

No. 743,853.

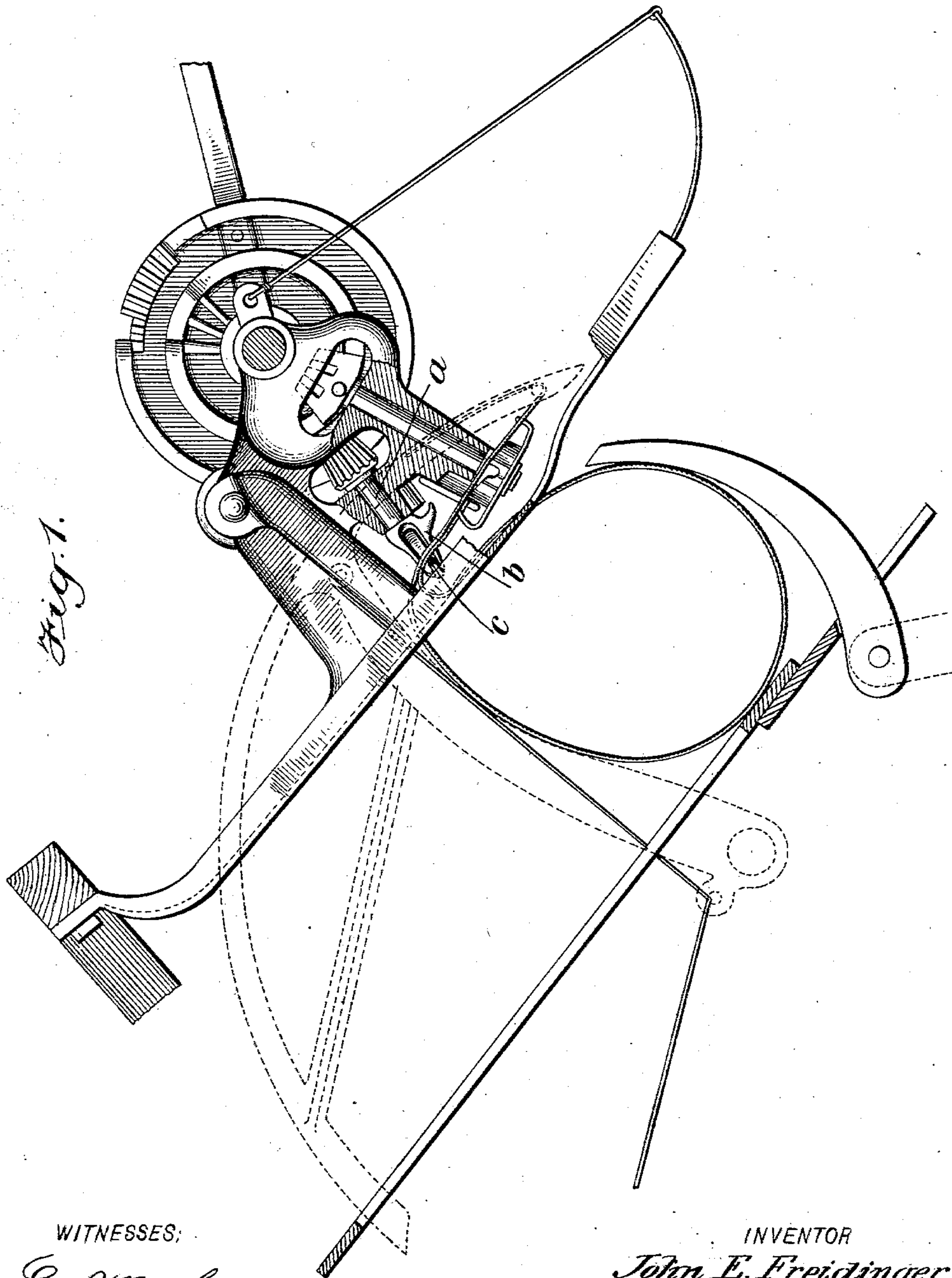
PATENTED NOV. 10, 1903.

