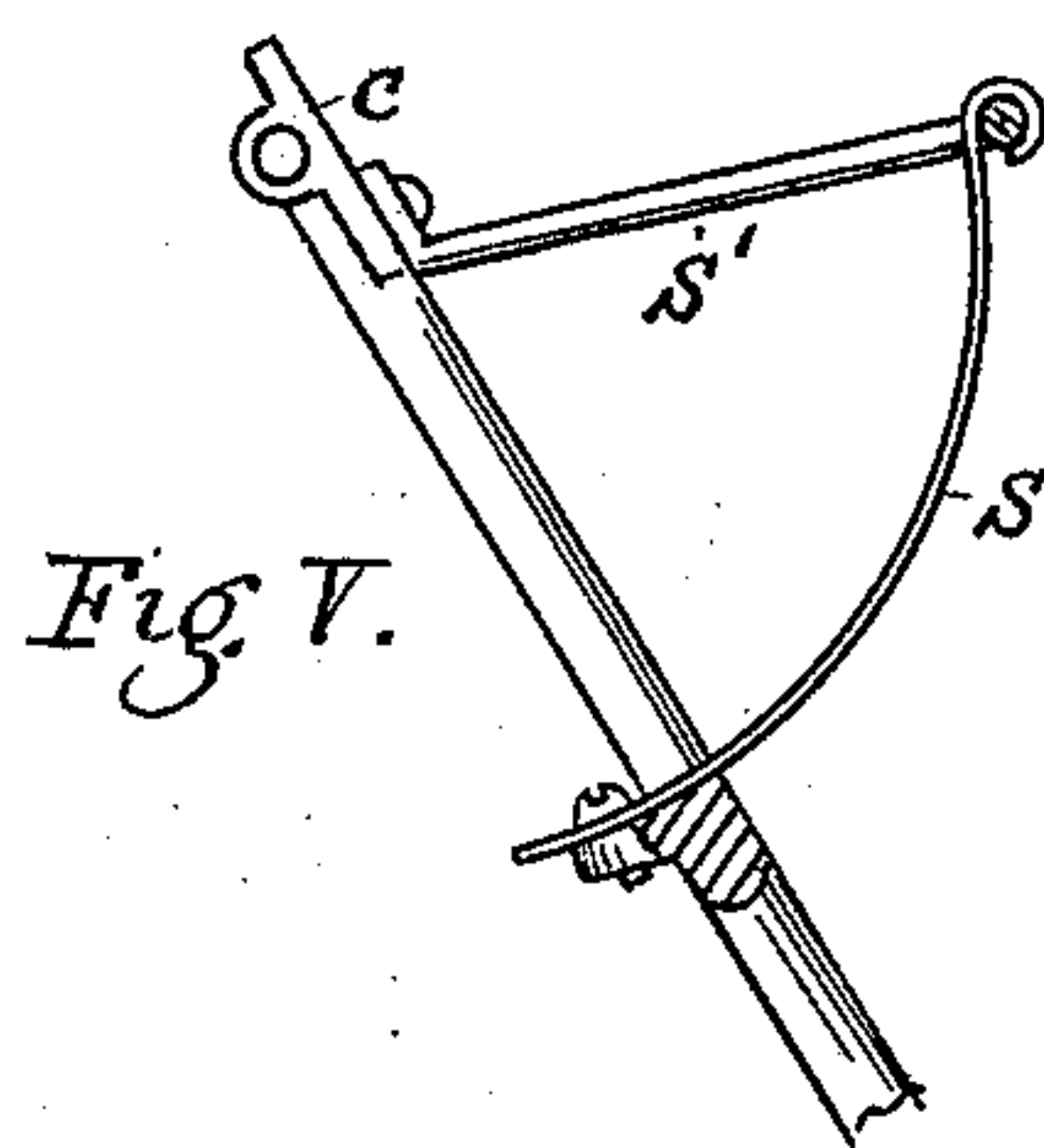
