

(No Model.)

2 Sheets—Sheet 1.

J. A. GLANTON.
EXTENSION TABLE.

No. 489,529.

Patented Jan. 10, 1893.

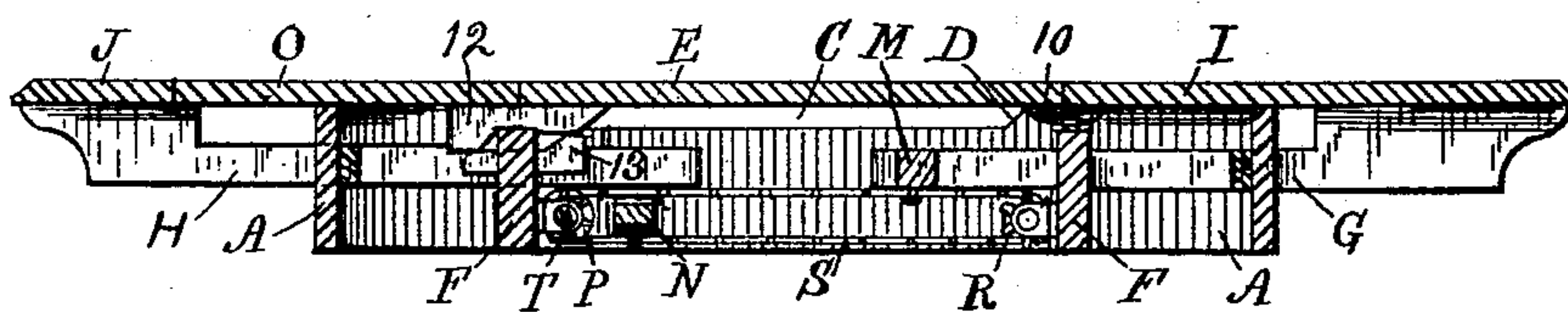
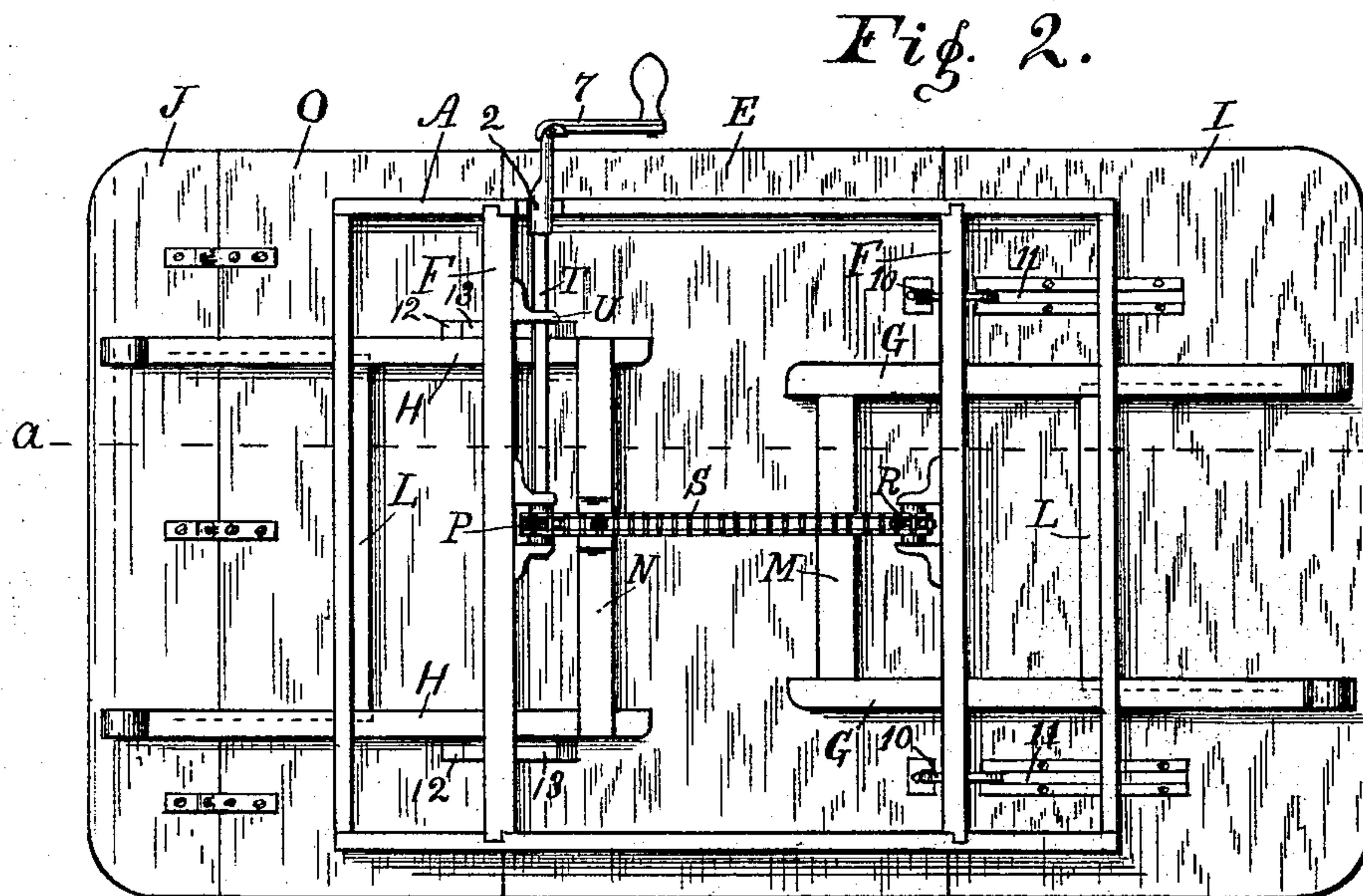
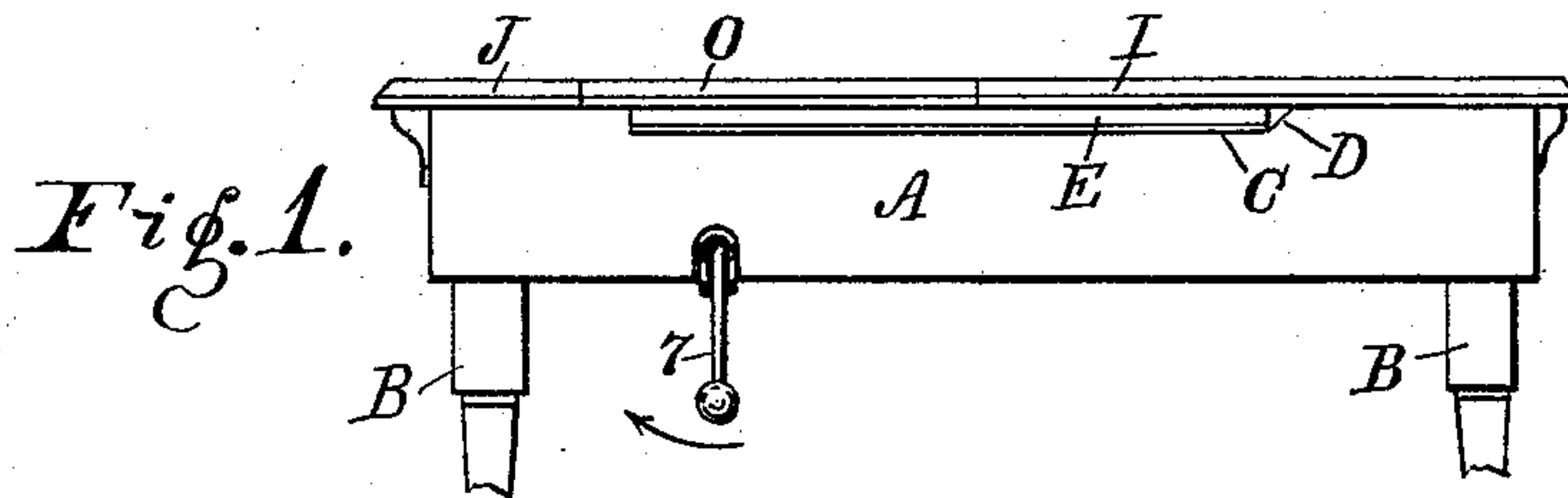


Fig. 3.

