

(No Model.)

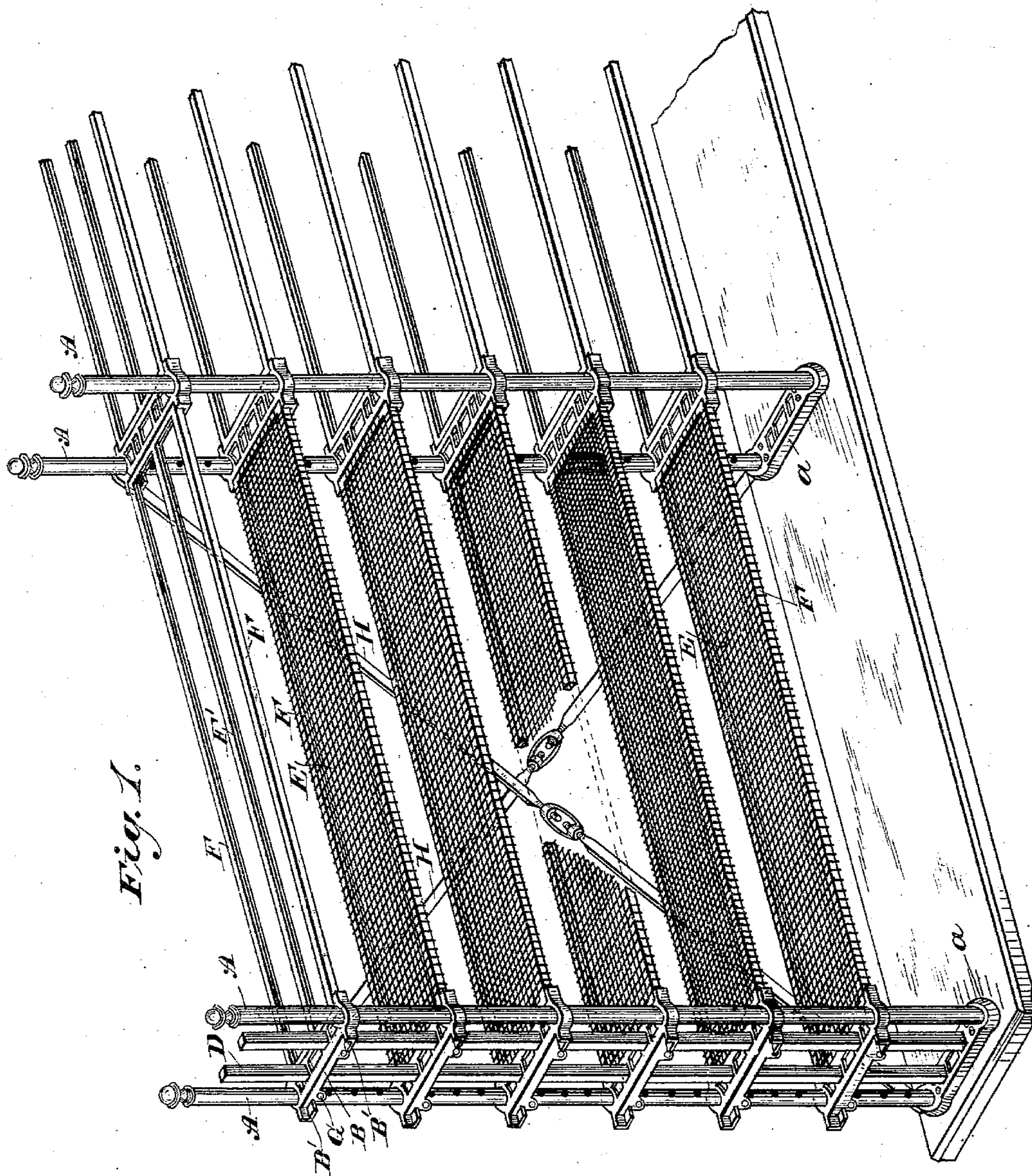
2 Sheets—Sheet 1.

