

No. 758,917.

PATENTED MAY 3, 1904.

J. M. & F. HOLLAND.
SHEET METAL BED RISER.
APPLICATION FILED OCT. 21, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1.

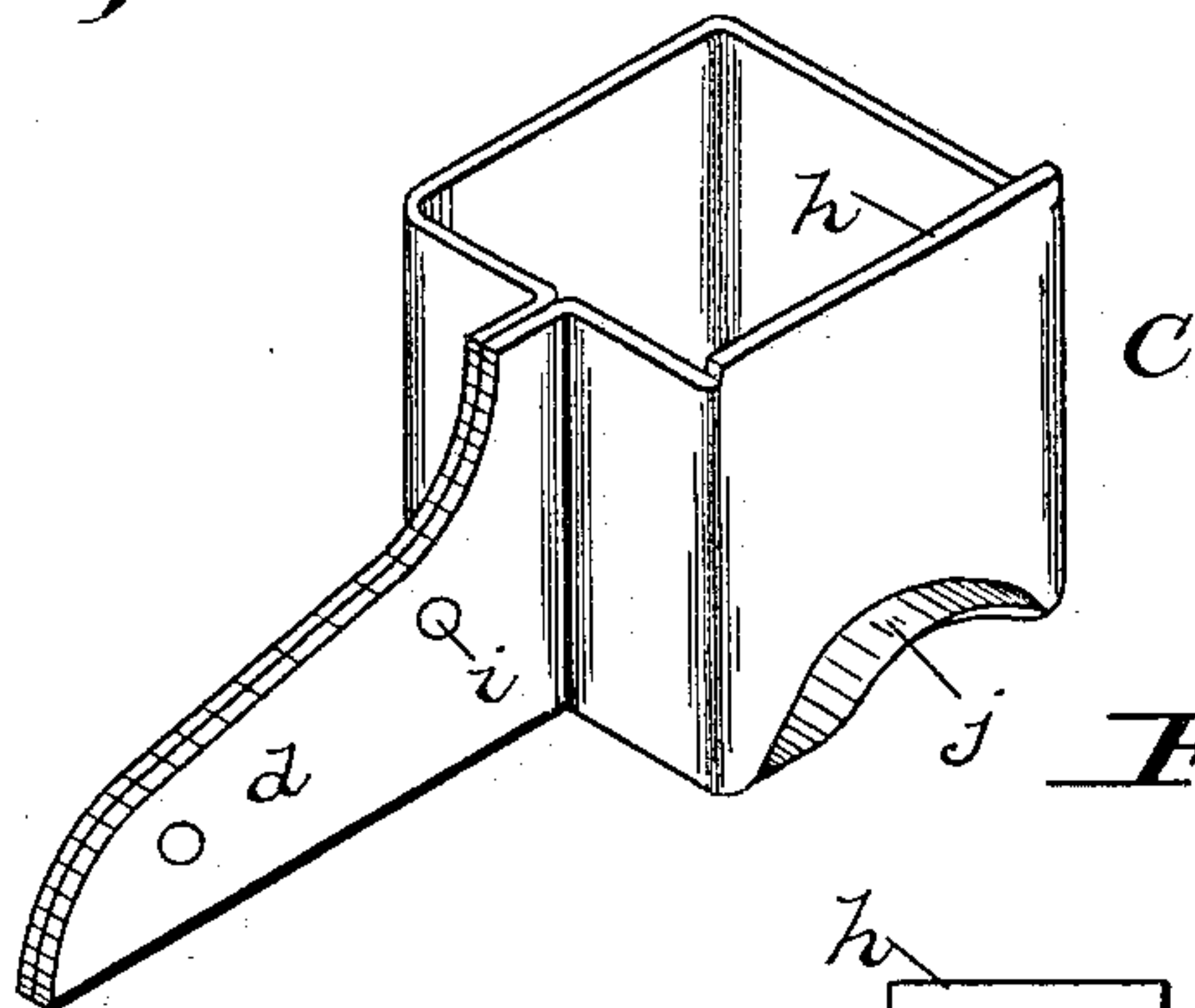


Fig. 2.

