

(No Model.)

2 Sheets—Sheet 1.

W. W. BURSON.
Conveyer Chain for Harvesters.
No. 238,849. Patented March 15, 1881.

Fig. 1.

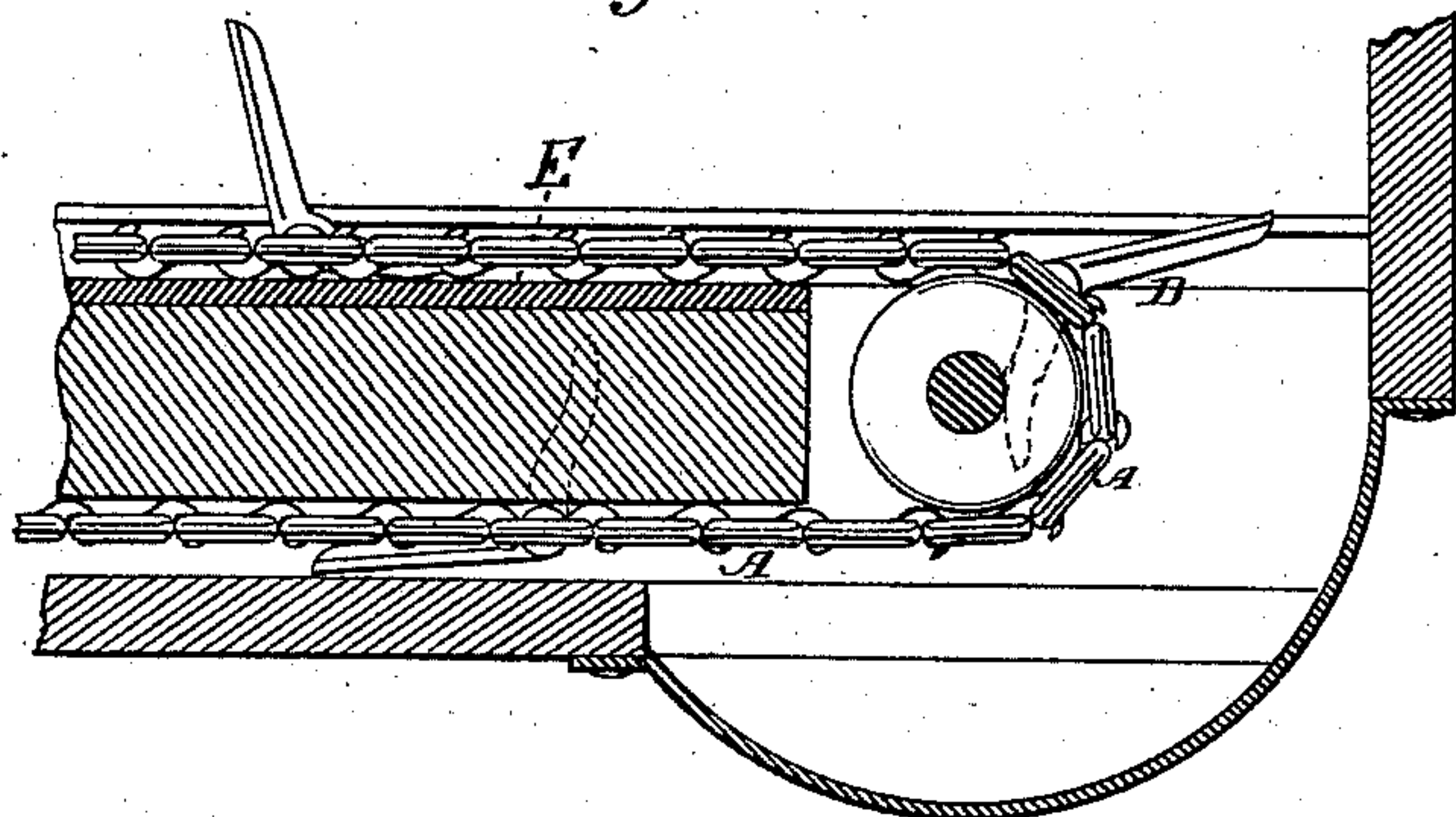


Fig. 2.

