

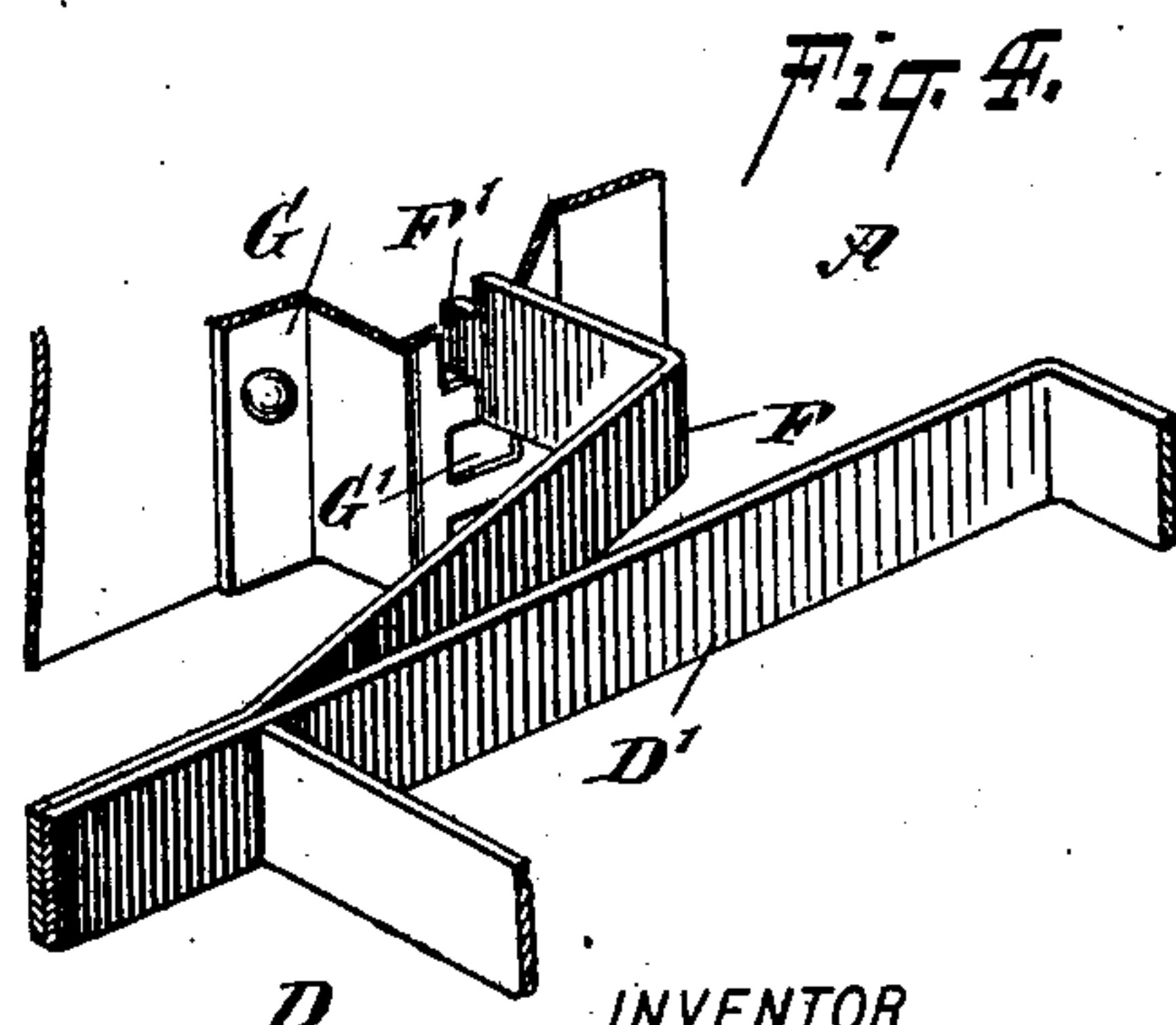