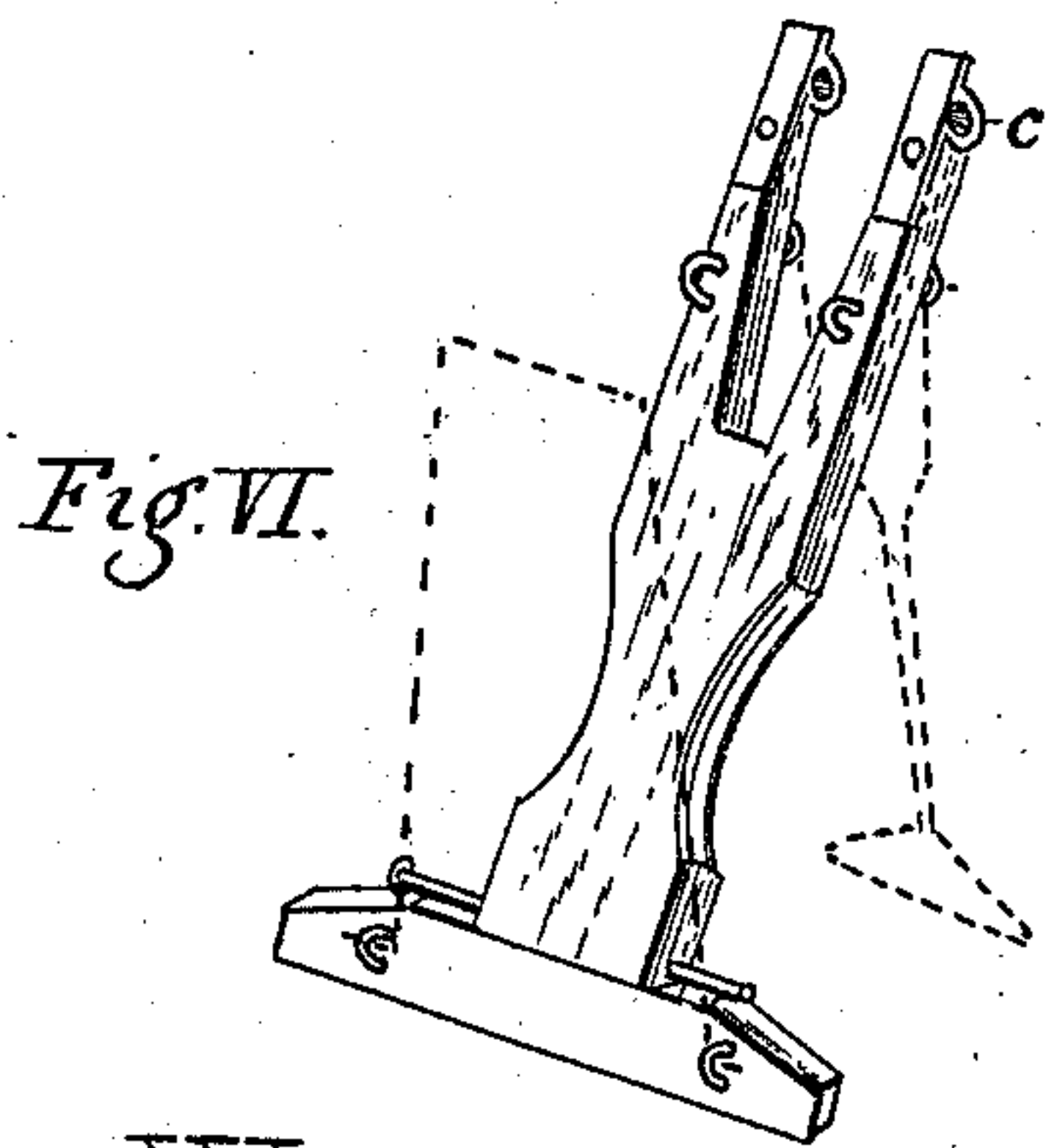