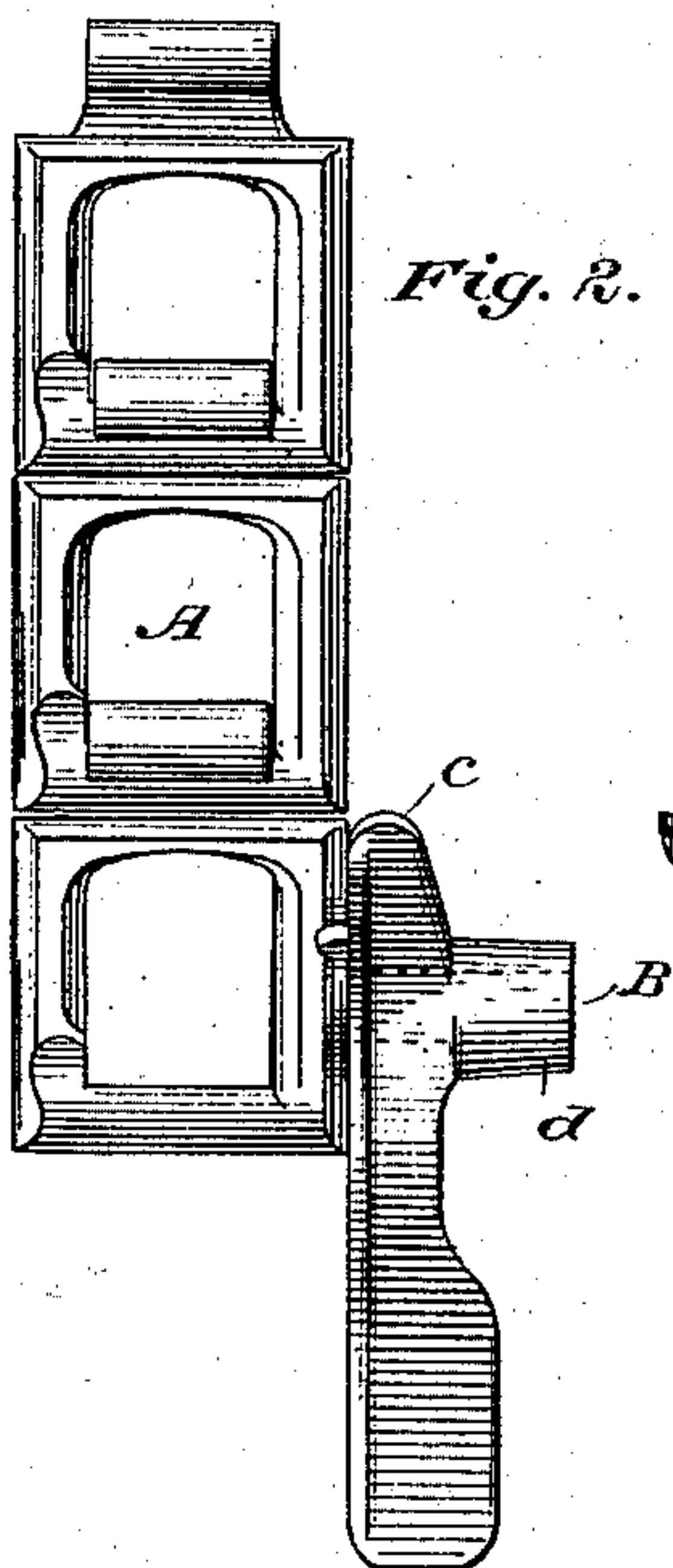


Fig. 3.