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(No Model.)

2 Sheets—Sheet 2.

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EXTENSION TABLE.

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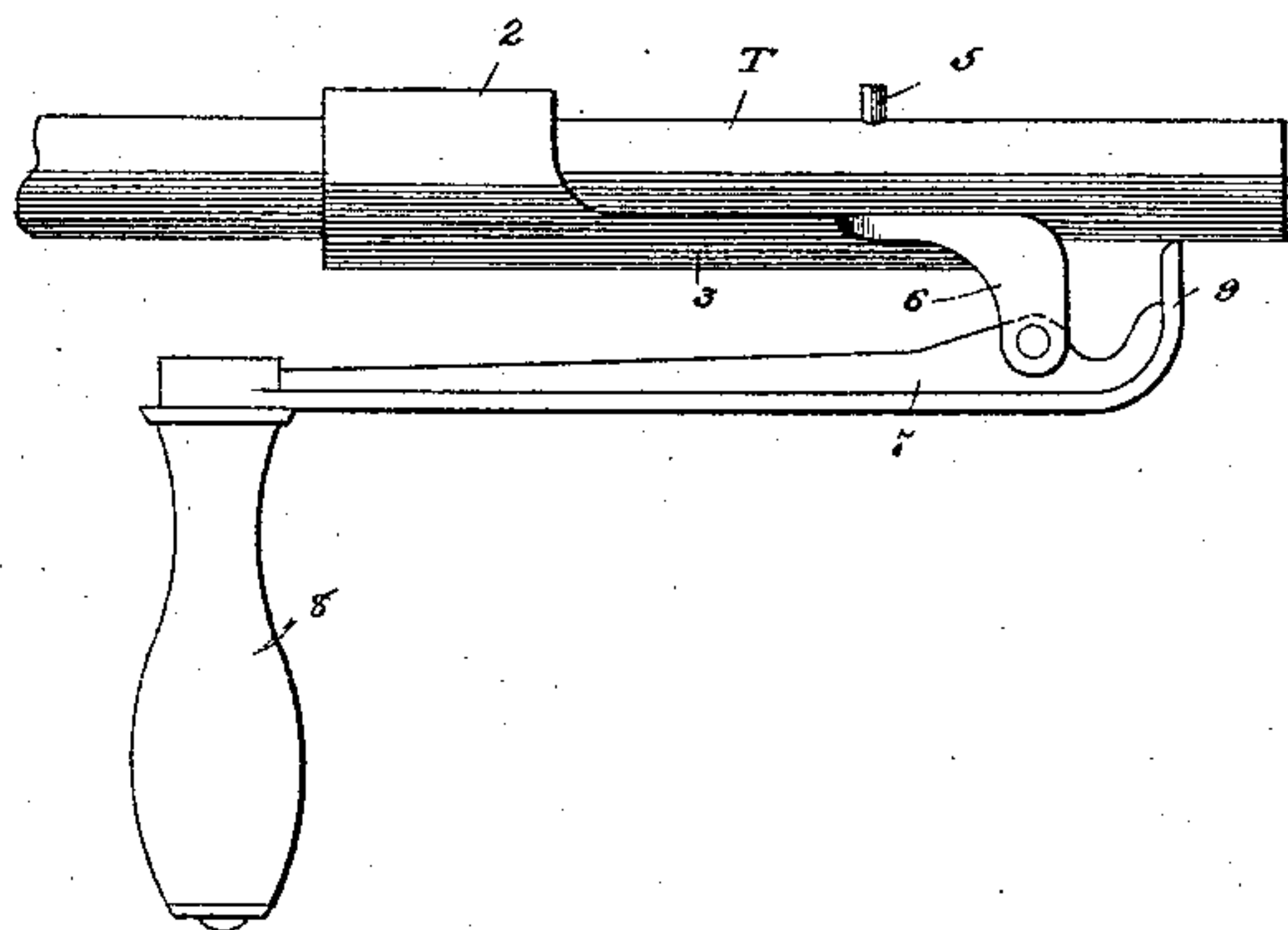


Fig. 6.