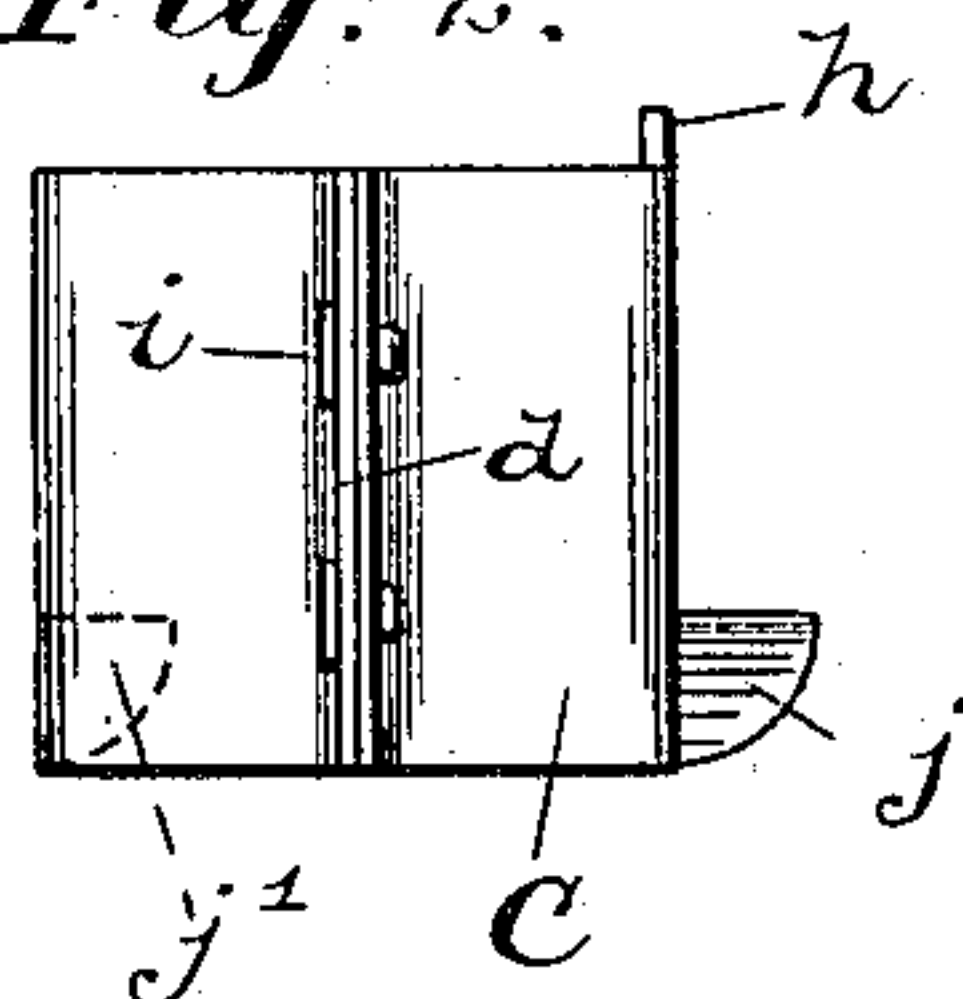


Fig. 3.