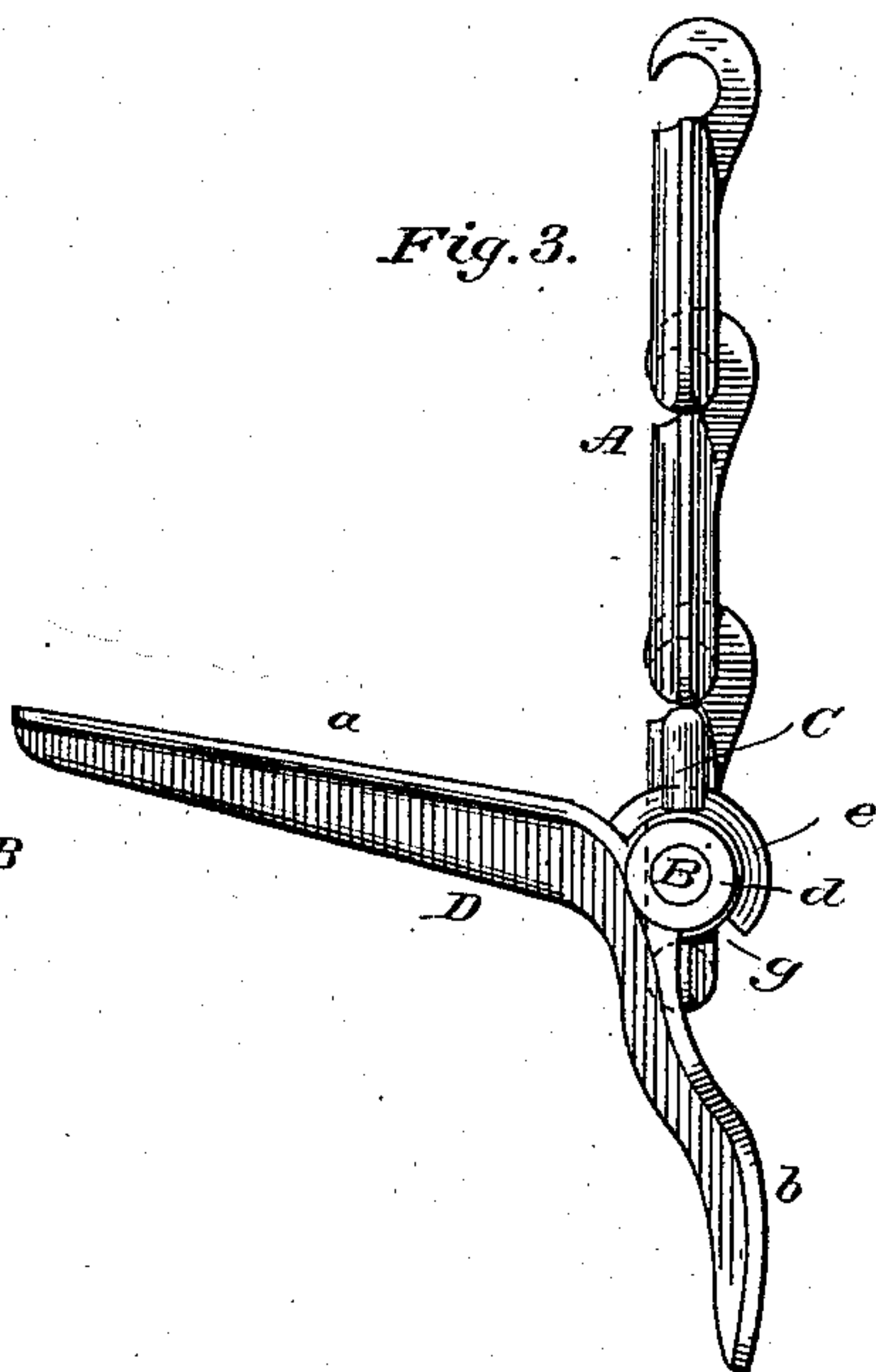


Fig. 4.