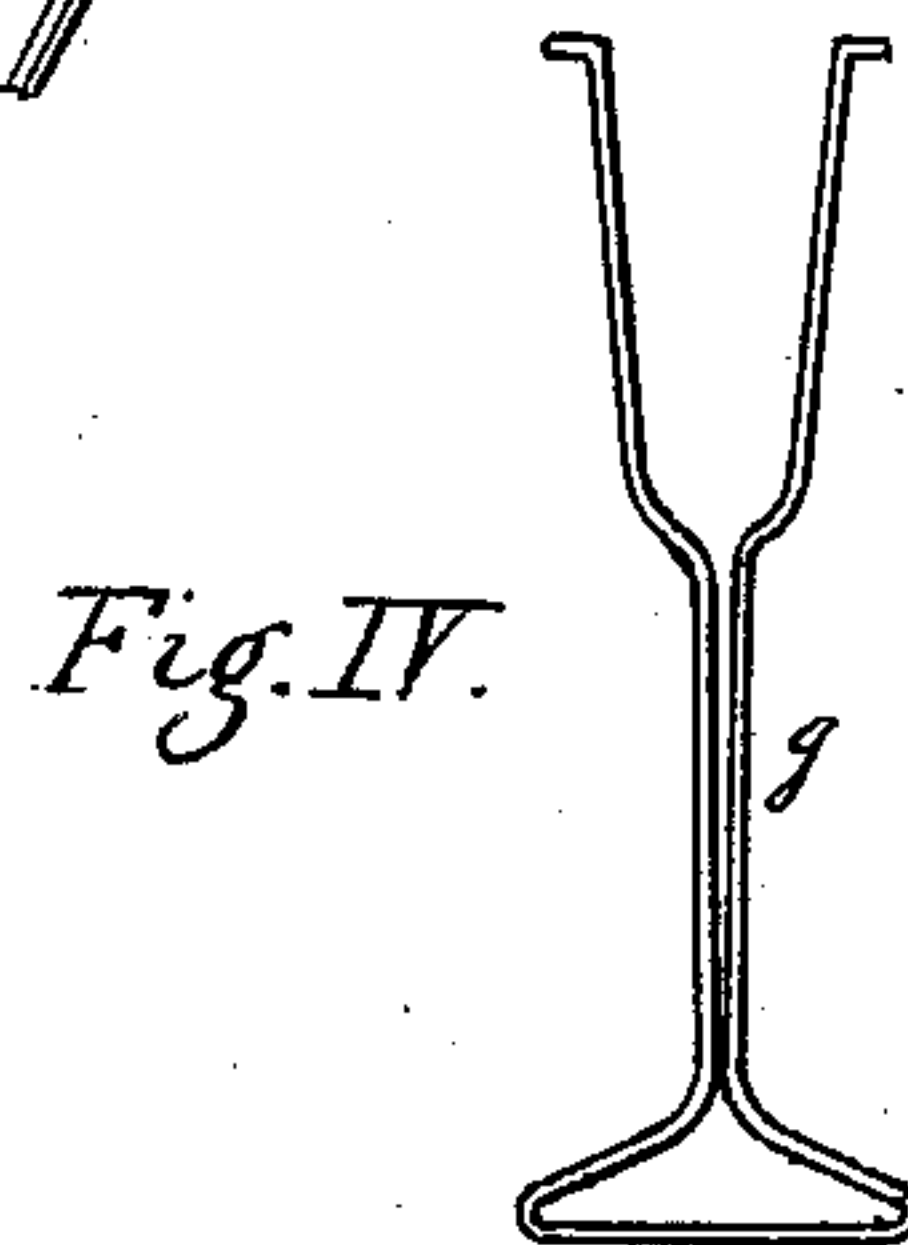
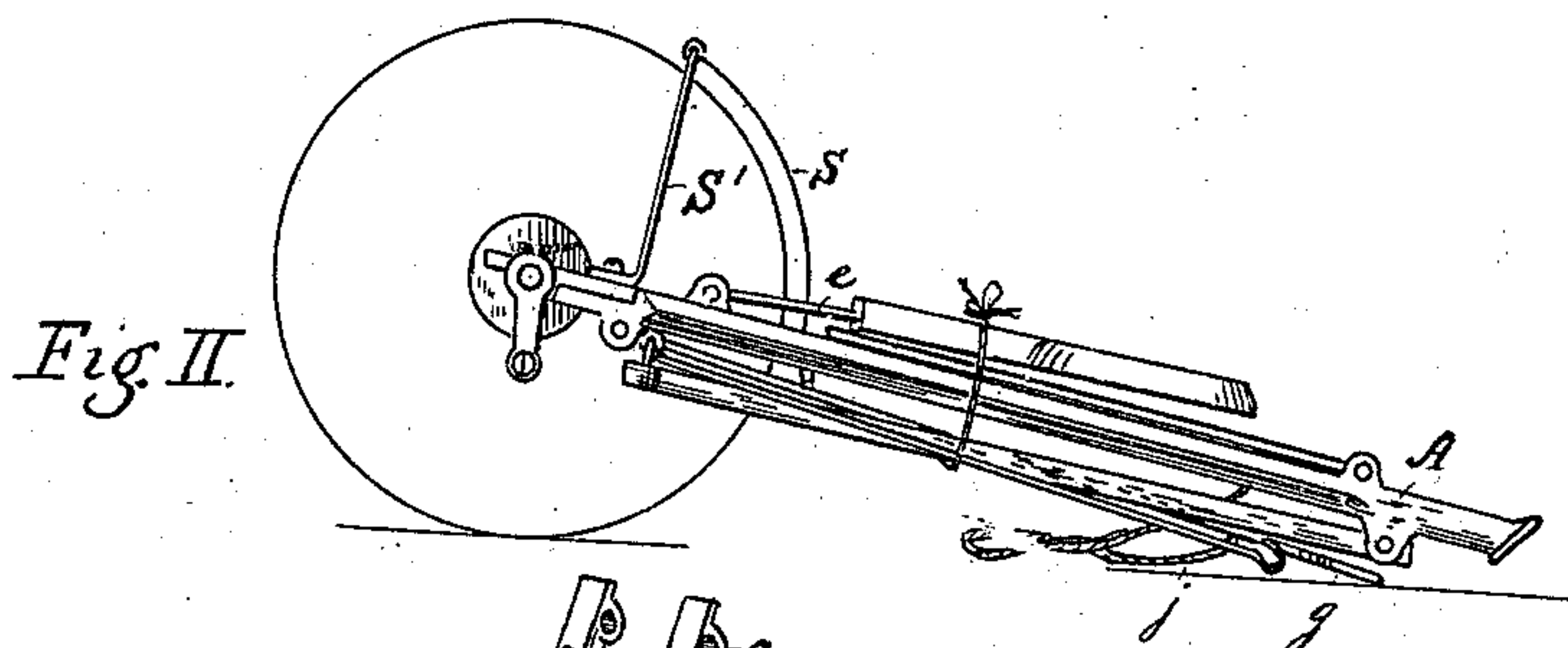