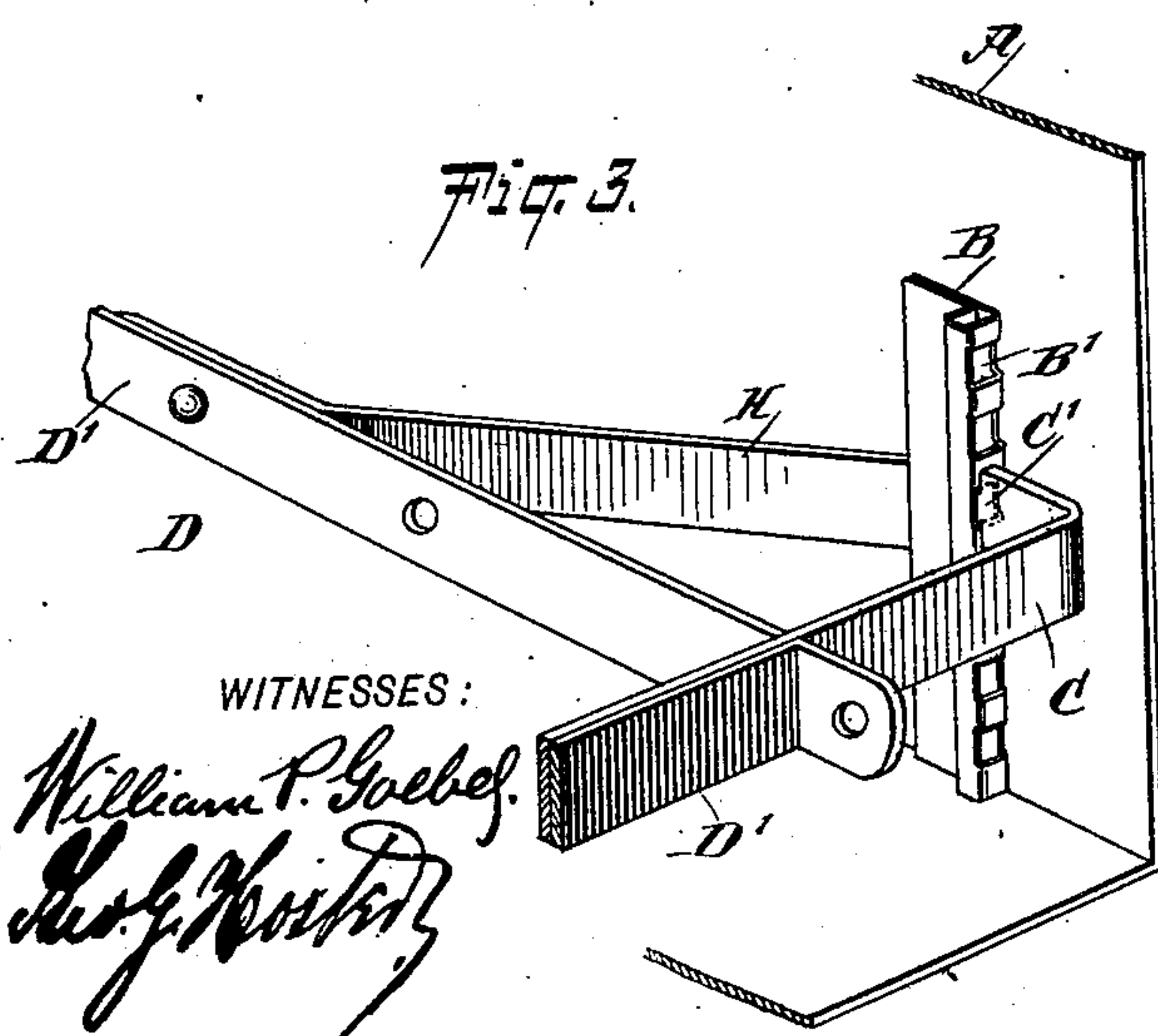
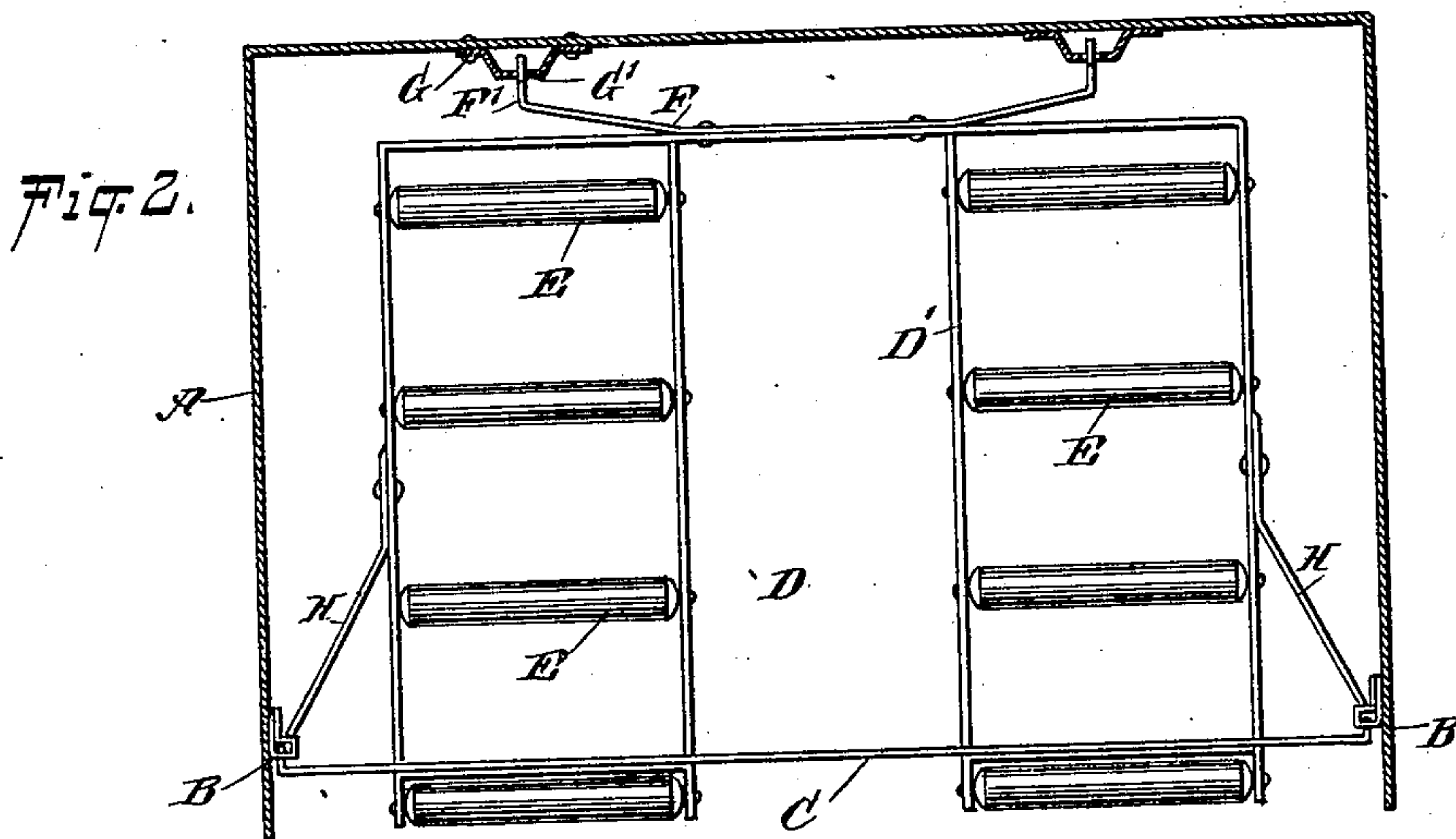