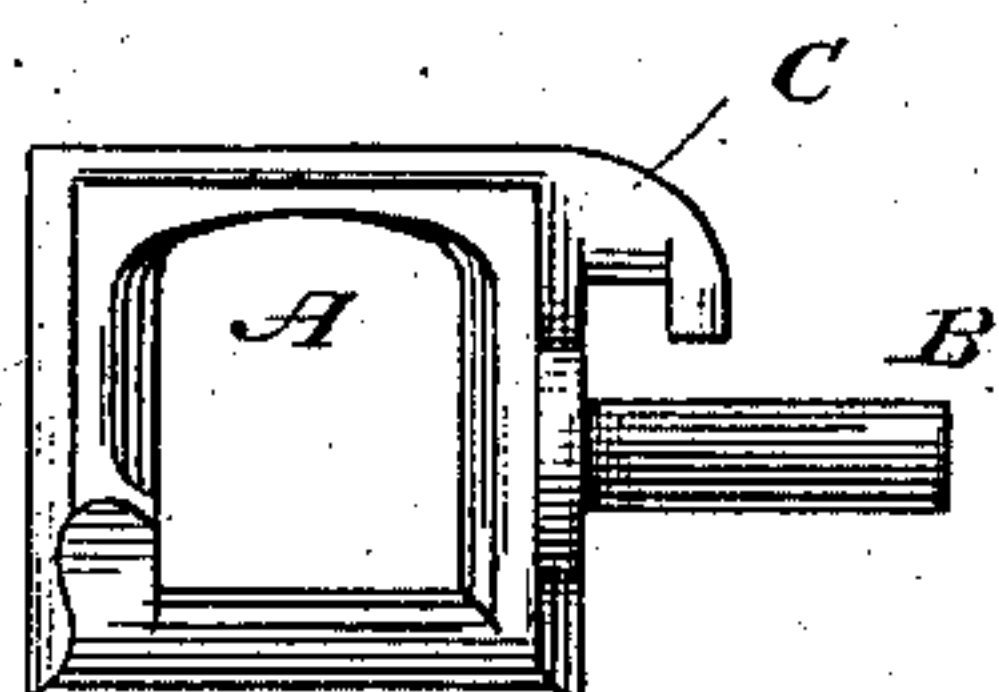
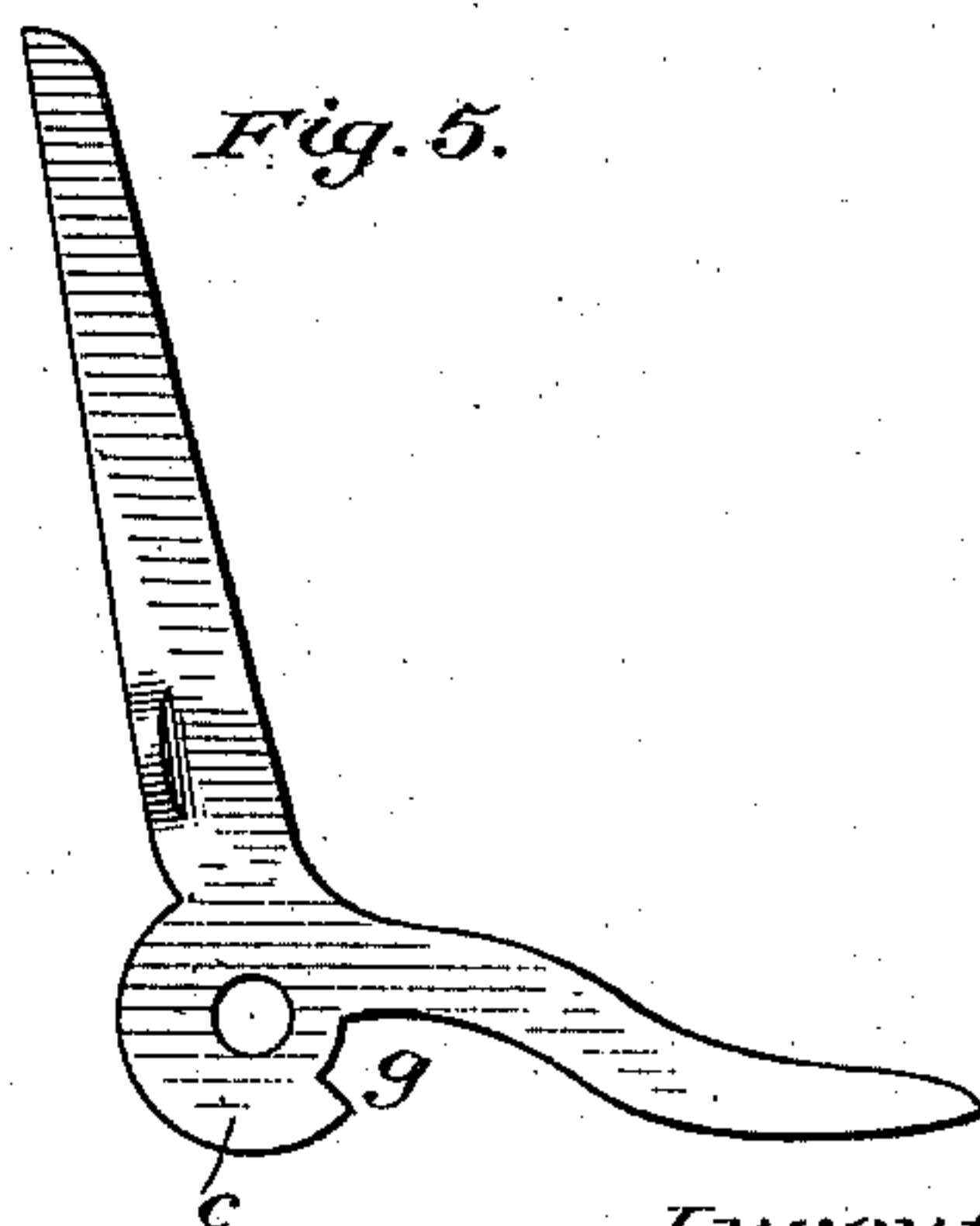


Fig. 5.



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R. D. Smith.

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2 Sheets—Sheet 2

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Fig. 6.