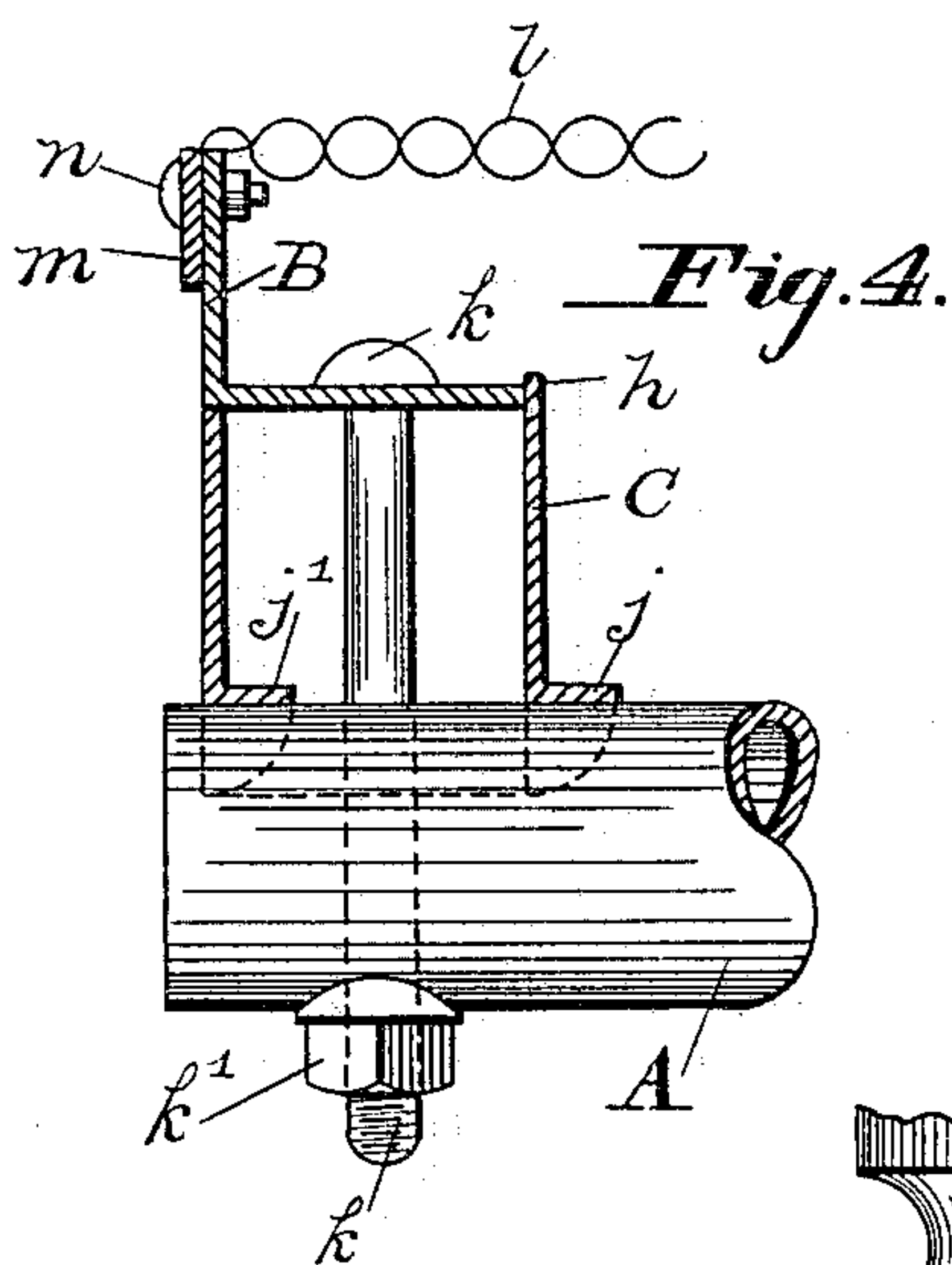
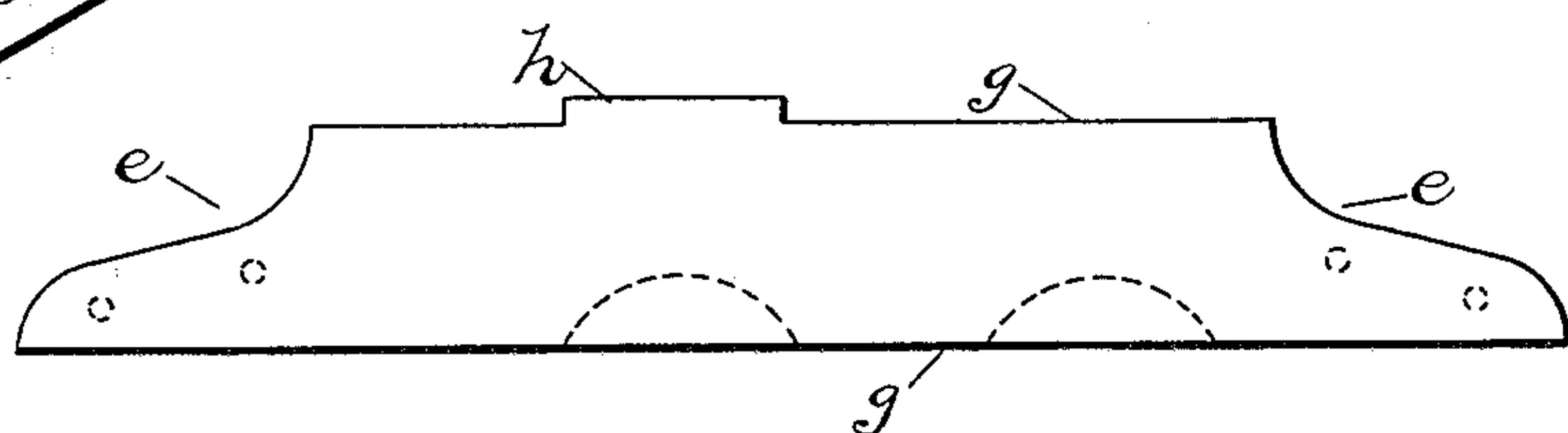
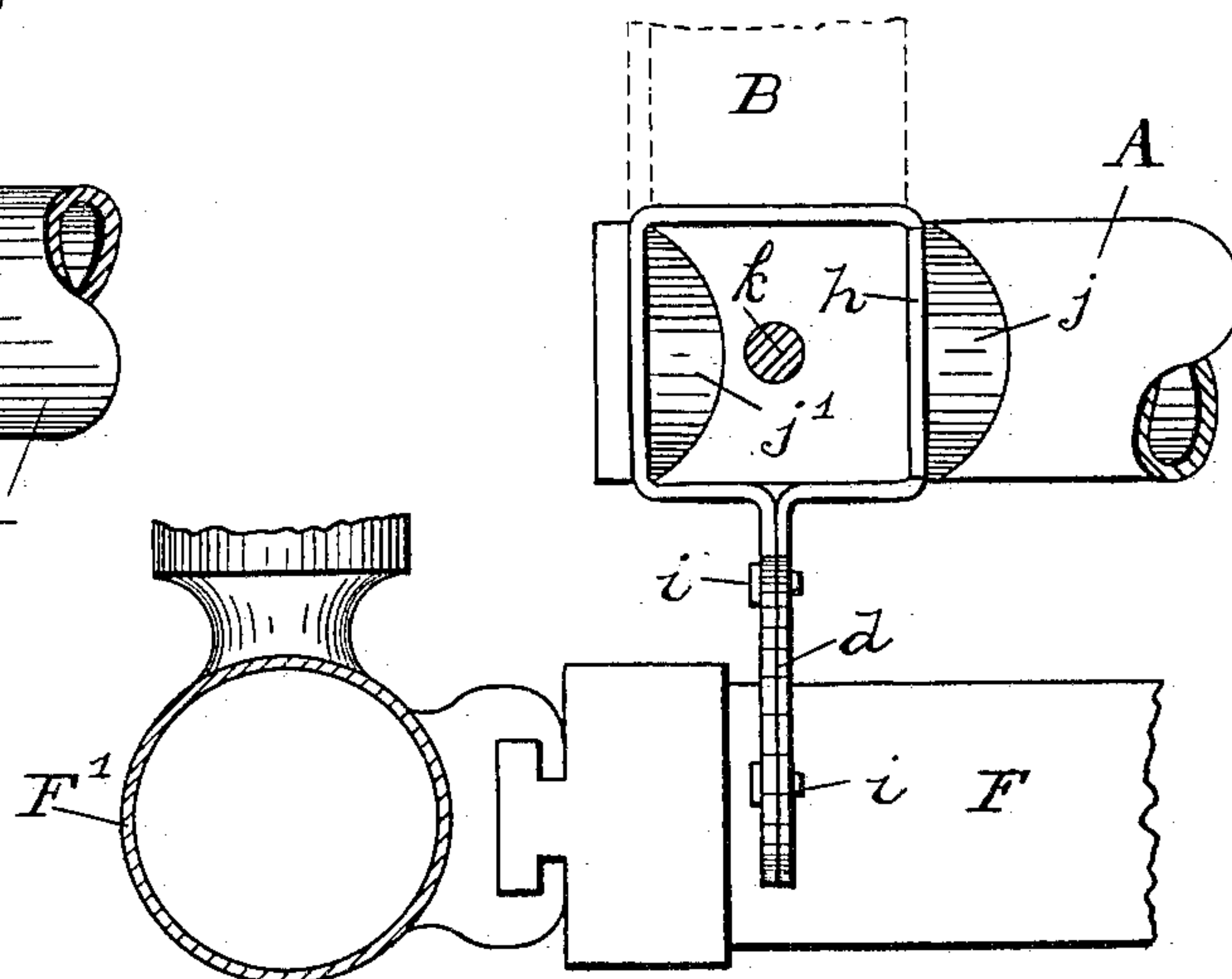