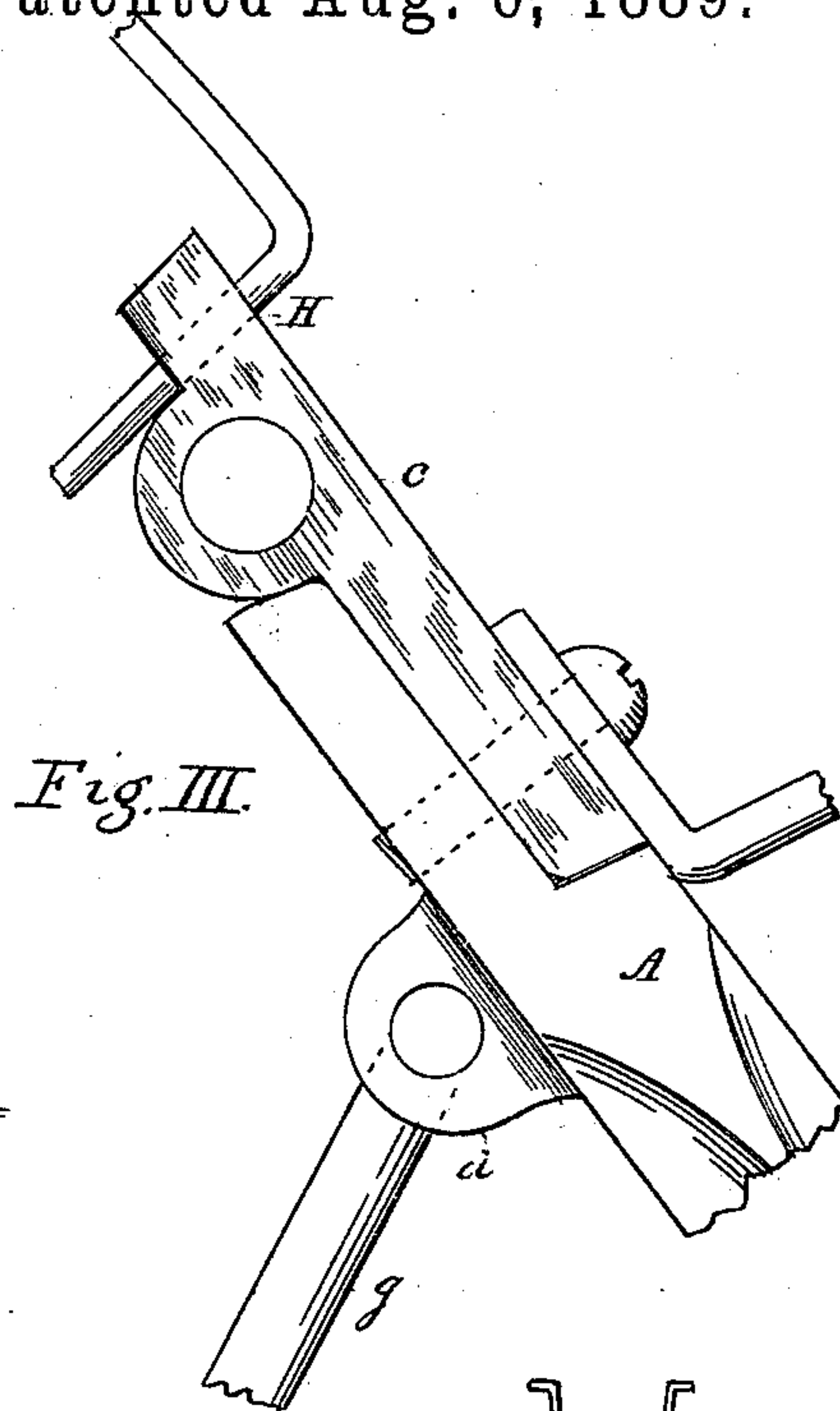