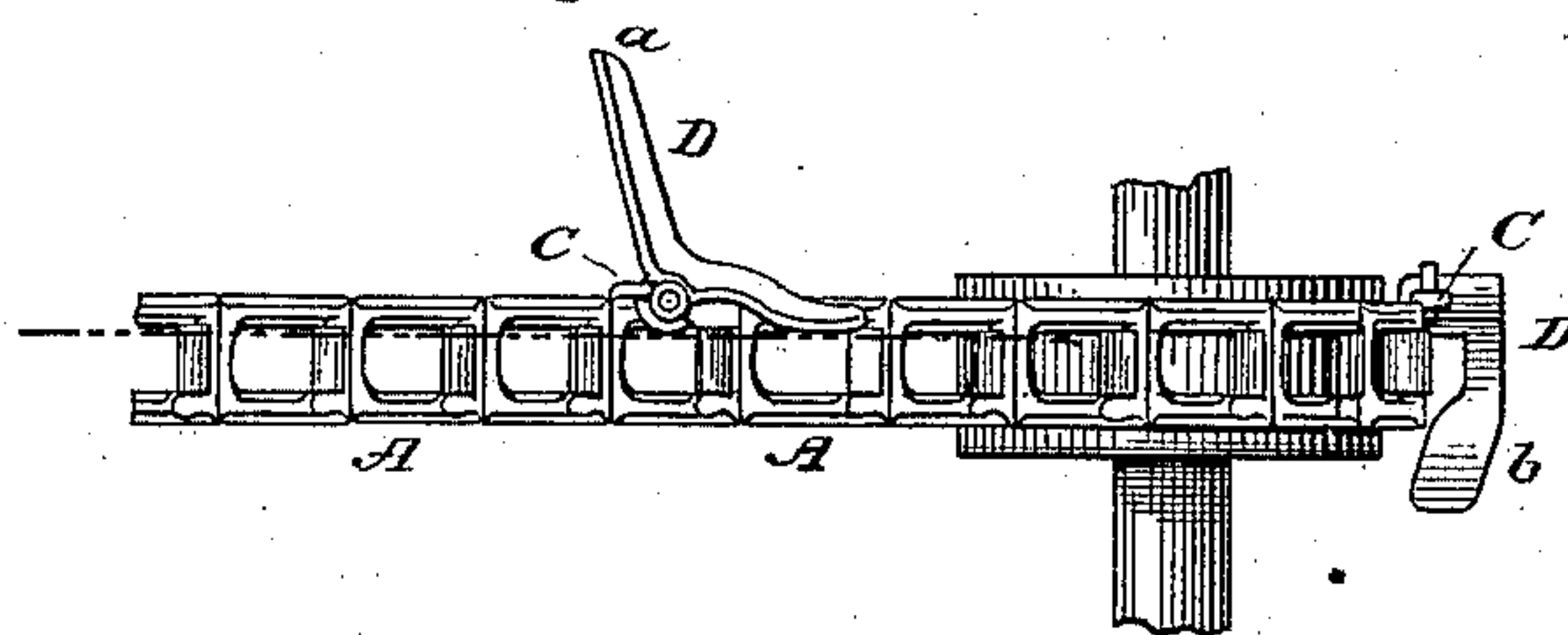


Fig. 7.