J. E. FREIDINGER.  
KNOTTER.

APPLICATION FILED JAN. 27, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES:

*Geo. W. Maylor.*

*Isaac B. Owens.*

INVENTOR

*John E. Freidinger.*

BY

*Mumford*

ATTORNEYS.

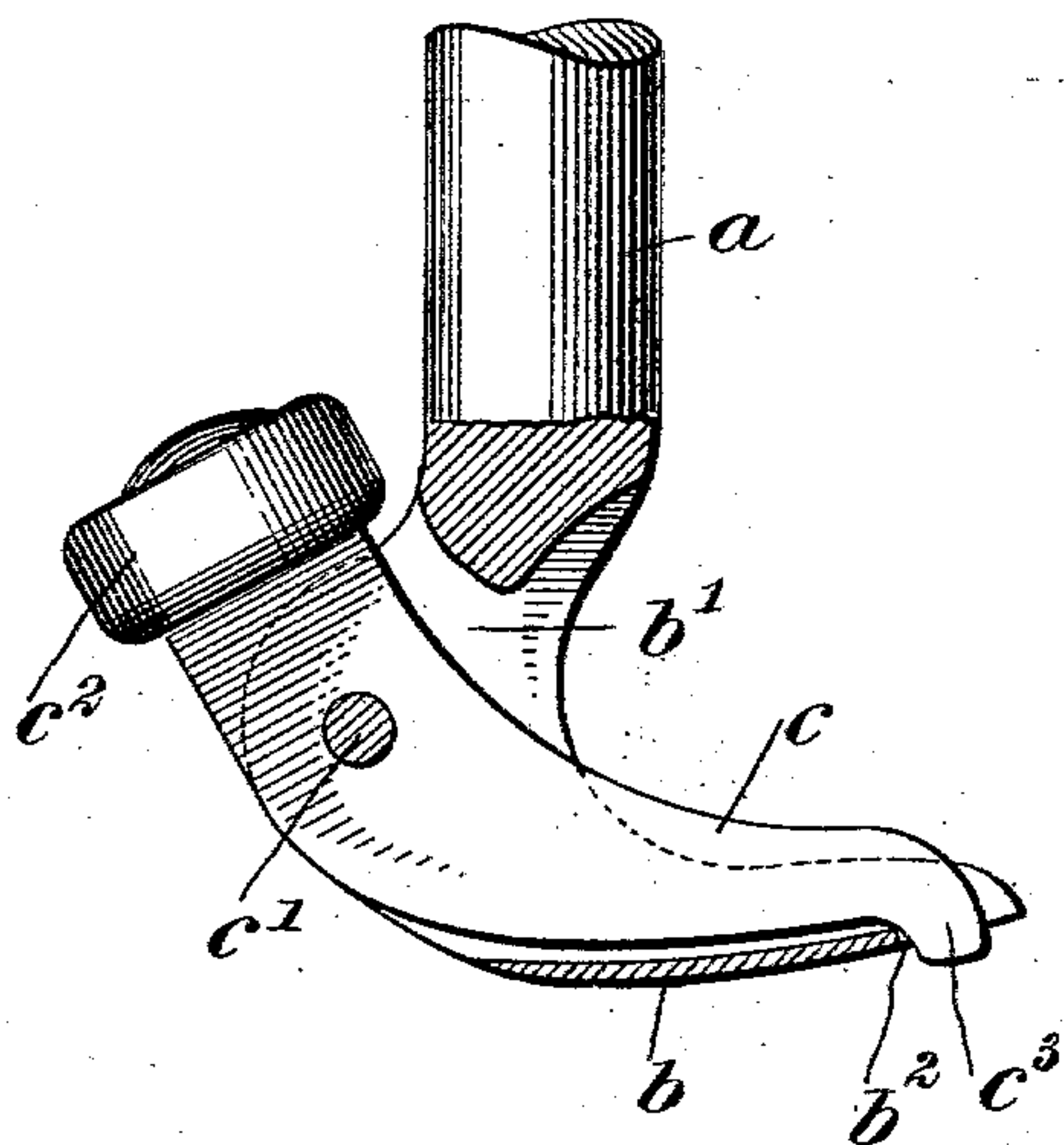
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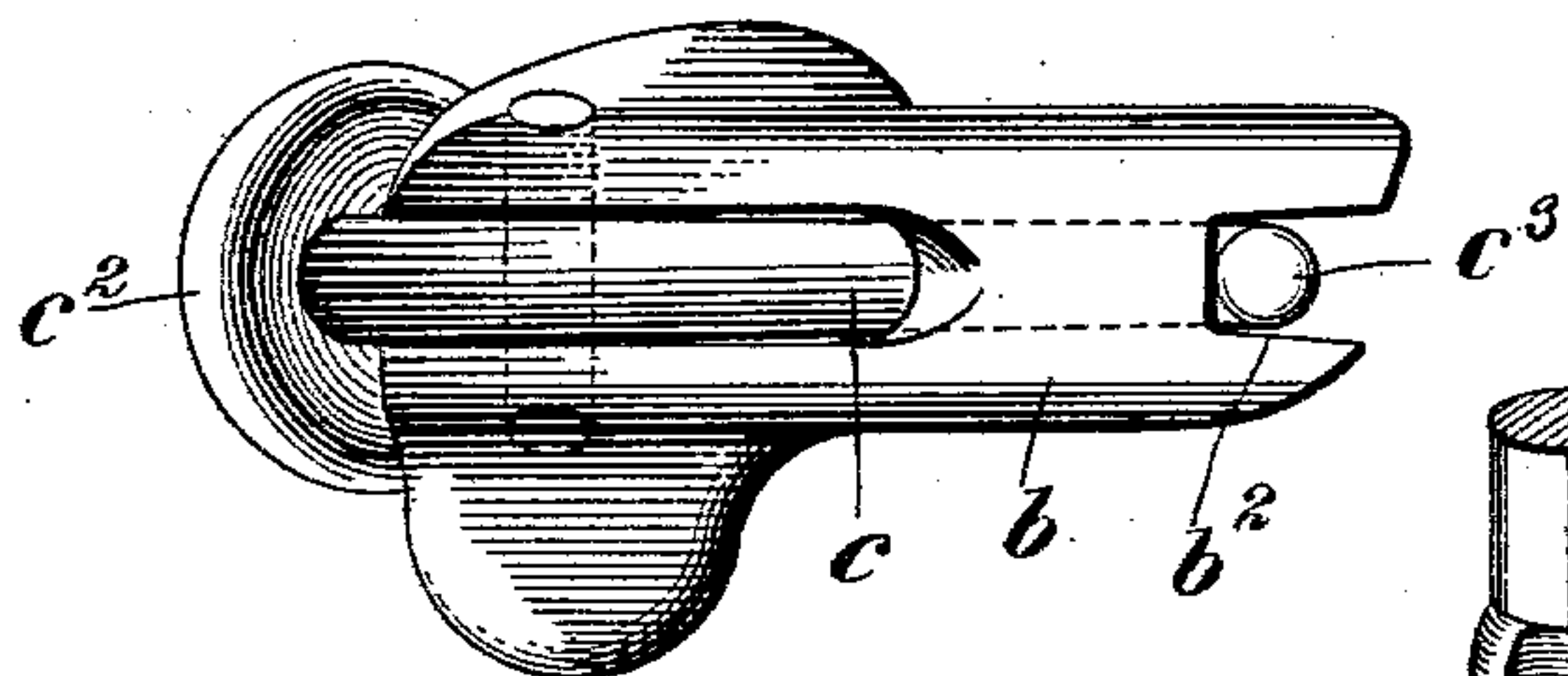
NO MODEL.

