

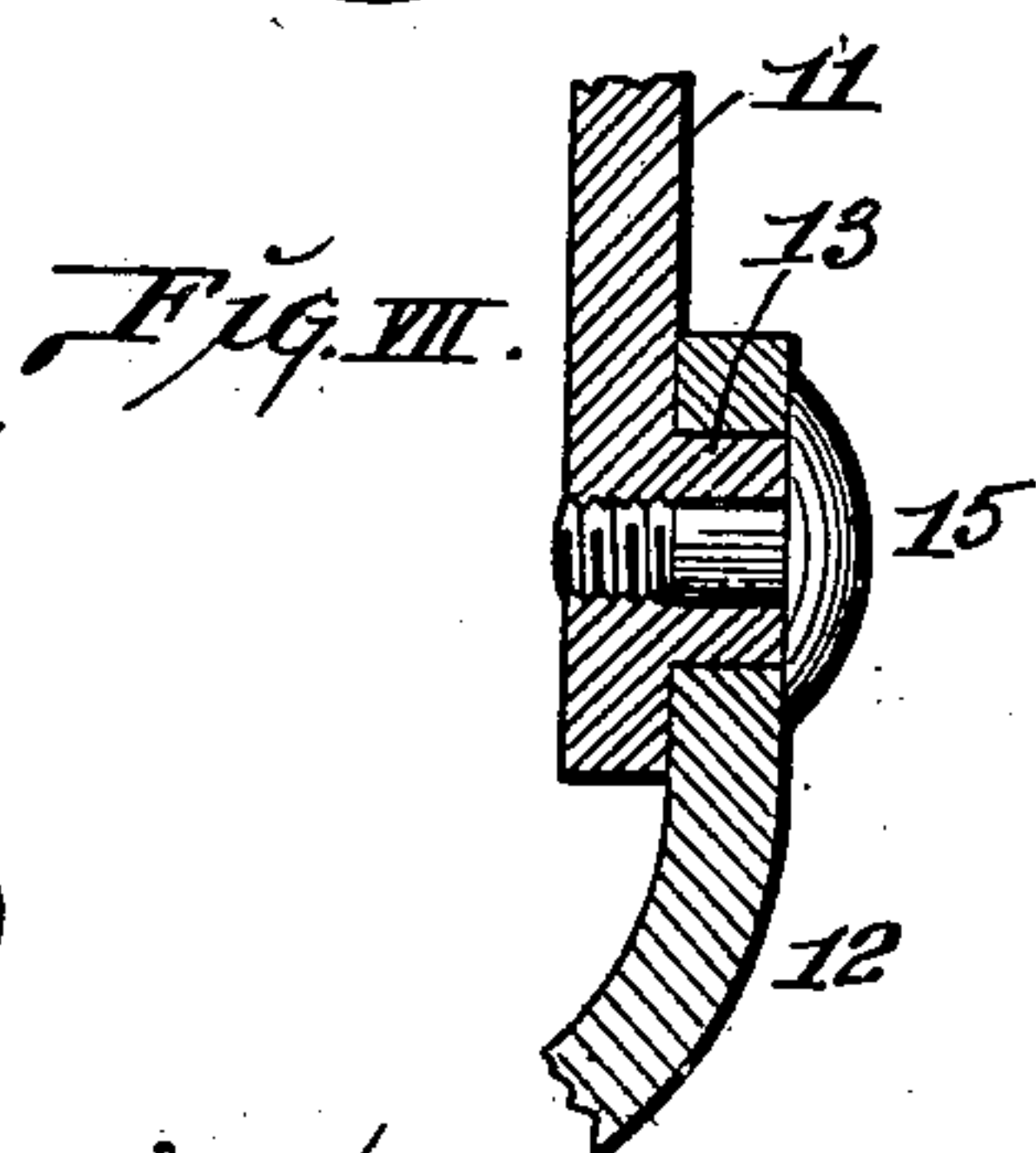