Fig. 5.



Witnesses.

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NO MODEL.

2 SHEETS—SHEET 2.

Fig. 6.

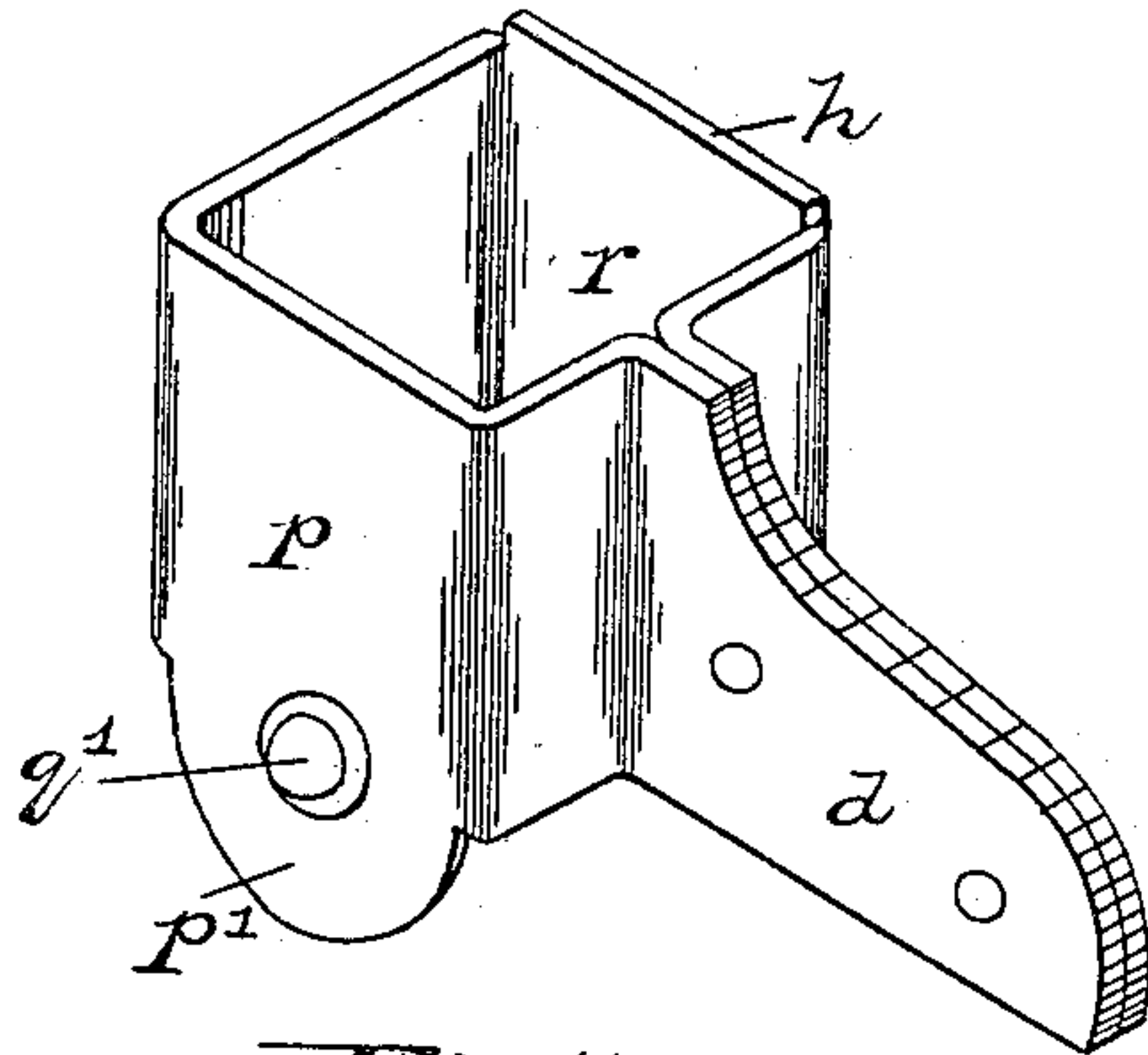


Fig. 7.