Fig. 5

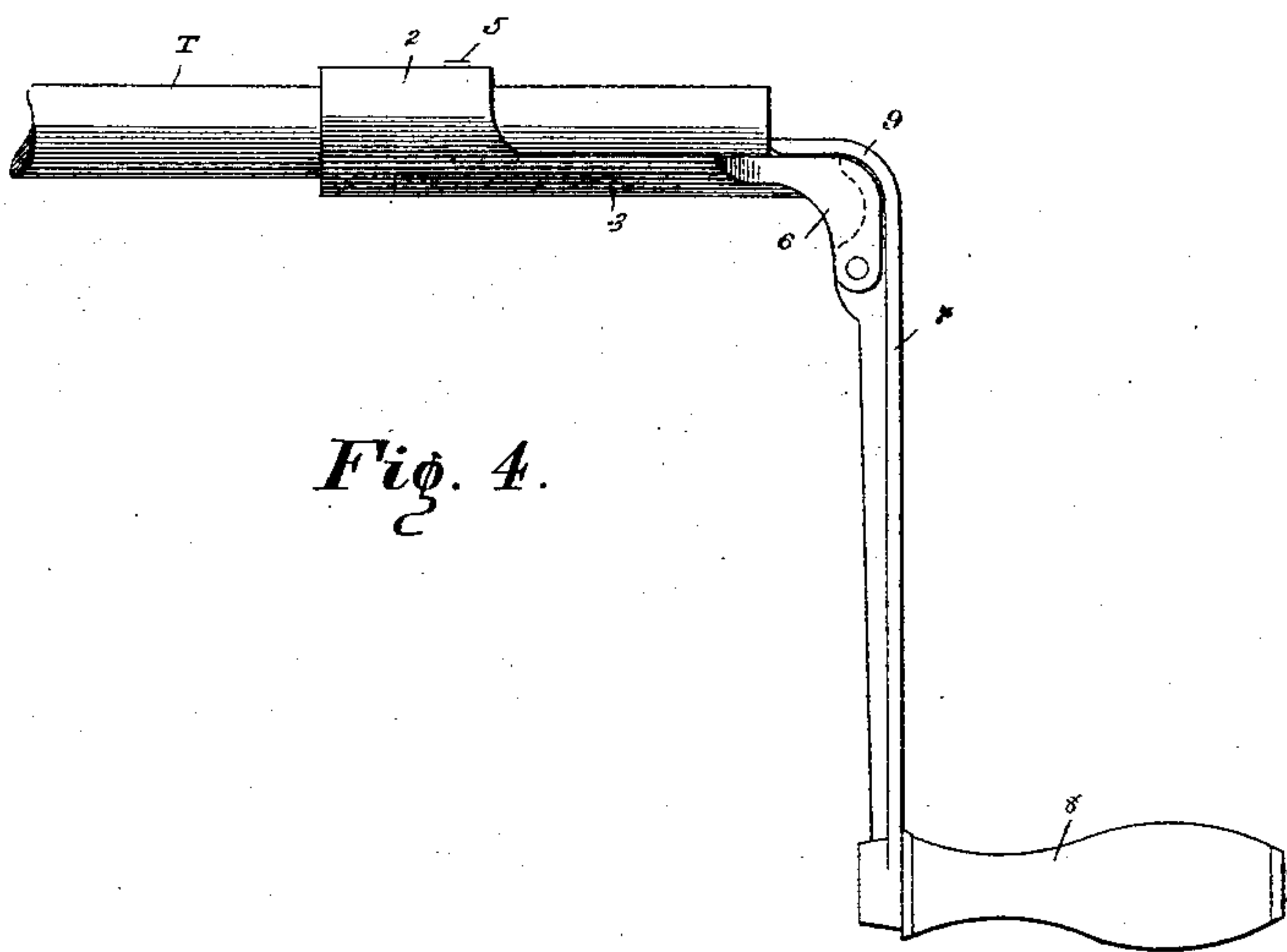
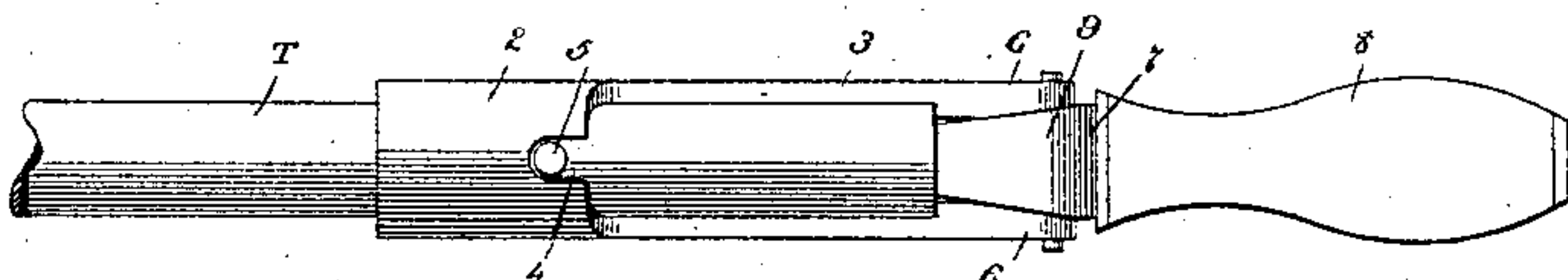