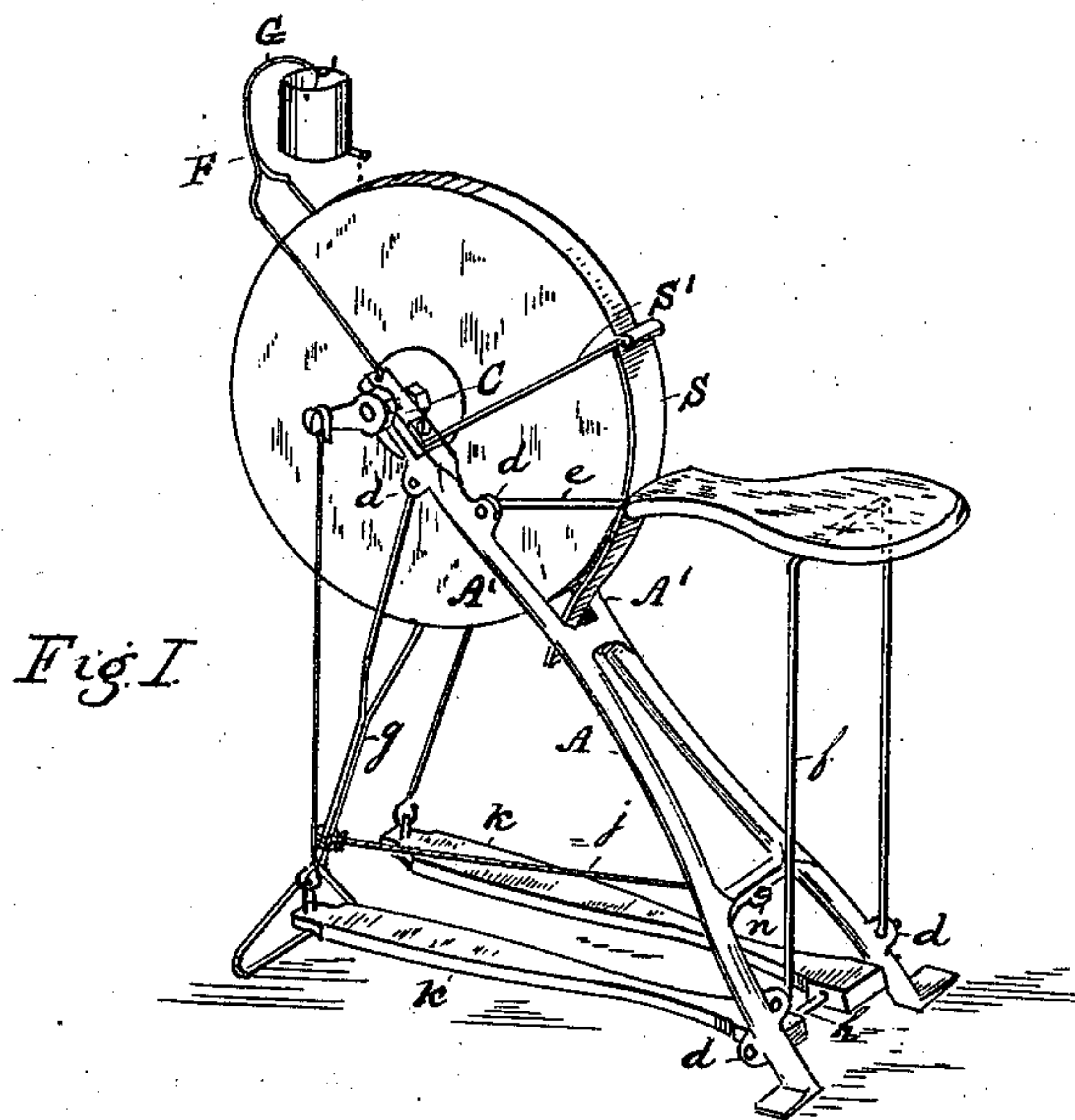