H. T. REED.

SHELVING.

No. 327,592.

Patented Oct. 6, 1885.



Witnesses:
E. J. Walker
E. L. Keale

Inventor:
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(No Model.)

2 Sheets—Sheet 2.

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Fig. 8.

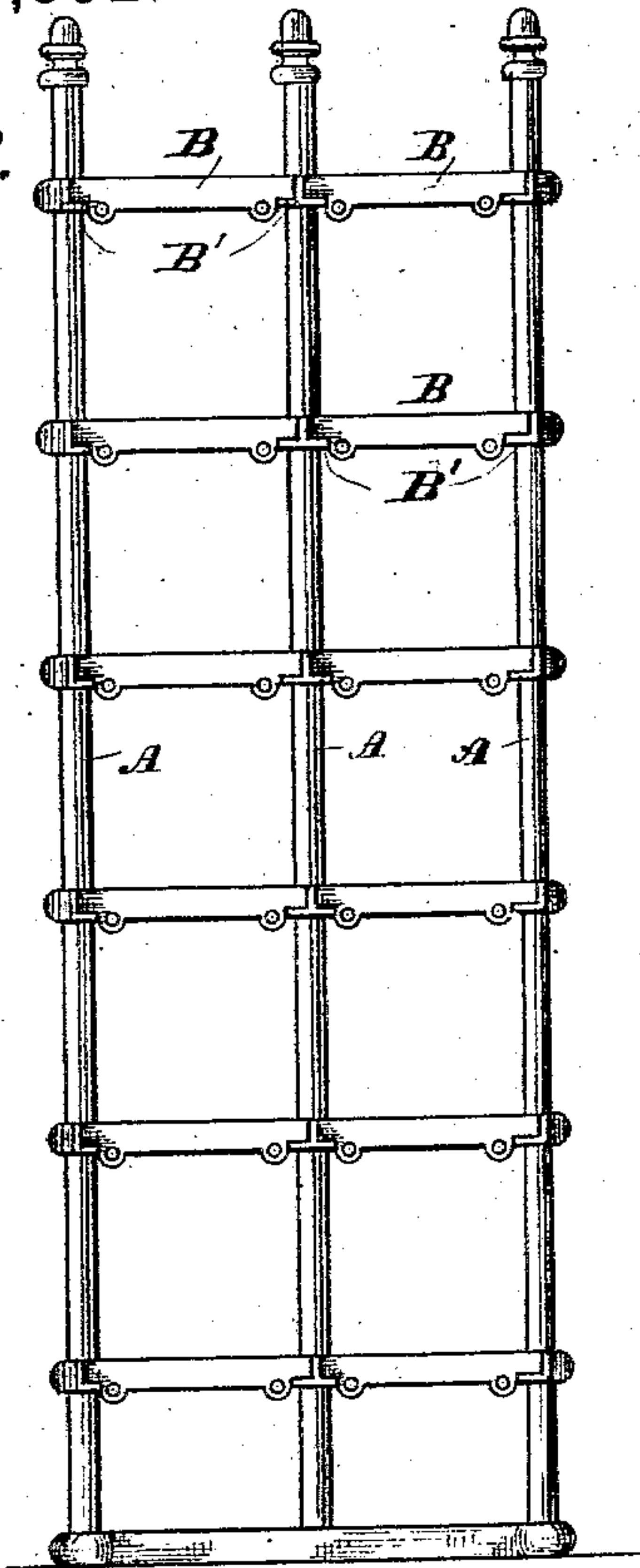


Fig. 7.