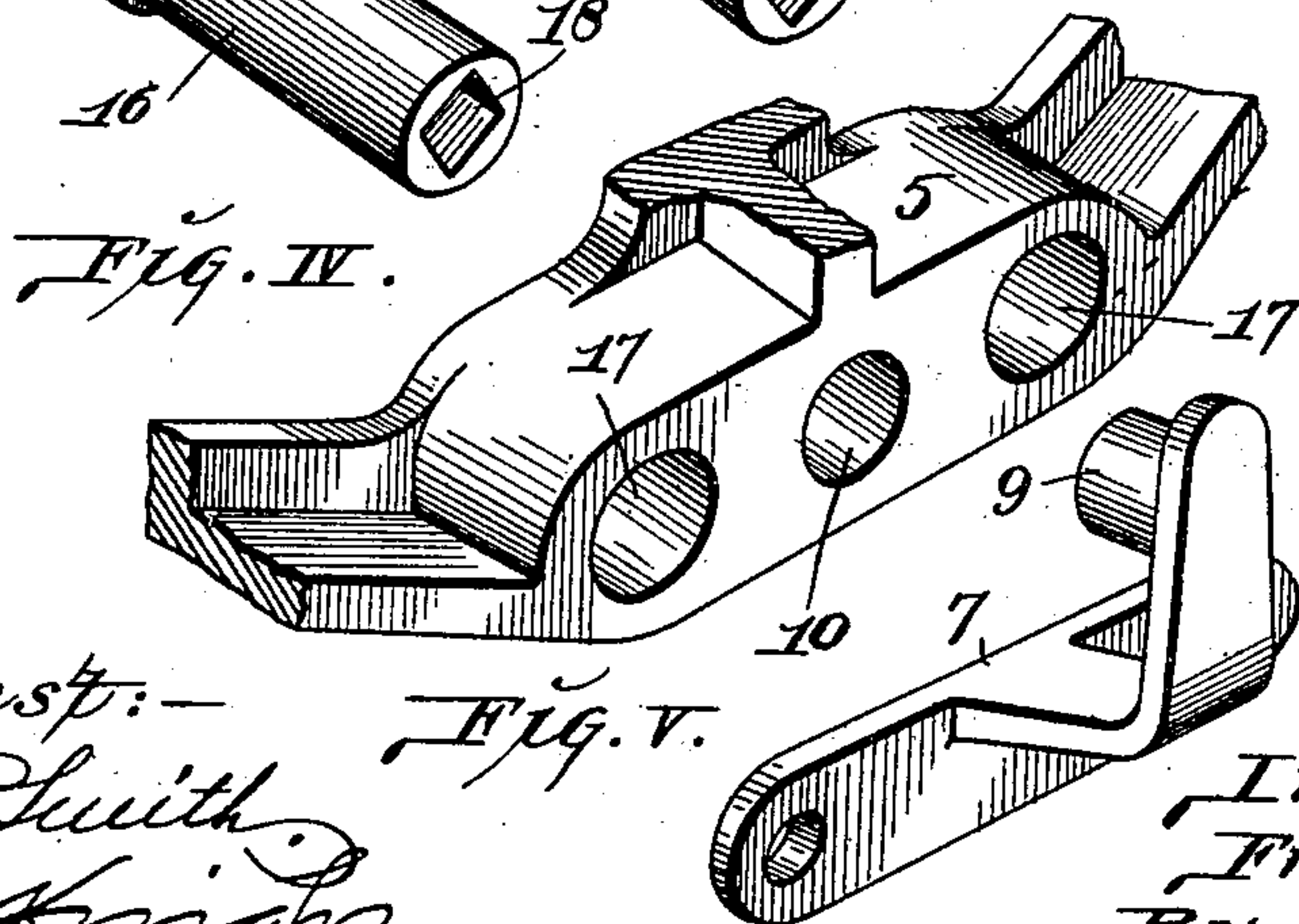
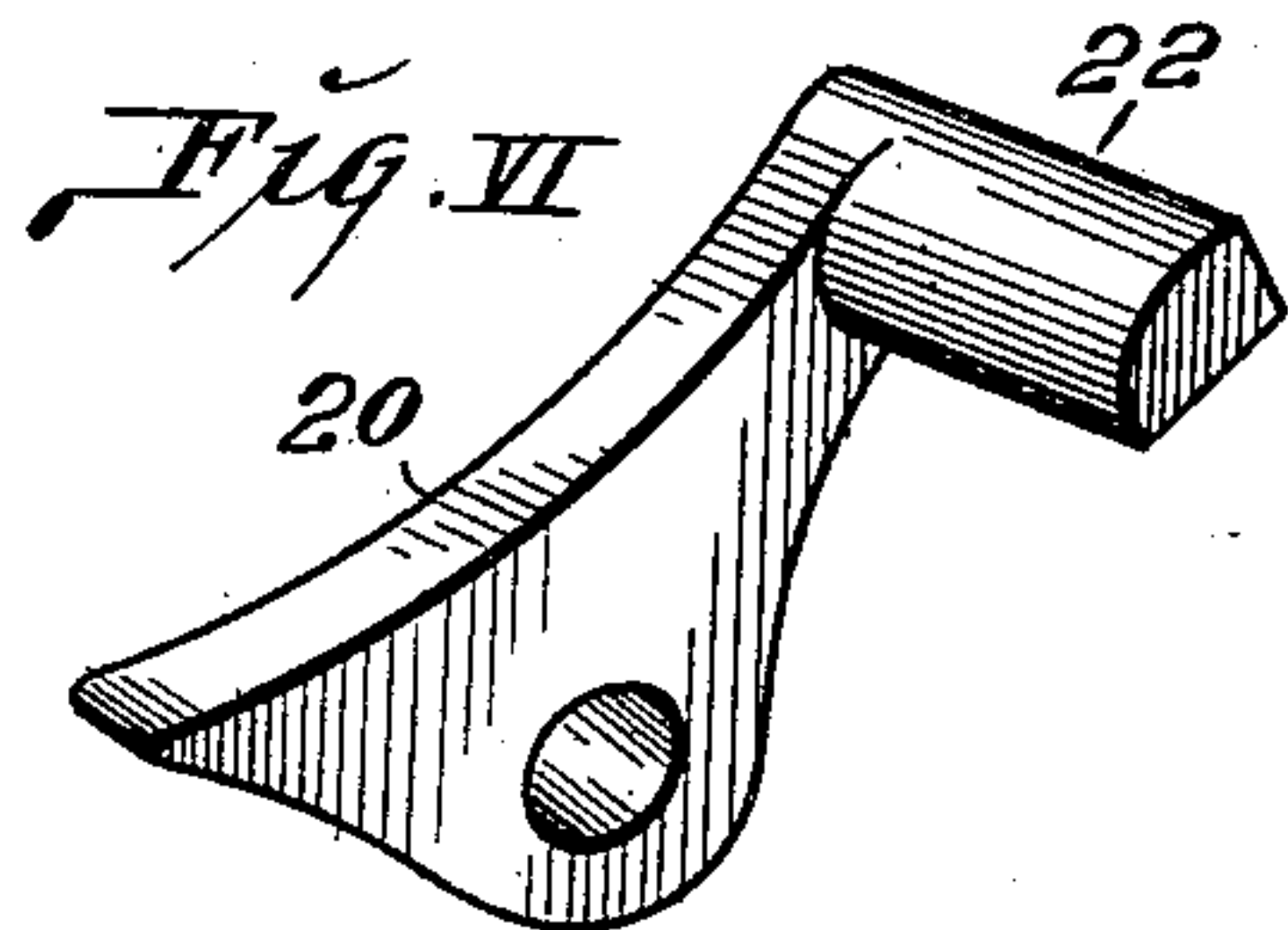