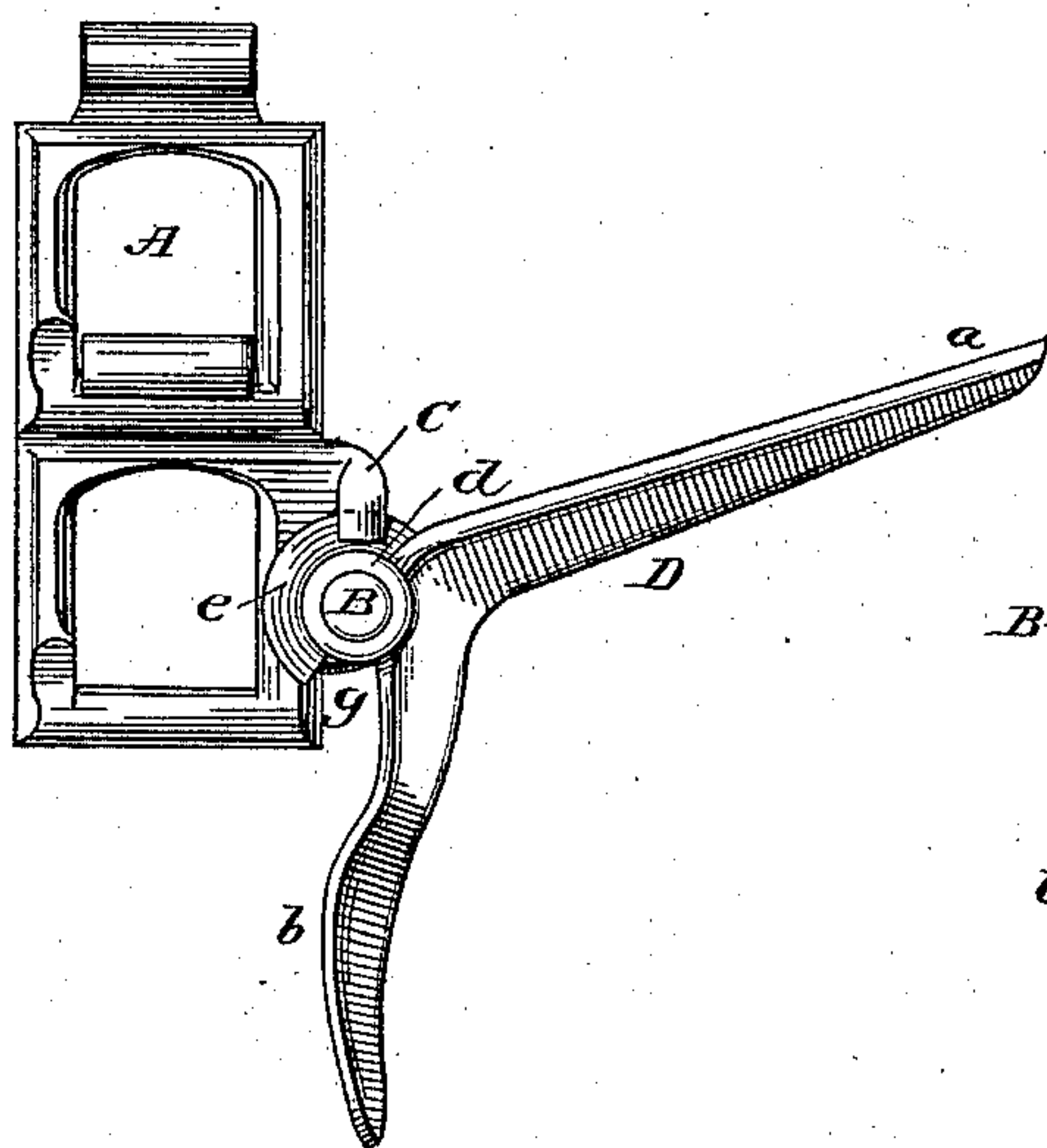


Fig. 8.