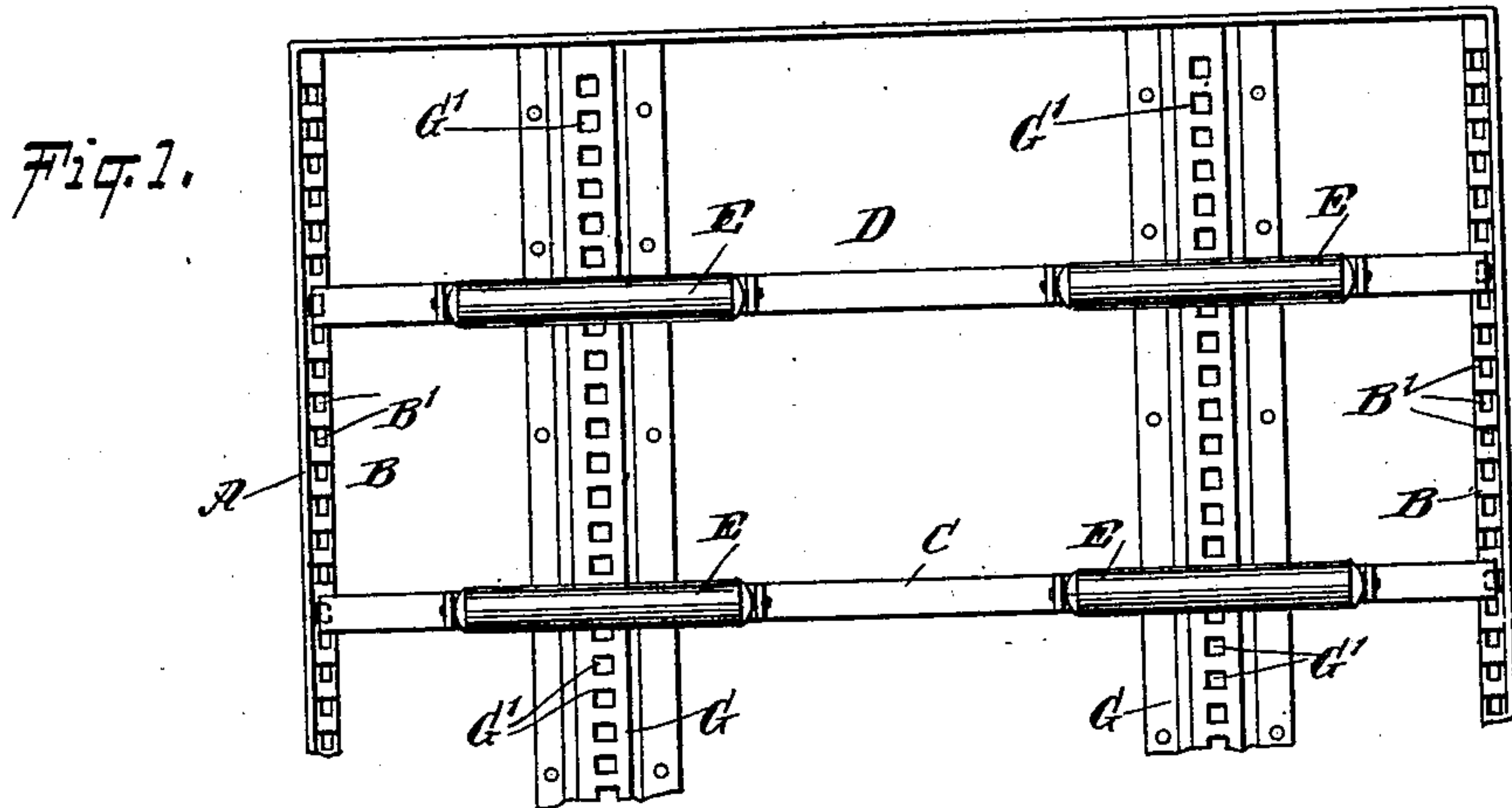
No. 677,624