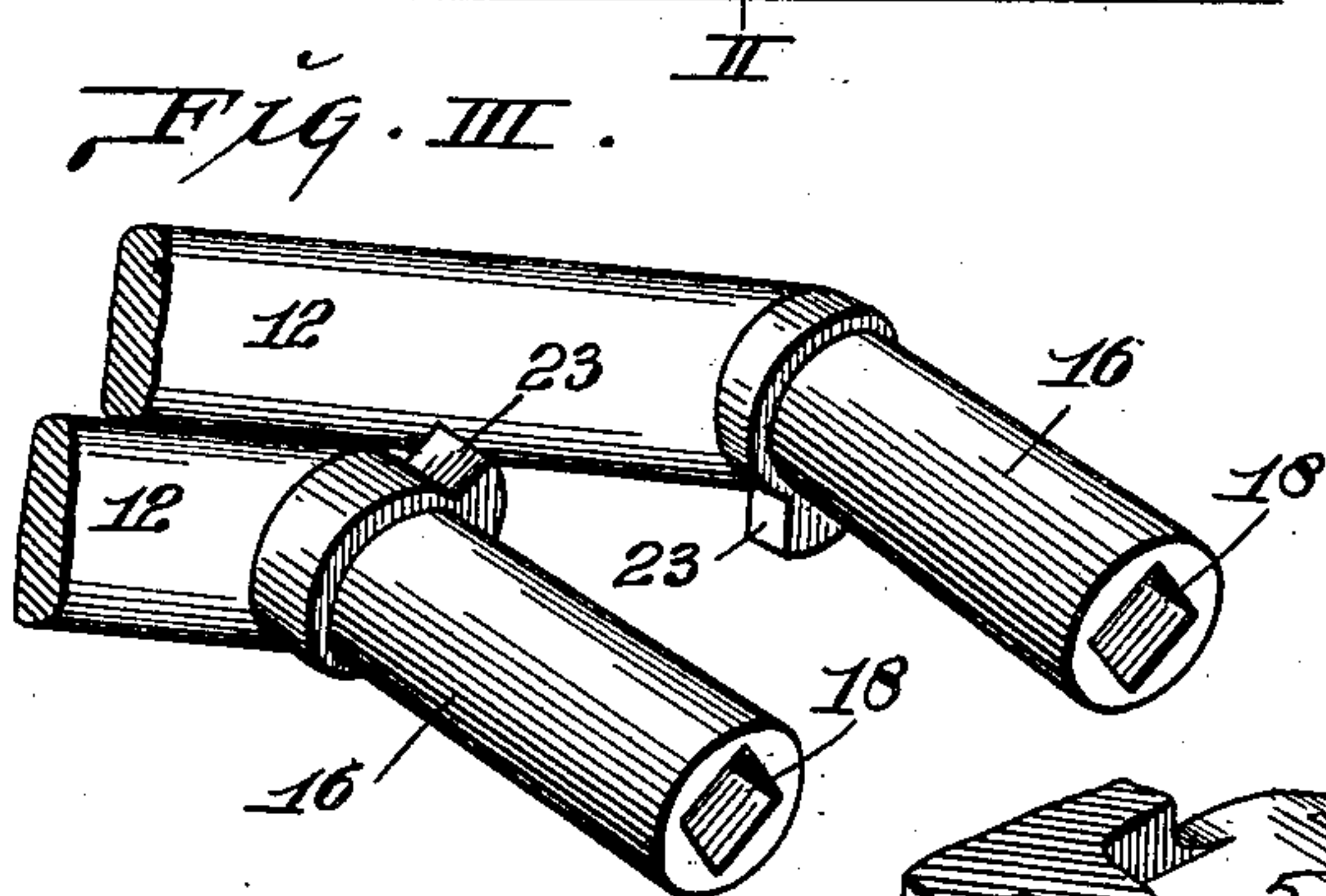