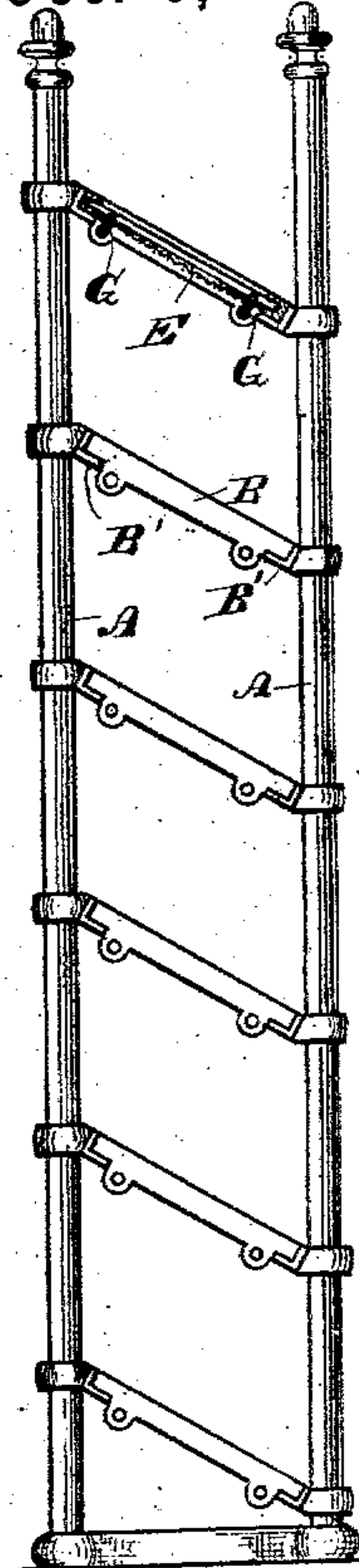


Fig. 5.



Fig. 6.