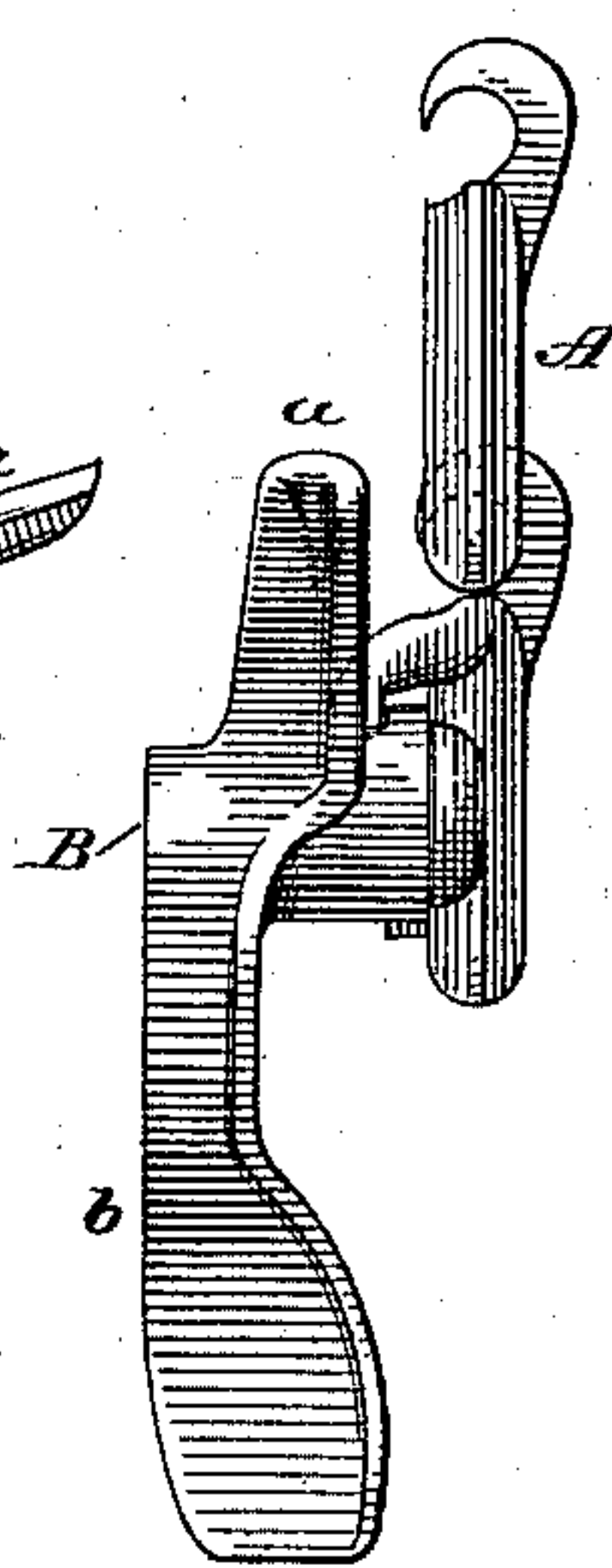
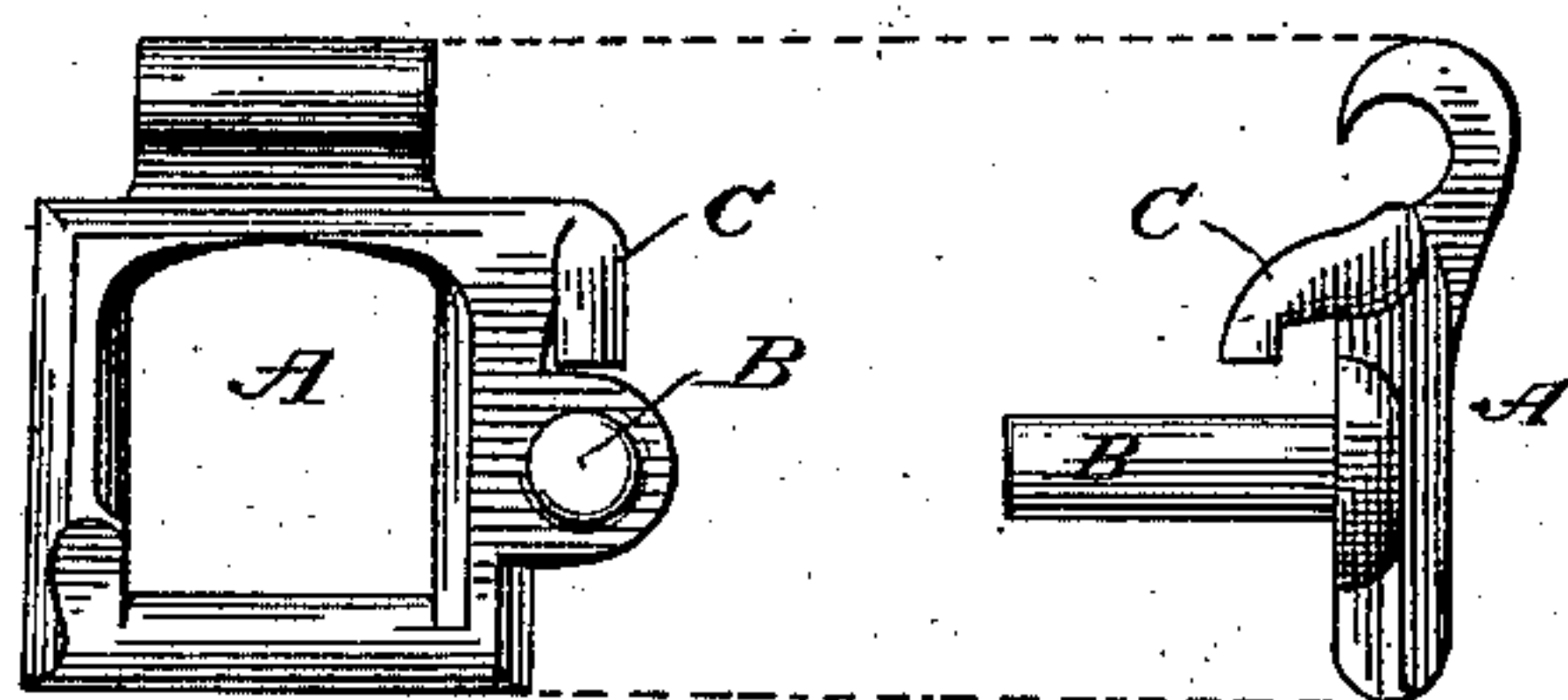


Fig. 9.