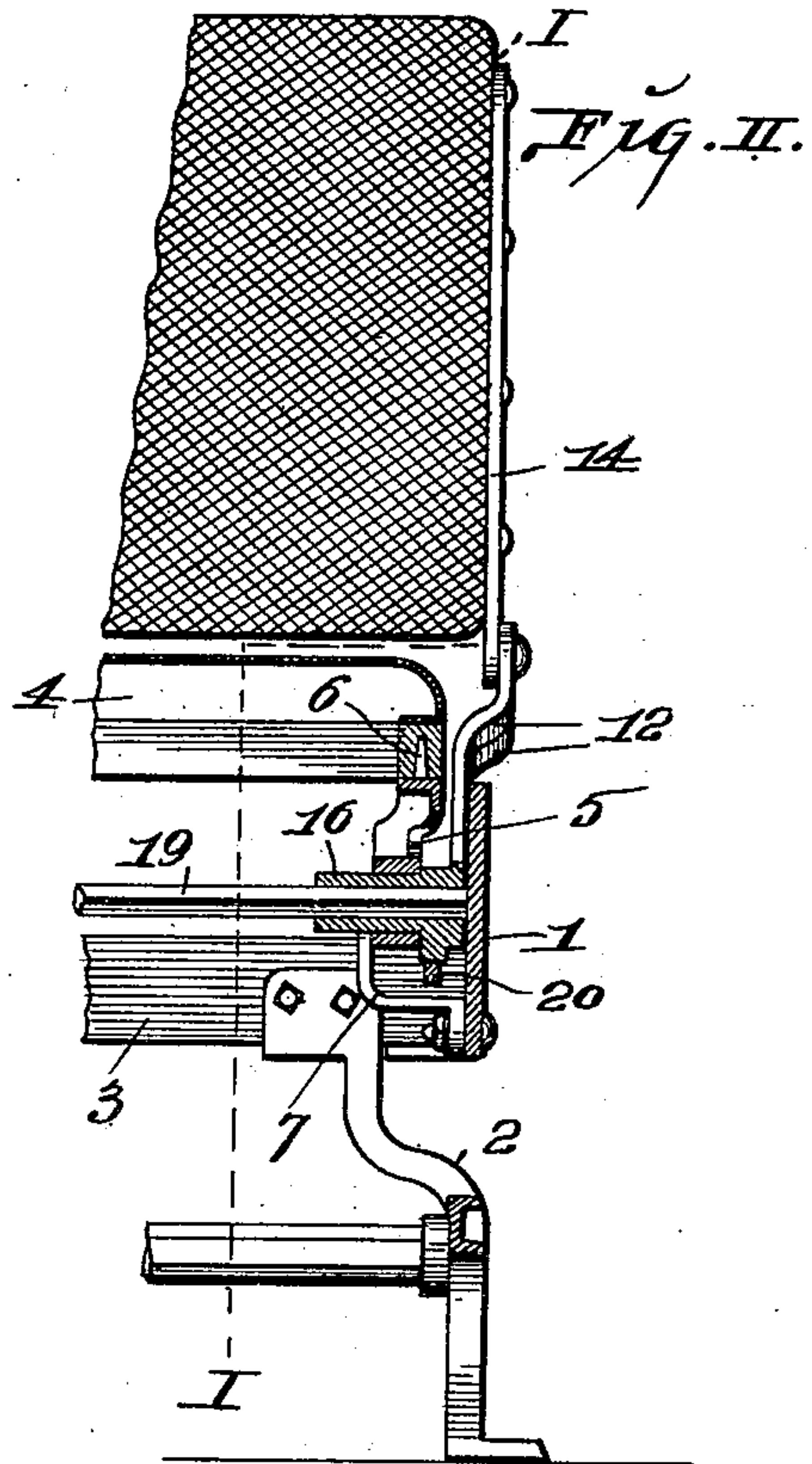