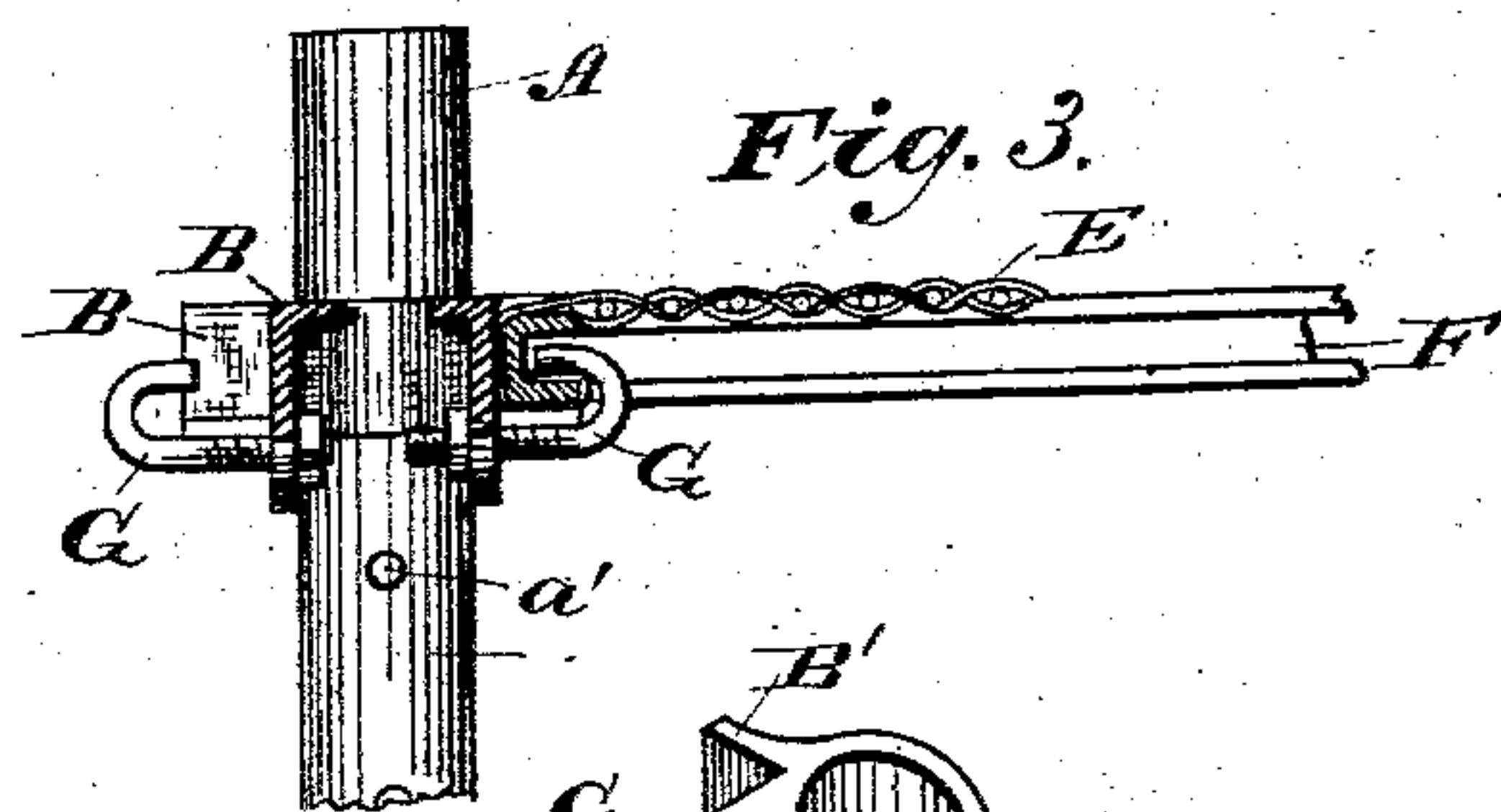
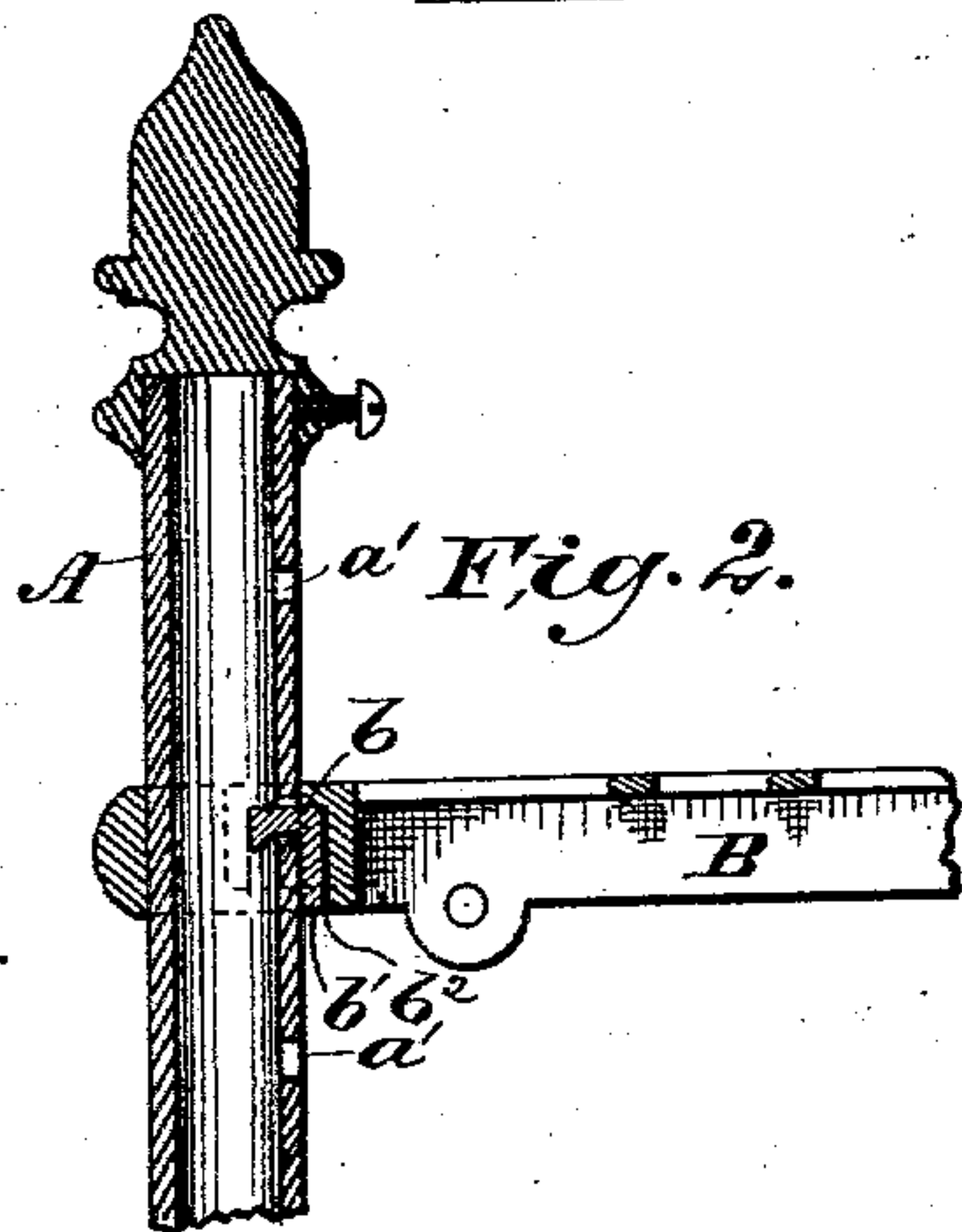
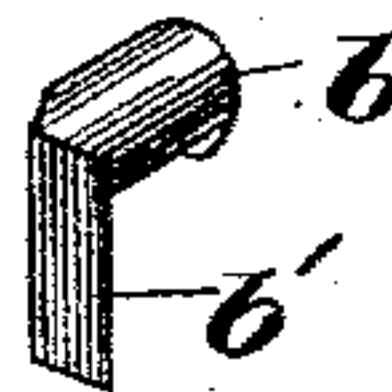