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Inventor:

W. W. Burson
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R. D. Smith

UNITED STATES PATENT OFFICE.

WILLIAM W. BURSON, OF ROCKFORD, ILLINOIS.

CONVEYER-CHAIN FOR HARVESTERS.

SPECIFICATION forming part of Letters Patent No. 238,849, dated March 15, 1881.

Application filed February 1, 1881. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM WORTH BURSON, of Rockford, in the county of Winnebago, in the State of Illinois, have made a new useful Improvement in Falling Teeth for Conveyer-Chains, and that the following is a full and exact description of the same.

The invention relates to such conveyer-chains as are used to transport the cut grain across the platform and up the elevator in some classes of reaping-machines; and it has particular reference to the mode of constructing and attaching the falling teeth without employing rivets or screws, so that they may be attached or detached at pleasure, but cannot in use become detached.

The object and effect of pivoted or falling teeth is well known. It permits the tooth to stand up during its period of advance across the platform and to assume an incumbent posture during its return, and thereby vertical space in the platform is economized.

My invention consists in a tooth cast with a lateral flange projecting around the pivot-socket, and in a plane perpendicular to the axis of said socket, and a notch in said flange at one side, in connection with a pintle or pivot-pin fitting said socket, and a hook attached to said pin at its base, adapted to hook over the edge of said flange, said hook and flange being adapted to each other so that they may be coupled by passing the hook through the notch before mentioned and uncoupled by a reverse movement.

That others may fully understand my invention, I will particularly describe it, having reference to the accompanying drawings, wherein—

Figure 1 is a perspective of my chain and falling tooth as the former runs flatwise. Fig. 2 is a perspective of my chain and falling tooth as the former runs edgewise. Figs. 3 to 9 are details, coupled and detached.

A is the chain or belt; and B represents the pintle or pivot-pins, which project at suitable intervals from the edge or face of said belt, according as the same runs upon its edge or back.

If a chain is employed the links may be constructed in any desired manner, either by forging or casting, and the pins B may be attached

in any suitable way, it being understood that my present invention does not refer in any way to the structure of the belt or chain, nor to the particular use to which it may be applied with my falling teeth attached to the base of said pintle B. There is a hook, C, the extremity whereof projects toward the pintle and in a direction perpendicular thereto.

D is the falling tooth. It is L-shaped. The part *a* is the working part, and the foot *b* traverses a runway or guide-board, E, while the part *a* is in action, so as to keep the same upright; but when the part *a* goes out of action by passing over the edge of the platform, &c., then the part *b* passes off its runway and permits the part *a* to fall backward to a position in the plane of the chain. In this position it may return beneath the grain or other material which is being moved over the platform without encountering the same, and when it has reached the point where it must go again into action the foot *b* again encounters its runway, and the part *a* is thereby lifted into action.

The tooth D is provided with a hub, *d*, with an axial socket or opening to receive the pintle B, and around the base of said hub there is also the flange *e*, which projects in a plane perpendicular to the axis of the hub *d*. A notch, *g*, is made in said flange at a proper point, so that the hook C may pass through the flange and be brought over the same by a subsequent partial rotation of the tooth. The relative rotation of the hook C and the notch *g* must be such that the tooth can never in use assume a position which will permit them to coincide, so as to become uncoupled. The change of position possible to the tooth during actual use will amount to about ninety degrees, whereas from a working position to a position when coupling or uncoupling is possible will involve a movement of about one hundred and twenty degrees.

It is manifest that this tooth may be placed on a chain running in any position, it simply being required that the pintle shall project in a direction perpendicular to the plane in which the tooth must move.

Having described my invention, what I claim as new, is—

1. A falling tooth, D, provided with hub *d*,

and flange *e*, with a notch, *g*, combined with a chain or belt provided with pintle B and hook C to engage the flange *e*, as set forth.

2. A falling tooth, D, provided with a hub,
5 *d*, and a lateral flange, *e*, provided with a notch,
g, combined with a pintle, B, and a hook, C,
and a guideway, E, the notch *g* and hook C
being so placed relatively that they cannot as-
sume a coincident position while the chain is
10 in working position.

3. A chain, A, constructed with certain links,
having pintles B and hooks C cast integral
with said links, combined with falling teeth D,
constructed with notched flanges *e*, as and for
the purpose set forth.

WILLIAM WORTH BURSON.

Witnesses:

ALFRED L. CLARKE,
P. W. KELLY.