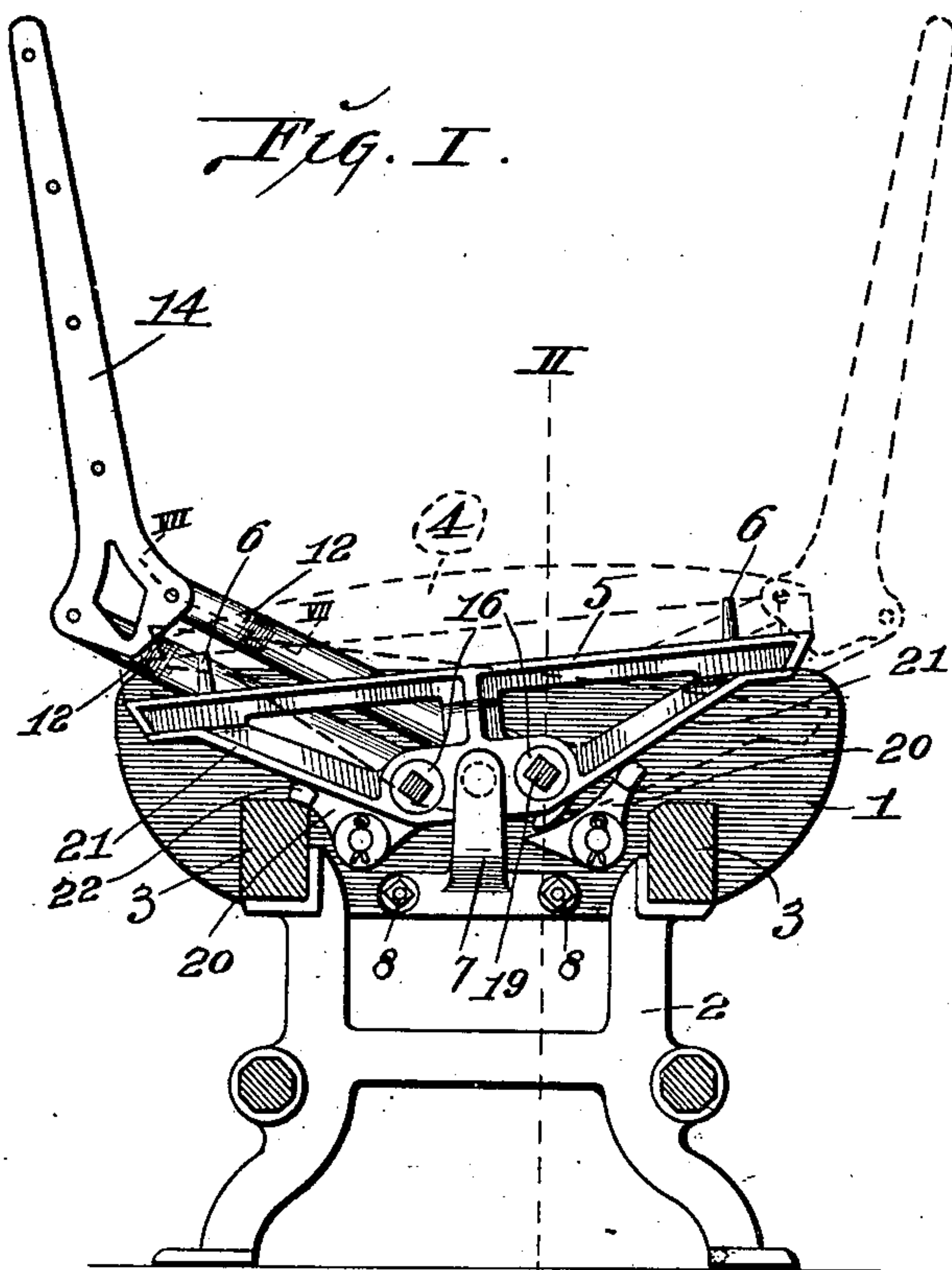
No. 679,081.