Fig. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

JAMES A. GLANTON, OF COLUMBUS, INDIANA.

EXTENSION-TABLE.

SPECIFICATION forming part of Letters Patent No. 489,529, dated January 10, 1893.

Application filed August 12, 1892. Serial No. 442,931. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. GLANTON, a citizen of the United States, residing at Columbus, in the county of Bartholomew and State of Indiana, have invented a new and useful Improvement in Extension-Tables, of which the following is a specification.

My invention relates to an improvement in extension-tables, of that class having a fixed frame and an extensible-top.

The object of my present improvement is, to provide improved means for operating the extensible-top.

The accompanying drawings illustrate my invention.

Figure 1 represents a side elevation, showing the top in its closed position. Fig. 2 is a plan of the under side of the frame and top, showing the top extended. Fig. 3 represents a longitudinal section at —a— Fig. 2. Fig. 4 represents, on a larger scale, a side elevation of a portion of the operating shaft, and the extensible-crank mounted thereon, showing the crank extended. Fig. 5 represents a plan of the same. Fig. 6 represents a side elevation, showing the crank in its folded position.

In the drawings, A, represents a light rectangular frame to which the supporting legs, B, are secured. The sides of frame A, are each provided with a shallow recess C, having one of its ends inclined, as at D, and adapted to receive the central top-board E, so that its upper surface shall be flush with the upper edge of the frame.

Frame A is provided with a pair of transverse cross-bars F, F, extending between the sides of the frame and secured thereto below the plane of the recesses C. The upper edges of said cross-bars are notched to form bearings for the inner ends of two pairs of sliding arms G, G, and H, H; similar bearings being formed for said arms in the ends of the main-frame. Secured to the upper sides of arms G, G, and H, H, at their outer ends, respectively, are the top-boards I, and J.

Each of the arms G, G, and H, H, is provided on its inner surface with a longitudinal groove, which grooves are engaged by projecting tongues formed on the ends of bars L, L, secured to the inner surfaces of the ends of the main-frame, and which serve to limit the outward movement of the arms and pre-

vent them from being lifted out of their bearings. The inner ends of arms G and H, are cut away so as to pass beneath the central top-board when it is resting in the recesses, C, of the main-frame; while their outer ends support the boards I and J, above the upper edge of the frame. The inner ends of each pair of sliding arms are connected by cross-bars M and N; cross-bar M being arranged in the same plane as the arms which it connects, and cross-bar N being arranged below the arms which it connects, for the purpose hereinafter explained.

Hinged to the upper edge of top-board J, and forming an extension thereof, is a top-board O, arranged so as to swing slightly in a vertical plane thereon so that its inner edge may be lifted above the plane of the next adjacent top-board.

Mounted in suitable bearings secured to the inner opposed faces of cross-bars F, F, are a pair of sprocket-wheels P and R. Said wheels are connected by a chain-belt S, which is arranged in such a plane that its upper portion passes close beneath and is secured to the cross-bar M connecting arms G; and its lower portion passes closely beneath and is secured to the cross-bar N connecting the arms H, H, the cross-bar passing through the bight of the chain, as shown.