(No Model.)

R. KIRK.  
GRINDSTONE FRAME.

No. 408,662.

Patented Aug. 6, 1889.



WITNESSES:

R. S. Millar  
Anna A. Farrell.

By

INVENTOR:

Robt. Kirk.  
J. Bailey

Attorney.



# UNITED STATES PATENT OFFICE.

ROBERT KIRK, OF HARTWELL, OHIO, ASSIGNOR OF ONE-HALF TO OLIVER J. BAILEY, OF SAME PLACE.

## GRINDSTONE-FRAME.

SPECIFICATION forming part of Letters Patent No. 408,662, dated August 6, 1889.

Application filed April 19, 1889. Serial No. 307,798. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT KIRK, of Hartwell, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Grindstone-Frames, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure I is a perspective view of my invention in operative position. Fig. II is a view of same folded. Fig. III is an enlarged detail view of bearing and adjacent parts. Fig. IV is a view of front support. Fig. V is a view of one method of securing the shield. Fig. VI is a view showing a slight modification and showing the stock to be made of wood.

The object of my invention is to construct a grindstone-frame that can be operated with double treadles and embodying features of construction hereinafter explained, whereby the device can be readily folded for storage or shipment or put in knockdown form.

In the accompanying drawings, A represents a bifurcated stock or standard, having a wide base and prongs A' at the upper part, provided with bearings C to receive the mandrel upon which the grindstone turns. This stock can be made of metal or wood. When made of metal, integral lugs *d d d d* are cast, which, when bifurcated, receive the laterally-bent projections of the seat attachment *e*, the seat-support *f*, the forward support *g*, and the cross-bar *h*, on which the treadles *k* are pivoted. The normal position of the stock is a forward inclination of about forty degrees, which brings the weight of the operator upon the seat approximately over the base, thereby giving great solidity and firmness of position.

To keep the operator protected from water flying off the stone, I provide a shield S, held in position by a bent iron S', whose ends are attached to the prongs of the stock. The lower end of the shield is attached to a lug at the

crotch of the stock, as is clearly shown in Fig. V. I also employ a drip-can support F, consisting of a wire bent together to form a hook G, thence curving downward and bent apart, the lower extremities bent at an angle to be inserted in perforated lugs, as indicated at H, Fig. III.

In using a stock or standard made of wood, as indicated in Fig. VI, I substitute staples or screw-eyes in place of the integral lugs of the cast stock. Other modifications can be made without departure from the principle of construction. The forward support *g* is held within limits by a cord *j*, extending to a lug *n* on the stock.

What I claim, and desire to secure by Letters Patent, is—

1. In a grindstone-frame, a bifurcated stock with wide base having prongs at the upper end provided with bearings between which the grindstone revolves, and having lugs to pivotally receive the seat attachment, seat-support, and forward support, substantially as shown and described.

2. In a grindstone-frame, the combination, with a bifurcated stock, of a pivotally-attached forward support, a shield, a pivotally-attached seat, a pivotally-attached seat-support, and a treadle-bar carrying forwardly-extending treadles to operate the stone, substantially as described.

3. In a grindstone-frame, the bifurcated stock carrying the grindstone in the bifurcation and the seat and the seat-support each pivotally attached to the stock, substantially as and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand, this 16th day of April, 1889, in the presence of witnesses.

ROBERT KIRK.

Witnesses:

ANNA A. FARRELL,  
R. S. MILLAR.