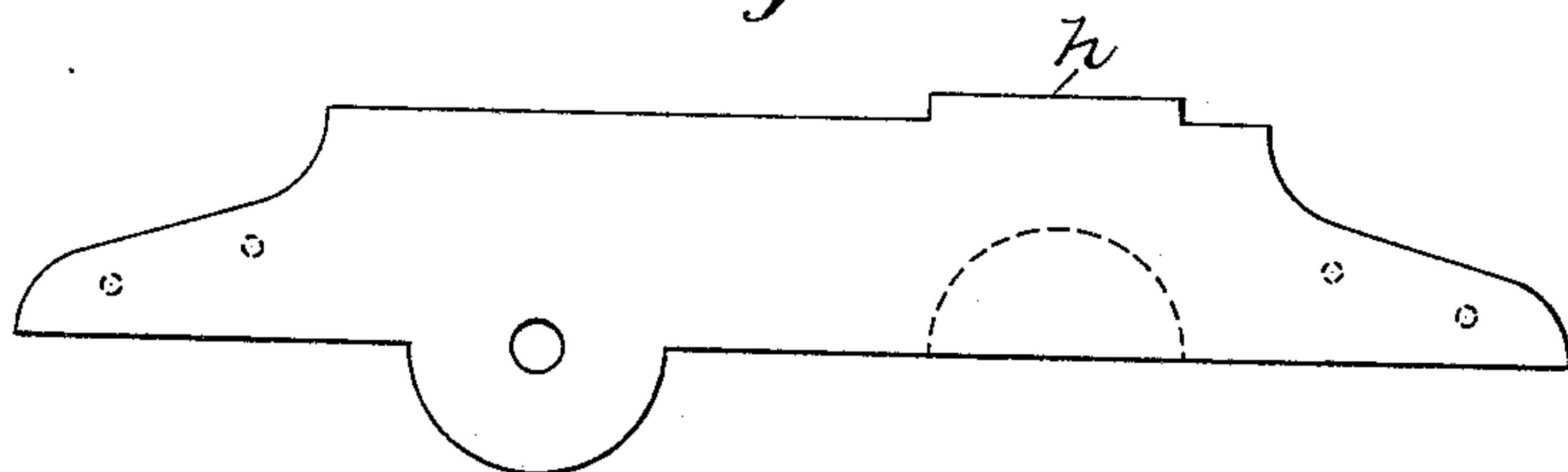


Fig. 8.

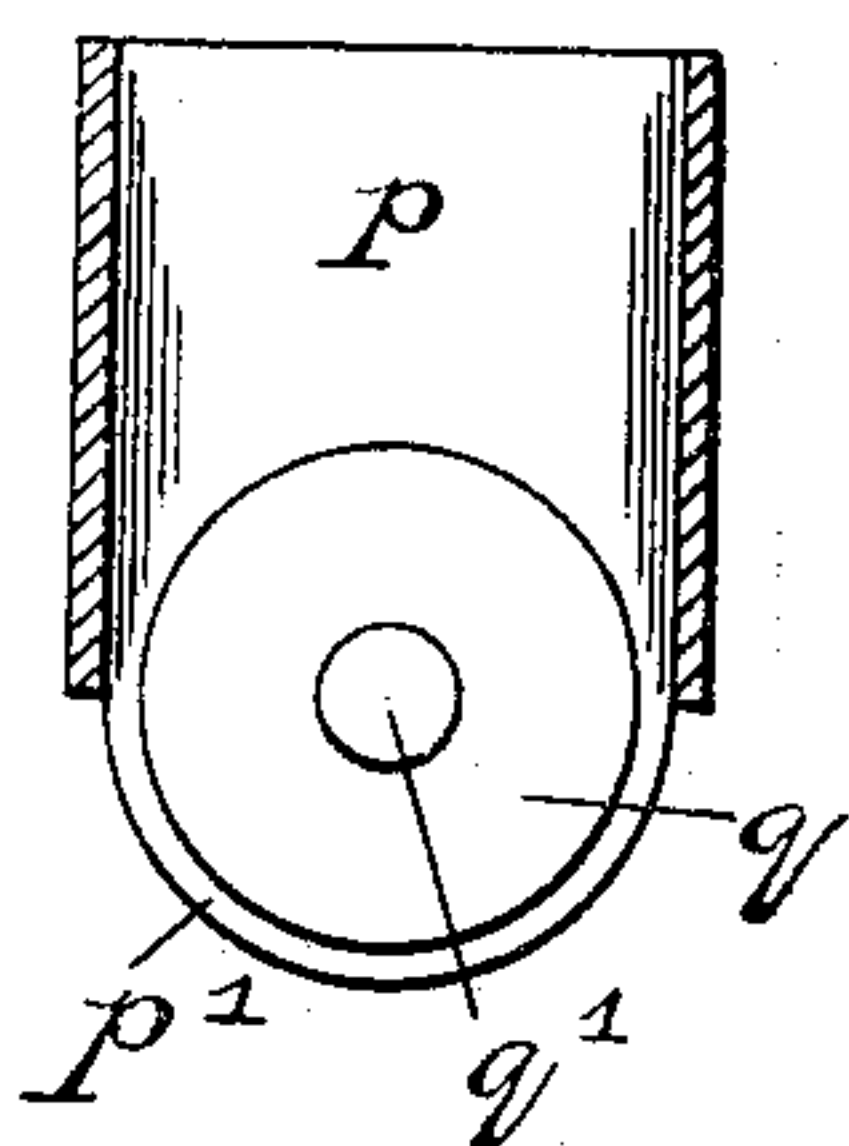


Fig. 9.