Patented July 23, 1901.

F. G. KOEHLER.  
CAR SEAT.

(Application filed Apr. 15, 1901.)

(No Model.)



attest:-  
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Fig. V.

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# UNITED STATES PATENT OFFICE.

FRANK G. KOEHLER, OF ST. LOUIS, MISSOURI.

## CAR-SEAT.

SPECIFICATION forming part of Letters Patent No. 679,081, dated July 23, 1901.

Application filed April 15, 1901. Serial No. 55,905. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK G. KOEHLER, a citizen of the United States, residing in the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Car-Seats, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to certain improvements in the class of car-seats known as "walk-over" seats, the back being reversible from side to side of the seat without revolving or turning over.

My invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a vertical transverse section of my improved seat, taken on line I I, Fig. II, the cushion being shown in dotted lines. Fig. II is a detail vertical section taken on line II II, Fig. I. Fig. III is a perspective view of the inner ends of the arms at one end of the seat that connect the back to the cushion-supporting brackets. Fig. IV is a detail perspective view of one of the cushion-supporting brackets. Fig. V is a perspective view of one of the bracket-supporting clips. Fig. VI is a perspective view of one of the levers that tilts the cushion-supporting bracket. Fig. VII is an enlarged detail section taken on line VII VII, Fig. I.

Referring to the drawings, 1 represents the end pieces of the frame of the seat, 2 the supporting-legs, and 3 the usual cross-bars that extend across the seat from end to end, these parts being old and common.

4 represents the cushion of the seat, that rests upon a bracket 5 at each end of the seat, the brackets having prongs 6, that fit up into the bottom of the cushion and hold the latter on the brackets. The brackets are held to the end pieces 1 by means of clips 7, bolted to the end pieces at 8, and having journal projections 9, that enter holes 10 in the brackets. The brackets are thus permitted to tilt on the projections 9, and do so tilt as the back of the seat is reversed, so as to cause the cushion to assume the proper inclination with relation to the back whichever position the back may be in. The shape of the clips 7 is shown in Fig. V.