Patented July 2, 1901.

D. A. BECKWITH.
ADJUSTABLE SHELF AND SUPPORT THEREFOR.

(Application filed Mar. 28, 1900.)

(No Model.)



WITNESSES:

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ADJUSTABLE SHELF AND SUPPORT THEREFOR.

SPECIFICATION forming part of Letters Patent No. 677,624, dated July 2, 1901.

Application filed March 28, 1900. Serial No. 10,547. (No model.)

To all whom it may concern:

Be it known that I, DEAN A. BECKWITH, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county of New York and State of New York, have invented a new and useful Improvement in Adjustable Shelves and Supports Therefor, of which the following is a full, clear, and exact description.

10 The invention relates to cabinets, bookcases, store-shelves, and like fixtures for supporting books, merchandise, and other articles; and the object is to provide a new and improved adjustable shelf and support there-
15 for which is simple and durable in construction, arranged to permit of placing a desired number of shelves in a cabinet, and to allow of readily adjusting the shelves to form spaces of the desired height, according to the
20 space needed for the books, merchandise, or other articles to be placed on the shelves.

The invention consists of novel features and parts and combinations of the same, as will be fully described hereinafter and then
25 pointed out in the claims.

A practical embodiment of my invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corre-
30 sponding parts in all the views.

Figure 1 is a front elevation of the improvement. Fig. 2 is a sectional plan view of the same. Fig. 3 is an enlarged sectional perspective view of part of the improvement,
35 and Fig. 4 is a similar view of another part of the improvement.