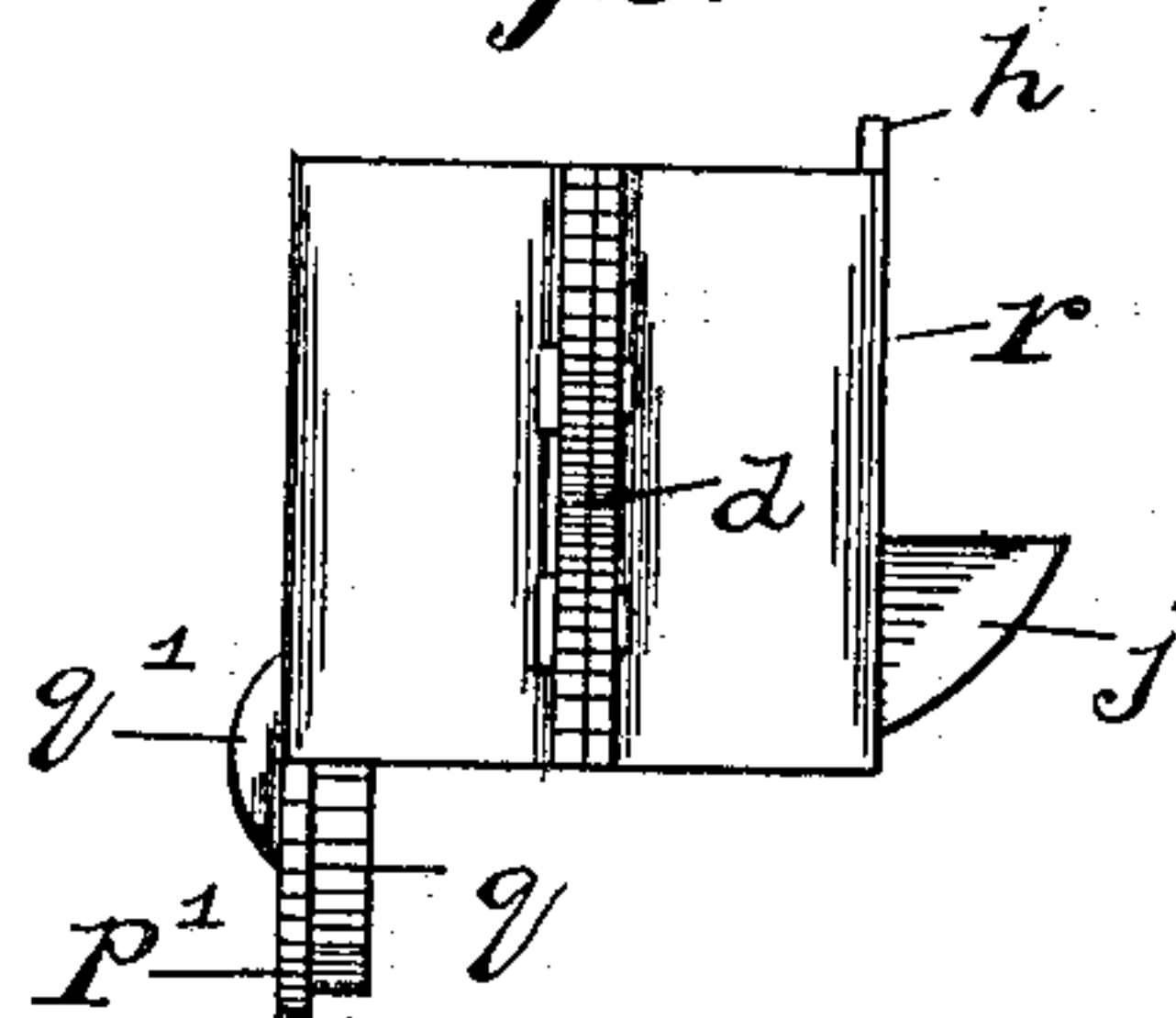
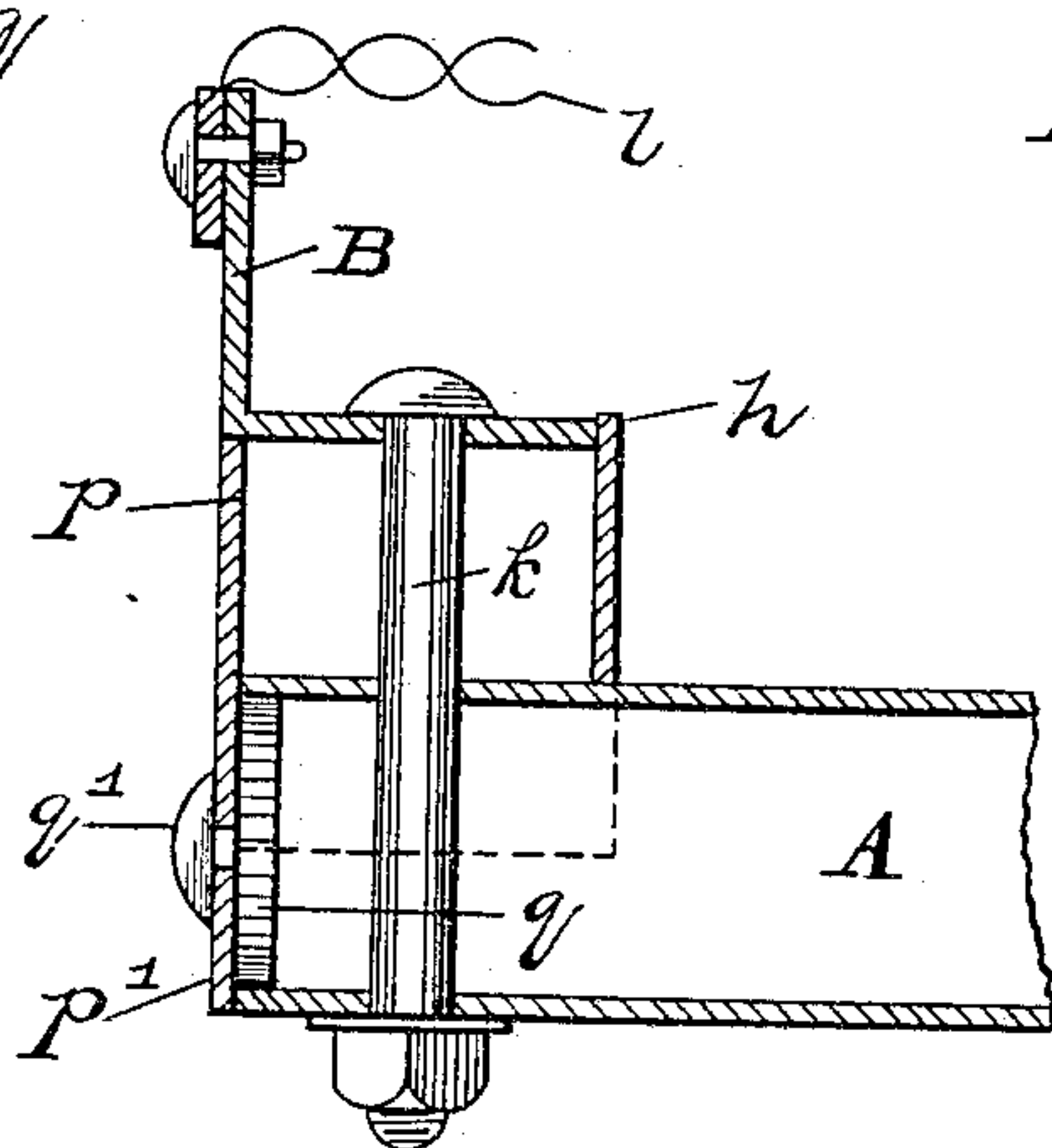


