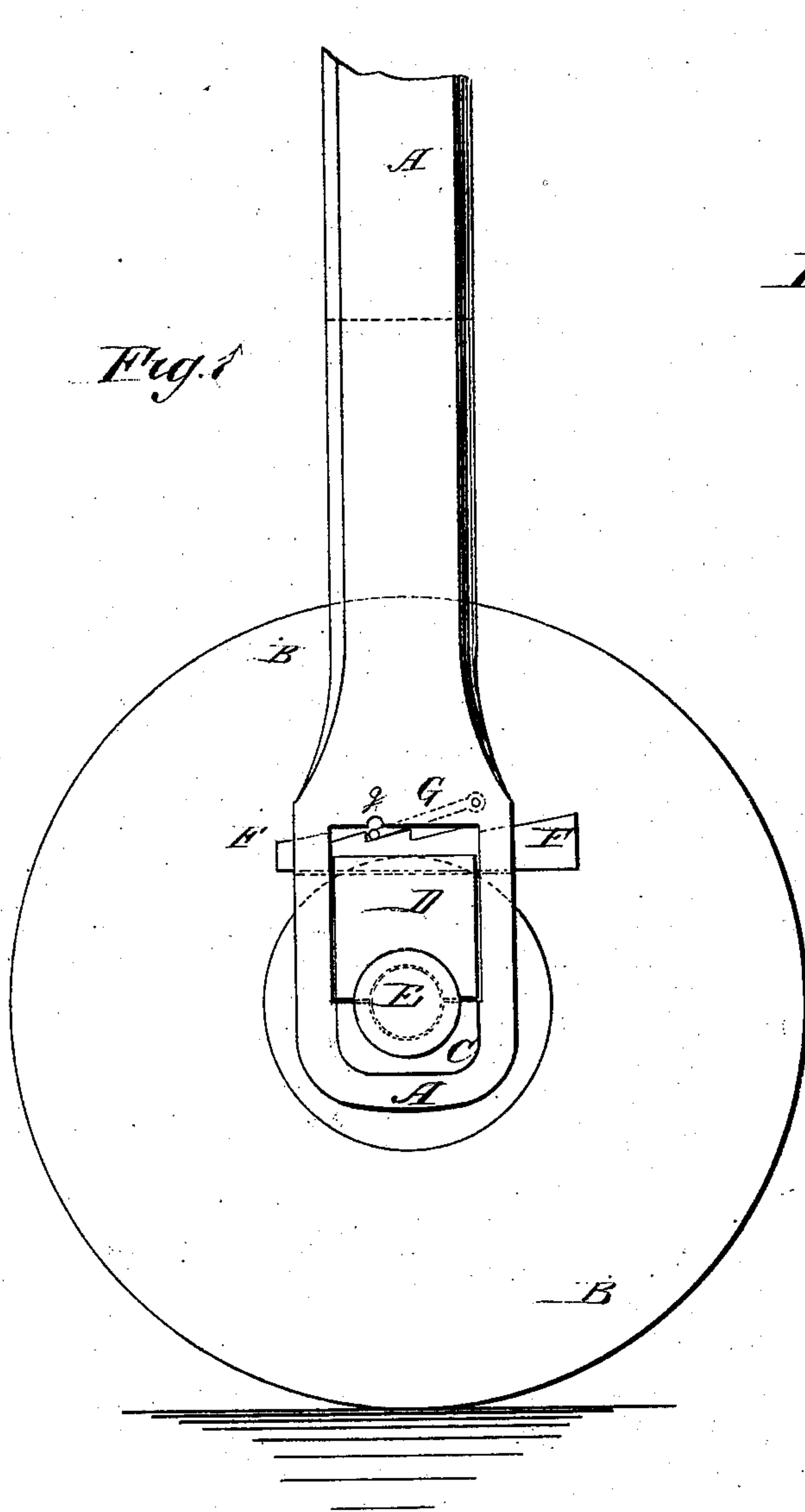
(No Model.)

S. M. WESTON & C. T. SHANNER.

ROTARY COLTER.

No. 272,368.

Patented Feb. 13, 1883.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

STEPHEN M. WESTON AND CHARLES T. SHANNER, OF SOMERVILLE, IND.

## ROTARY COLTER.

SPECIFICATION forming part of Letters Patent No. 272,368, dated February 13, 1883.

Application filed May 5, 1882. (No model.)

*To all whom it may concern :*

Be it known that we, STEPHEN M. WESTON and CHARLES T. SHANNER, of Somerville, in the county of Gibson and State of Indiana, have invented certain new and useful Improvements in Rotary Colters, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a side elevation of our improvement. Fig. 2 is a sectional front elevation of the same.

The object of this invention is to promote the durability and efficiency of rotary colters.

The invention consists, mainly, in a rotary colter constructed with movable bearings of novel form for taking up the wear, and a locking key and pawl for fastening the colter to its axle, as will be hereinafter fully described.

A is the colter-standard, the upper part of which is designed to be secured to a plow-beam in the ordinary manner. The lower end of the standard A is forked to receive the colter B, and in the lower ends of the arms of the said standard are formed slots to receive the bearings C D for the journals of the colter-axle E. The lower part, C, of the bearings is cast in the lower end of the slot in the standard-arm, as it is not liable to be worn, the pressure of the journals being upward. The upper part, D, of the bearings fits into the upper part of the slot in the standard-arm, and has a groove in its upper edge to receive the wedge-key F, which is driven into short slots in the arm of the standard A, so that the bearing D can be forced down to take up the wear, by driving the key F forward in its slots. The upper edge of the key F is toothed to receive the spring-pawl G, to prevent the key F from working out and allowing the journal to become loose in its bearings; or the key F can be locked in place by a small key inserted in holes g in the standard-arm in such position as to engage with the teeth of the said key F. The ends of the axle E project at the outer side of the standard-arms, and its journals are made of a less diameter than the body of the

axle, so that the shoulders thus formed will rest against the opposite sides of the bearings and prevent the axle from having any longitudinal movement. In the center of the colter B is formed a square eye, to fit upon the middle part, e, of the axle E, to prevent the said colter from turning upon the said axle. The colter B is placed upon the center of the axle E, and rests against a flange, H, cast upon the said axle. Upon the inner side of the flange H are cast pins or projections I, which pass through holes in the colter B and enter holes in the collar J, placed upon the axle E at the other side of the colter B from the flange H. The collar J has a square eye formed through its center, to fit upon the square middle part of the axle E, and is pressed firmly against the colter B by a wedge-key, K, driven into a slot formed through the axle E, as shown in Fig. 2.

By this construction all wear will come upon the axle-journals and the bearings and can be readily taken up, so that all irregular movements of the colter will be prevented and the colter will be made to advance in a straight line.

We are aware that shafting-boxes have before been retained in position by wedging-keys drawn to place by screw-nuts on their little ends, and we do not claim this as our invention; but

What we claim is—

1. The combination, in a rotary colter, of the forked standard A, the adjustable bearings D, the notched key F, the spring-pawl G, the axle E, having flange H and pins I, the colter B, the movable collar J, and locking-key K, as set forth.

2. In a rotary colter, the combination, with the slotted arms of the standard A and the colter-axle E, of the movable bearings D, the wedge-keys F, and their locking-pawls G, substantially as herein shown and described, whereby the wear of the axle-journals can be readily taken up and the colter made to revolve true, as set forth.

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Witnesses:

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