Fig. 4.

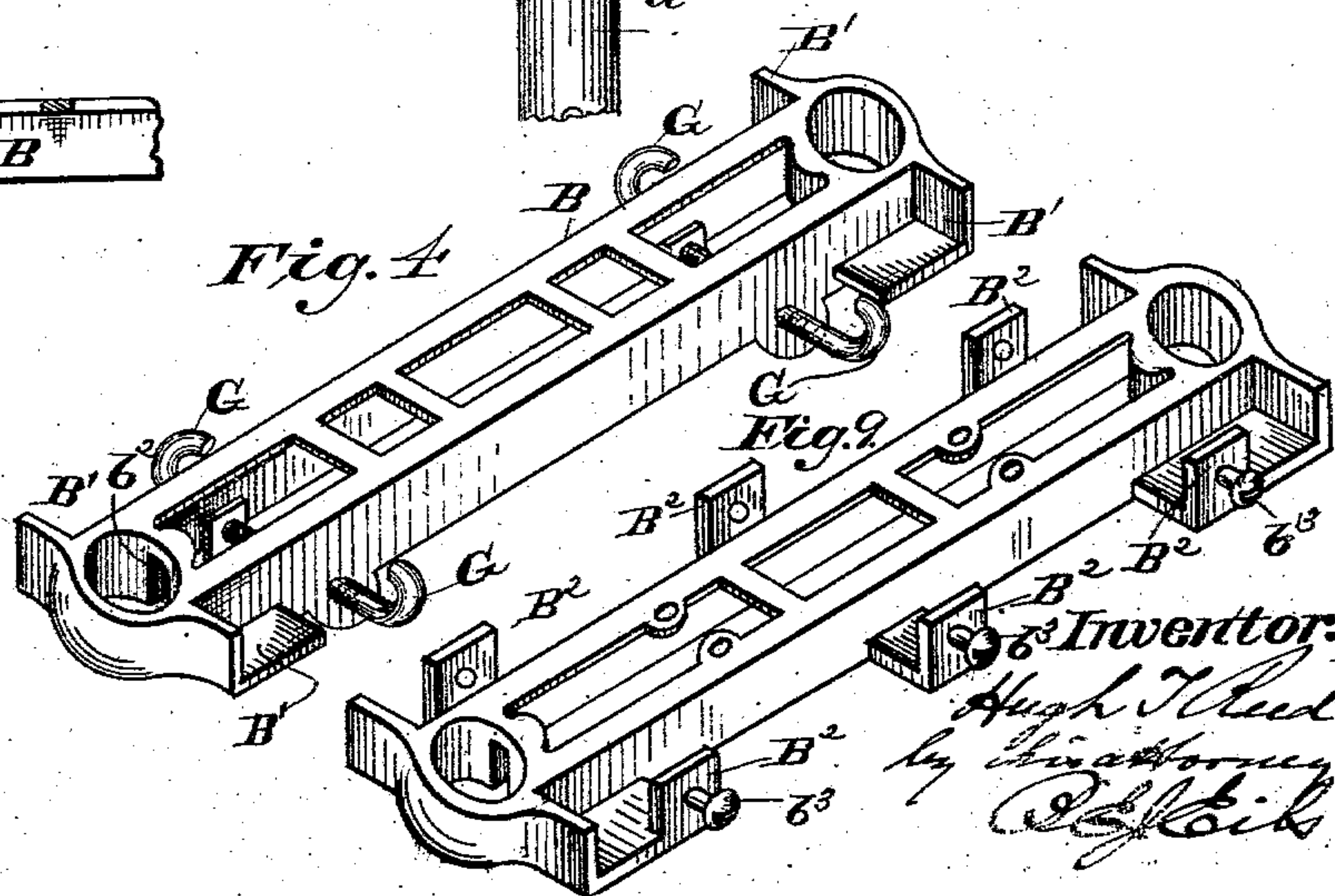


Fig. 9.

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UNITED STATES PATENT OFFICE.

HUGH T. REED, OF RICHMOND, INDIANA.

SHELVING.

SPECIFICATION forming part of Letters Patent No. 327,592, dated October 6, 1885.

Application filed March 30, 1885. Serial No. 160,632. (No model.)

To all whom it may concern:

Be it known that I, HUGH T. REED, a citizen of the United States, residing at Richmond, in the county of Wayne and State of Indiana, have invented certain new and useful Improvements in Shelving; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention consists of metallic knock-down shelving adapted for general purposes. The novel features of this shelving are specifically pointed out in the claims at the close of this specification, and the construction and combination of the different parts are clearly set forth in the following detailed description, aided by the annexed drawings, so that any person skilled in the art can make and use the invention from the information here given.

Figure 1 is a perspective view of a panel of my metallic knockdown shelving, also indicating the mode of joining to it a second panel. Figs. 2 to 6 are detail views of parts drawn on a larger scale than Fig. 1. Fig. 7 illustrates a modification in which the shelves are inclined. Fig. 8 illustrates, in end elevation, a duplex form of my shelving. Fig. 9 illustrates a modified form of shelf support or cleat.

The same letters of reference indicate identical parts in all the figures.

My knockdown metallic shelving is composed, in the main, of corner standards or pillars, A, preferably tubular, adjustable shelf supports or cleats B, and shelves. The pillars A may be set in suitably-formed base-pieces, a, adapted to be screwed or bolted to the floor, if required. The cleats B are slipped on the pillars, and are supported thereon by pins b, applied as clearly shown in Fig. 6. The pillars are provided with vertical series of holes a' on the sides which face each other, for the reception of these pins b, which, in case the pillars are hollow, as in the illustration, are constructed with heads b'. The cleats are constructed with a socket, b², at each end, open from the under side of the cleat to admit the projecting portion of the supporting-pins, which are thus confined by the cleat so that they cannot be displaced accidentally. To adjust the height of a shelf, the cleats are lifted