Fig. 10.



Witnesses.

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UNITED STATES PATENT OFFICE.

JAMES MONROE HOLLAND AND FRANKLIN HOLLAND, OF BALTIMORE,
MARYLAND.

SHEET-METAL BED-RISER.

SPECIFICATION forming part of Letters Patent No. 758,917, dated May 3, 1904.

Application filed October 21, 1903. Serial No. 177,891. (No model.)

To all whom it may concern:

Be it known that we, JAMES MONROE HOLLAND and FRANKLIN HOLLAND, citizens of the United States, residing at Baltimore, State of Maryland, have invented certain new and useful Improvements in Sheet-Metal Bed-Risers, of which the following is a specification.

This invention relates to a bed-riser for the corners of woven-wire mattresses or other stretched-fabric beds. Four of these bed-risers are usually employed in each bed, and each riser sets upon a tube, two of which constitute the longitudinal or side stretcher-bars of the woven-wire-mattress frame. A cross-bar, of angle-iron, comprises the end pieces of this mattress-frame, and such bar rests upon two of these bed-risers and is secured thereto. Each bed-riser of this type is provided with a laterally-projecting prong, which when the mattress-frame is in position upon the bedstead rests on the side bar of the bedstead, and thereby supports the mattress-frame. Heretofore this style of bed-riser has been made of cast metal, and it is found that owing to the brittleness of cast-iron the projecting prongs are sometimes broken off in the shipment of the goods, and when one of these risers is thus broken the entire woven-wire mattress and its frame is rendered practically worthless, because a new riser can be substituted only at the factory where the special machines are employed for stretching these wire mattresses. The desideratum, therefore, is a bed-riser of this type made of wrought iron or steel cut or stamped by dies from sheet metal.

Our invention consists of the novel construction of a sheet-metal bed-riser, as hereinafter described.

Referring to the drawings, Figure 1 is a perspective view of the improved bed-riser. Fig. 2 is a side elevation. Fig. 3 is a view, on a smaller scale, of a sheet-metal blank from which the bed-riser is made. Fig. 4 is a side view in elevation, showing the bed-riser in section and in its position between the longitudinal tube and the end bar. Fig. 5 is a top plan view showing the parts in their position as when the mattress is on a bedstead. The

parts shown comprise one corner of a mattress-frame and bedstead. Fig. 6 is a perspective view of the bed-riser, showing an additional feature. Fig. 7 is a view of a blank from which the riser shown in Fig. 7 is made. Fig. 8 is a vertical section through the riser, showing the disk. Fig. 9 is a side elevation of this form. In this instance the saddle-flange is shown. Fig. 10 is a side elevation showing this form of bed-riser in section and connected with the side tube and the angle-bar.