The improved device is provided with a receptacle A in the form of a cabinet, bookcase, or the like, and on the inner faces of the sides
40 of said receptacle and near the front ends thereof are arranged the uprights B, formed on their front faces with recesses or notches B', adapted to receive catches C', projecting rearwardly from the ends of a supporting-
45 bar C, attached to the front of a skeleton frame D, having rollers E for supporting heavy books or other articles, said rollers facilitating the placing in position or the removal of the books. Each shelf D is further
50 provided at its back with a supporting-bar F, formed at its free ends with rearwardly-extending catches F', adapted to engage aper-

tures, recesses, or notches G', formed in up-
rights G, fastened to the back of the receptacle A, as is plainly indicated in Figs. 2 and 4. 55

On the sides of the skeleton frame D' of each shelf D are secured braces H, each extending forwardly and outwardly and made of spring material, so that when a shelf is placed in position in the receptacle A said
60 braces finally snap in on the back edges of the uprights B to lock the shelf against removal in a forward direction. The rear supporting-bar F is also made of spring metal, and its catches F' are in horizontal alinement
65 with the catches C' and with corresponding catches, recesses, or apertures B' and G', so that when the operator slides a shelf into the receptacle in a horizontal position then the catches C' finally engage corresponding re-
70 cesses B' and the catches F' engage corresponding recesses G', and at the same time the braces H snap in upon the back edges of the uprights B. As the bar F and the braces H are
75 made of spring metal, it is evident that when the shelf is in position it is properly supported in a horizontal position, is locked against forward removal, and is securely held in po-
80 sition, owing to the resiliency of the bar F and the braces H, which latter also press the sides of the skeleton frame D in the receptacle A.

The device is very simple and durable in construction, is not liable to get out of order, and the shelves can be placed in the receptacle A the desired distance apart, as the
85 recesses B' and G' are arranged close together to allow minute adjustment of the shelves. Furthermore, each shelf is supported at four points within the casing to permit of carry-
90 ing considerable weight on the shelves without danger of said shelves breaking down, and when it is desired to remove a shelf the operator slightly pushes the shelf rearward against the tension of the spring-bar F to
95 move the free ends of the braces H out of engagement with the uprights B, and upon the operator now pressing said braces slightly inward toward each other to clear the sides of the uprights it is evident that the shelf can
100 now be pulled out, the catches C' and F' disengaging the recesses or notches B' and G', respectively.

The catches C' and F', as shown, are in the

form of reduced pins at the ends of the supporting-bars C and F to form shoulders on the latter to limit the inward movement of the pins by the shoulders abutting against the
5 faces of the uprights. The rear spring supporting-bar F is slightly compressed when the shelf is placed in position, so that the resiliency of the bar exerts a forward pressure on the shelf to hold the free ends of the braces
10 in firm contact with the back edges of the front uprights B.

I do not limit myself to the peculiar form of the uprights and catches on the shelves, as it is evident that other suitable devices may
15 be employed for the purpose without deviating from my invention, it being expressly understood that the receptacle may be omitted and the uprights secured to the walls, floors, and ceiling of a room or in any other manner
20 without departing from my invention.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. In a device of the class described, the
25 combination with a receptacle having uprights on its sides near the front and on its back, of a shelf provided at its front with catches for engaging the front uprights and at its rear with a spring-bar having catches
30 at its ends for engaging the rear uprights, and spring-braces secured to the shelf and adapted to snap behind the front uprights

when the shelf is placed in position, substantially as described.

2. In a device of the class described, the
35 combination with a receptacle having recessed or apertured uprights on its sides near the front, and recessed or apertured uprights on its back, of a shelf, a supporting-bar on the front of the shelf, said bar projecting be-
40 yond the ends of the shelf and having catches for engaging the recesses or apertures of the front uprights, a supporting-bar on the rear of the shelf, said bar being of spring material and having catches at its ends for engag-
45 ing the recesses or apertures of the rear uprights, and spring-braces secured to the shelf and extending forwardly and outwardly, said braces being adapted to snap behind the front uprights when the shelf is placed in position,
50 substantially as described.

3. A shelf, provided at its front with a side-wise-extending front supporting-bar formed at its ends with rearwardly-extending catches, a rear supporting spring-bar at the rear end
55 of the shelf and provided with rearwardly-extending catches at its ends, and spring locking-braces, each secured at one end on the side of the shelf and extending forward and outward, substantially as shown and described.
60

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Witnesses:

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