11 represents the back of the seat, which is connected by arms 12 to the brackets 5. The manner of connecting the arms to the back is illustrated in Fig. VII, the arms having perforations fitting over studs 13, formed on the end pieces 14 of the back, to which they are held by screws 15. As the back is reversed the arms turn on the studs 13. The inner ends of the arms are formed with inwardly-extending projections 16, that fit in openings 17, made in the brackets 5, one on each side of the hole 10, as seen in Fig. IV. The inner ends of the arms fit between the brackets and the end pieces 1 of the car-seat, as shown in Fig. II. The projections 16 have non-circular sockets 18 to receive bars 19, that extend across the seat, one end of the bars being held in the projections 16 on one side of the seat and the other end of the bars being held in like projections of the arms at the other end of the seat. The arms 12 on one end of the seat are thus connected to the arms 12 on the other end of the seat, so that the two will move in unison when the back is reversed, the projections 16 of course turning in the openings 17 as the back is reversed from side to side of the seat. Pivoted to each end piece 1 of the seat is a pair of levers 20, the outer ends of which are adapted to bear against the inclined faces 21 of the brackets 5, these ends of the levers having horizontal extensions 22, (see Fig. VI,) that extend beneath the brackets.

23 represents cams carried by the arms 12 or by the extensions 16 of the arms and which bear against the upper curved faces of the levers 20. As the back is reversed the cams 23 move out and in on their respective levers, thus tilting the levers, which in turn tilt the brackets and the cushion carried thereby, so that the latter is given the proper incline with relation to the back, whichever position the latter is in. As the back reaches one of its positions the projection 22 of the lever on that side of the seat comes against the cross-bar 3 and arrests the movement of the parts, and when the back is reversed the projection 22 on the other lever comes against its cross-bar 3 and arrests the movement of the parts. The cams have a constant bearing on their respective levers as the back is shifted from side to side of the seat, so that



the projections 22 are kept constantly bearing against the under sides of the brackets 5, thus providing against any loose movement of the brackets and the cushion carried by the brackets.

I claim as my invention—

1. In a car-seat, the combination of the end pieces of the frame of the seat, cushion-supporting brackets pivoted to the end pieces, a back, arms connecting the back to the brackets respectively on opposite sides of the pivots of the latter, cams carried by the arms, and levers pivoted to the end pieces; said cams bearing against said levers and said levers bearing against said brackets, substantially as set forth.

2. In a car-seat, the combination of the end pieces of the frame of the seat, brackets pivoted to the end pieces and adapted to support the cushion, a back, a pair of arms at each end of the seat having pivotal connection with the back and the inner ends of which have pivotal connection with the brackets on each side of the pivot of the latter, bars connecting the inner ends of the arms on one end of the seat to the inner ends of the arms at the other end of the seat, cams carried by the arms, and levers pivoted to the ends of the seat beneath said brackets; said cams bearing against said levers and said levers bearing against said brackets; substantially as set forth.

3. In a car-seat, the combination of the end pieces of the frame of the seat, brackets pivoted to the ends of the seat and provided with openings on each side of their pivots, a back,

a pair of arms at each end of the seat pivotally connected at their outer ends to the back and having hollow projections at their inner ends that fit in the openings formed in the brackets, bars fitting in said projections and extending across the seat, cams carried by the arms, and levers pivoted to the ends of the seat beneath the brackets; said cams being adapted to bear against said levers, and said levers bearing against said brackets, substantially as set forth.

4. In a car-seat, the combination of end pieces, cushion-supporting brackets pivotally connected to the end pieces, levers pivoted to the end pieces beneath the brackets, a back, and arms pivoted to the back and to the bracket and having means for engagement with said levers whereby the latter is moved as the back is reversed, substantially as set forth.

5. In a car-seat, the combination of end pieces, cushion-supporting brackets having inclined bottoms, clips secured to the end pieces and on which said brackets have pivotal bearing, a back, a pair of arms, at each end of the seat, pivoted to the back and having pivotal connection with the brackets, cams carried by the arms, and levers pivoted to the end pieces and against which said cams bear; said levers having horizontal projections engaging the inclined bottom of said brackets, substantially as set forth.

FRANK G. KOEHLER.

In presence of—

E. S. KNIGHT,  
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