The form of device shown in Figs. 1 to 5, inclusive, will first be described. The letter A designates one of the side bars or stretchers of an ordinary woven-wire-mattress frame. This bar is an iron tube. The letter B designates the angle-iron cross-bar, of which two are used in these frames, one at the head end and the other at the foot end. The riser C (shown in perspective in Fig. 1) is seated on the said tube A and supports the said angle-iron cross-bar B in an elevated position above the tube. The prong *d* of the riser projects laterally at one side and rests upon the side rail F of the bedstead, as in Fig. 4, and thereby supports one corner of the mattress-frame. The letter F' denotes the corner-post of the bedstead. The improvement consists in first forming or cutting out the blank of sheet metal shown in Fig. 3. The two ends of this blank have similar ogee curves *e*, and the two edges *g* are parallel; but one end is shorter than the other and has an offsetting flange *h*, which extends about or nearly one-fourth of the length of the blank. The blank shown is then bent to form a square or four-sided pedestal or riser C, and the offsetting flange *h* now has position at one of these sides and makes this side higher than the other three sides. The two ends having the ogee curves are brought flat together in close contact and secured together by rivets *i* and constitute the prong *d*, which projects laterally from one side of the pedestal or riser C. It is not to be understood that the prong of two thicknesses of sheet metal must project from the middle of one of the four sides, as we contemplate variations from this form. The ogee curve constitutes the top edge of the prong,

and the bottom edge is straight. Two saddle-flanges $j j'$ are formed at the base of the riser to fit on the rounded surface of the side tube A, and thereby afford a stable bearing or seat. These saddle or curved flanges $j j'$ are formed by forcing the sheet metal at the lower edge of two opposite sides of the square riser to take a lateral or right-angled position, as plainly shown in Figs. 4 and 5. The angle-iron cross-bar B sets upon the riser C, as shown in Fig. 4 and as indicated by broken lines in Fig. 5. This cross-bar in practice extends entirely across the mattress-frame at right angles to the two side tubes A, each end of the bar being seated on a riser. A bolt k passes through one side of the angle-bar B, down through the square riser, and transversely through the said tube A and is secured by a nut k' on the under side of the tube, as seen in Fig. 4. It will now be seen that the construction of the bent sheet-metal riser C, with two curved or saddle-shaped flanges $j j'$ at the lower edge, enables the riser to be clamped very tightly to the side tube A without any injury to said tube or without liability of crushing it or indenting it, as often is the case with other devices. The woven wire l is secured in the usual way to the upright flange of the angle-bar B by a plate m and bolt n , and it will be seen the flange h at the top and one side of the riser prevents the angle-bar B from movement when drawn by the stretched woven wire.

The form shown in Figs. 6 to 10, inclusive, will now be described. This form of bed-riser has all the essential features of construction of and is formed into shape in the same manner as the riser shown in the first five figures of the accompanying drawings and in addition to that desired construction has a feature which serves to close the end of the side-bar tube to exclude dirt and make it more sightly and also by filling the end of the tube effectually prevents the end from being mashed or partly flattened. The added feature referred to consists of making one wall p of the angular pedestal or riser longer vertically than the others, and this increased length of one wall projects downward, as at p' , below the other walls, and when the riser is in position on the side tube of the mattress-frame this down-projecting part p' serves as a cap that closes the end of the side tube. This cap part of the riser is provided on its inner face with a

disk q , which is secured, preferably, by a rivet q' . The disk is of proper size to enter and snugly fit into the open end of the side tube A. The opposite wall r of the riser at its lower edge has a curved saddle-notch or opening that is adapted to fit on the rounded surface of the side tube A. The lateral flange j may be provided at this saddle-notch, as in Fig. 9, or it may be omitted, as in Fig. 10.

Bed-risers thus made of wrought sheet metal with a prong d of two thicknesses of metal will not be broken off during shipment or at other times and are therefore more durable and serviceable.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A wrought-sheet-metal bed-riser bent in the form of angular sides and having a prong formed by two thicknesses of metal in close contact and secured together, said prong projecting laterally from the riser.

2. A wrought-sheet-metal bed-riser bent in the form of angular sides and having at one or more of said sides a curved or saddle-shaped flange at the lower edge and provided with a prong formed by two thicknesses of metal in close contact and secured together, said prong projecting laterally from the riser.

3. A wrought-sheet-metal bed-riser bent in the form of angular sides and having a prong formed by two thicknesses of metal in close contact and secured together, said prong projecting laterally from the riser and the wall of one side of the riser projecting downward below the other sides to serve as a cap for closing the end of a tube.

4. The combination of a side tube of a mattress-frame; a sheet-metal bed-riser bent in the form of angular sides and having a prong projecting laterally from the riser and the wall of one side of the riser projecting downward below the other sides and closing the end of the said side tube and provided with a disk-shaped portion fitting snugly into the end of said tube.

In testimony whereof we affix our signatures in the presence of two witnesses.

JAMES MONROE HOLLAND,
FRANKLIN HOLLAND.

Witnesses:

CHAS. B. MANN,
G. FERDINAND VOGT.