2 SHEETS—SHEET 2.

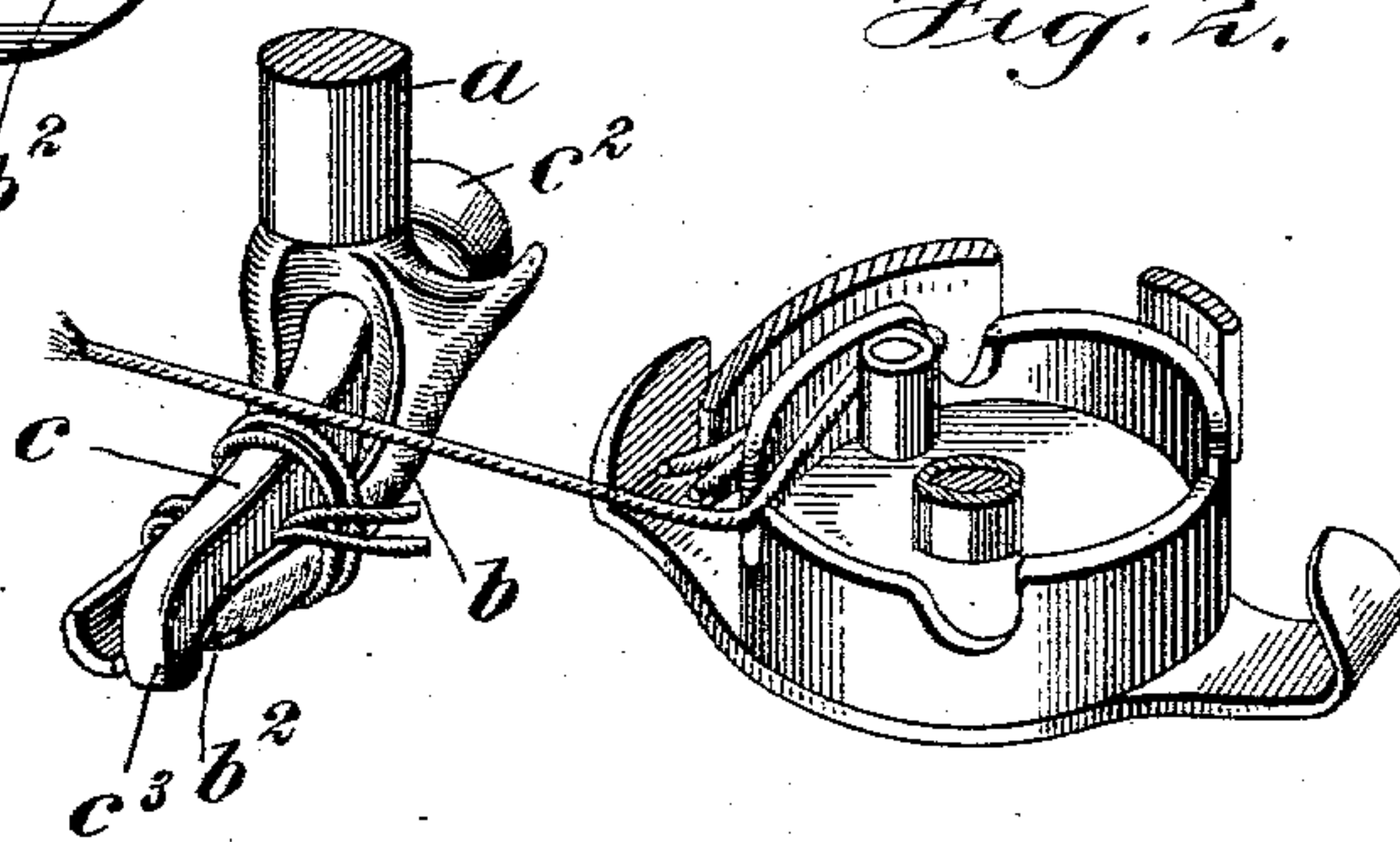
*Fig. 3.*



*Fig. 4.*



*Fig. 2.*



WITNESSES:

*Geo. W. Taylor.*

*Isaac B. Owens.*

INVENTOR

*John E. Freidinger*

BY

*Wm. B. ...*

ATTORNEYS.