so as to expose the supporting-pins, which are then withdrawn and shifted to such other holes in the pillars as will place the shelf at the desired elevation. The cleats are cast skeleton bars of substantially rectangular form, each corner being constructed with a laterally-projecting angular flange, B', the horizontal portion of which is designed to support one corner of a shelf, while the vertical portion prevents lateral displacement of the shelf. At each end a hole is formed for the reception of a pillar, and intermediate between these end holes are several other holes, adapted for the reception of upright bars D, in case such bars are required to bridge the spaces between the shelves at their ends, as shown in Fig. 1. It is obvious that where a piece of shelving composed of a single panel only is required the two angular flanges B' at one side of the cleats may be omitted; but I prefer to provide such a flange at each of the four corners in all cases, so that additional panels may be added at any time. The shelves consist of a wire-cloth, E, stretched on stiff frames F, adapted to rest at the corners in the angular flanges B' of the cleats B. The wire-cloth may be stretched and secured to a suitable frame in any known manner; but in order to provide a light and yet rigid frame, and a convenient and secure mode of securing the wire-cloth thereto, I have contrived the following novel construction: The frame is made of channel-iron, around which the strands of the wire-cloth are bent, in the manner shown in Fig. 3, so as to project into the channel. Where heavy articles are to be supported on the shelves the frames F may be constructed with an intermediate longitudinal rail, F', as shown in Fig. 1, top shelf-frame. The shelves may be secured to the cleats by hook-bolts G, applied as shown in Fig. 3. Where the shelving has no wall-support the panels may be braced by diagonal braces H, applied at the rear side, as shown in Fig. 1; but when erected as a permanency against a wall the rear pillars may be secured to such wall by the ordinary gas-fitters' hooks, and braces omitted.

It is common to place goods for show purposes on an incline on shelves. For such purposes I modify the construction of the cleats

of my shelving to the form shown in Fig. 7, and the shelves should then be placed upside down on the cleats, so as to present an upwardly-projecting ridge at the front side, to prevent the goods from sliding off.

Fig. 8 illustrates what I term "duplex shelving," in the erection of which cleats of the same construction as are used for single shelving may be employed, or else the cleats are made of the form shown in this figure, adapted to support two separate shelves.

Fig. 9 illustrates a modified form of cleat, cast with upright lugs B^2 , for engaging the ends of the shelf-frame, so that hook-bolts may be dispensed with. Set-screws b^3 may be applied to these lugs to fasten the shelves.

One of the advantages of my shelving is that it can be taken apart, packed in a small compass for transport, and readily erected by any person of ordinary intelligence.

It is obvious that some parts of my invention may be used without other parts. For instance, the metallic shelves may be replaced by wooden shelves. Instead of wire-cloth, perforated metal or other styles of screening may be used in the construction of the shelves, or they may be made of rods. In case doors are required for this shelving, suitable provision will be made for hanging them. The pins b may be merely a bent wire.

I claim as my invention—

1. The knockdown shelving, substantially as before described, composed of corner pillars, cleats slipped on said pillars, and independently-detachable shelves supported on the cleats, but otherwise independent of the pillars.

2. The combination, substantially as before set forth, of the corner pillars provided with vertical series of holes, projecting cleat-supporting pins inserted in said holes, and the shelf-sustaining cleats which are slipped on the pillars and have sockets to receive and cover the supporting-pins.

3. The metallic shelf composed of wire-cloth or its equivalent stretched on a frame of channel-iron, the strands of the wire-cloth being bent around said frame and projecting into the channel thereof, substantially as before set forth.

4. The combination, substantially as before set forth, of the corner pillars, the metallic shelf, and the shelf-supporting cleats provided with hooks or lugs for hooking onto the ends of the shelf.

In testimony whereof I affix my signature in presence of two witnesses.

HUGH T. REED.

Witnesses:

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E. T. WALKER.