Sprocket-wheel P is secured to a shaft T, which extends outward through a bearing U, and through the side of the main-frame.

For the purpose of providing means for turning shaft T, which shall be at all times accessible, but which may be folded out of the way when not in use, I provide a crank constructed in the following manner. 2, indicates a hollow cylindrical sleeve, having on one side a longitudinal extension, 3, and adapted to turn upon and slide easily longitudinally along shaft T. The upper side of sleeve 2 is provided with a notch 4, which engages a pin 5, projecting radially from the shaft, and serving to limit the outward movement of the sleeve, and to prevent its turning thereon. Pivoted between lugs 6, 6, depending from the outer end of extension 3, is a lever 7, provided on one side with a handle 8, projecting at a right angle therefrom, and provided on the opposite side and end with a short arm 9. The arrangement of lugs 6, lever 7, and arm

9 is such, that, when sleeve 2 is engaged with pin 5, arm 9 engages the upper side of extension 3, and limits the outward swinging movement of lever 7, as shown in Figs. 4 and 5, and, when the sleeve is slipped inward upon the shaft the end of arm 9 engages the side of the shaft and holds the lever 7 in the folded position illustrated in Fig. 6. While in this position the crank may be turned on the shaft so as to be concealed within the main-frame.

That edge of the central top-board E, which is next to the inclined ends of recesses C, in the sides of the frame, is provided with a pair of links 10, 10, pivoted thereto so as to have a limited movement thereon in a vertical plane, and the opposite ends of these links are provided with lateral projections which engage under-cut grooves 11, 11, formed in the under surface of the top-board I; in a manner well known in this class of extension-tables; and fully illustrated in my United States Patent No 440,261 the arrangement being such as to permit a limited vertical movement of the central top-board relatively to the other, and a sliding movement of one upon the other. The opposite edge of the central top-board is provided on its under side with short arms 12, 12 having their under surfaces inclined to correspond to the inclined surfaces of a pair of wedge-shaped lugs, 13, which are permanently secured, respectively to the sides of arms H, H, the relative arrangement of said arms 12, and lugs 13 being such that when the central top-board is resting in the recesses C, in the sides of frame A, and arms H have nearly reached the limit of their outward movement, arms 12 will be engaged by the lugs 13, and the top-board will be lifted by the further outward movement of the arms.

The operation of my device is as follows. The top being closed, as in Fig. 1, and shaft T being turned in the direction indicated by the arrow, the sliding arms G and H, are carried in opposite directions by the opposite sides of the chain-belt S to which they are secured, and are projected in opposite directions from the ends of the frame, carrying

with them the top-boards I, O, and J; said boards sliding above the central board E. When the top-board I has moved outward sufficiently to uncover board E, the ends of the links 10, which slide in the grooves 11, have reached the inner closed ends of the grooves and the further outward movement of board I operates to draw board E in the same direction and to thereby raise it into the same plane as boards, I, O, and J. To close the table shaft T is turned in the opposite direction. It will be observed that by means of the sprocket-wheels P and R, and the chain-belt mounted thereon, said chain-belt being secured at opposite sides to the respective arms, a positive movement is given to the top-boards in either direction by means of a simple and durable mechanism.

I claim as my invention;

1. In an extension-table, the combination with the fixed-frame and a pair of sliding frames arranged to be projected in opposite directions from opposite ends of said frame and adapted to support the top-boards, of a pair of sprocket-wheels mounted on the fixed frame, a chain-belt mounted on said sprocket-wheels, and having its opposite sides secured, respectively, to said sliding frames, and a driving shaft connected with one of said sprocket-wheels, all arranged to co-operate substantially as and for the purpose set forth.

2. In an extension-table having a driving-shaft whereby the table is extended, the combination with said driving-shaft, provided with pin 5 of the above-described crank consisting of the cylindrical sleeve mounted upon the shaft so as to turn therewith and slide longitudinally thereon, and provided with slot 4 extension 3, and lugs 6, and the lever 7, provided with handle 8, and oppositely arranged arm 9, and pivoted to said lugs, all arranged to co-operate in the manner and for the purpose set forth.

JAMES A. GLANTON.

Witnesses:

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