# UNITED STATES PATENT OFFICE.

JOHN EDWARD FREIDINGER, OF HASTINGS, NEBRASKA.

## KNOTTER.

SPECIFICATION forming part of Letters Patent No. 743,853, dated November 10, 1903.

Application filed January 27, 1903. Serial No. 140,713. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN EDWARD FREIDINGER, a citizen of the United States, and a resident of Hastings, in the county of Adams and State of Nebraska, have invented a new and Improved Knotter, of which the following is a full, clear, and exact description.

This invention relates to a device for tying a knot in the cord which binds the gavel in a self-binding harvester.

It consists in certain features of construction and relative arrangements of parts by which the knot may be effectively tied under all conditions.

This specification is an exact description of the invention, while the claim defines the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a sectional view of the invention, taken across the axis of the needle and showing the binding-neck, breastplate, knotter-shaft, and gear of the usual or any preferred construction and illustrating my invention in operative position. Fig. 2 is a fragmentary view further illustrating the position of the knotter. Fig. 3 is an enlarged sectional view of my invention, and Fig. 4 is a bottom plan view thereof.

*a* indicates the knotter-spindle.

*b* indicates a rigid finger, which is formed with a longitudinal groove running through it and with a rounding lower side, according to the usual construction. In the inner portion of the finger *b* an opening *b'* is formed, as heretofore, and through this opening is projected the moving finger *c*, said finger being pivoted on the axis *c'* and fitted at its rear end with a roller *c''*, all of which will be understood from the prior art.

According to my invention the outer end of the rigid finger *b* is formed with an opening *b''* therein. As shown in Fig. 3, this opening is in the form of a slot, which extends from the very point of the finger *b* rearward. The free end of the moving finger *c* is formed with a hook *c''*, which extends downward and projects clear through the opening *b''*, the bill of the hook lying below the lower surface of the stationary finger *b*. As shown in Fig. 4, one of the members formed by the slot at the end of the rigid finger is shorter than the other

member, and the outer ends of the members are curved or sloped approximately in alignment.

In the ordinary construction when the twine varies in thickness the knotter almost invariably misses the tie, and also when straw becomes entangled between the fingers the tie is lost. This is due to the imperfect lock which is effected between the knotter-fingers under the ordinary construction. With my invention, however, a perfect lock is effected between the ends of the fingers, and thus there is no danger of the twine slipping, notwithstanding that the twine may vary in thickness to a large degree. Further, the opening in the end of the rigid finger allows all straws which become entangled in the knotter to be carried by the tip or hook *c''* downward out of the way, and should any straw lie crosswise between the fingers they will still hold the twine, since the connection effected between the hook *c''* and the walls of the hole or opening in the rigid finger will hold the twine notwithstanding.

Various changes in the form, proportions, and minor details of my invention may be resorted to at will without departing from the spirit and scope thereof. Hence I consider myself entitled to all such variations as may lie within the intent of my claim.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The herein-described knotter consisting of the rigid finger *b* provided in its outer end with a notch forming the separated side sections, one of said sections being shorter than the other and being sloped on its outer side at its end, and the opposite or longer section being sloped at its end approximately in alignment with the sloped end of the shorter section, and the movable finger *c* pivoted to the rigid finger and provided at its free end with a depending hook operating in the notch of the rigid finger and projecting below said finger in the closed position of the pivoted finger, substantially as set forth.

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

JOHN EDWARD FREIDINGER.

Witnesses:

M. D. FUGATE,  
P. L. JOHNSON.