

No. 756,749.

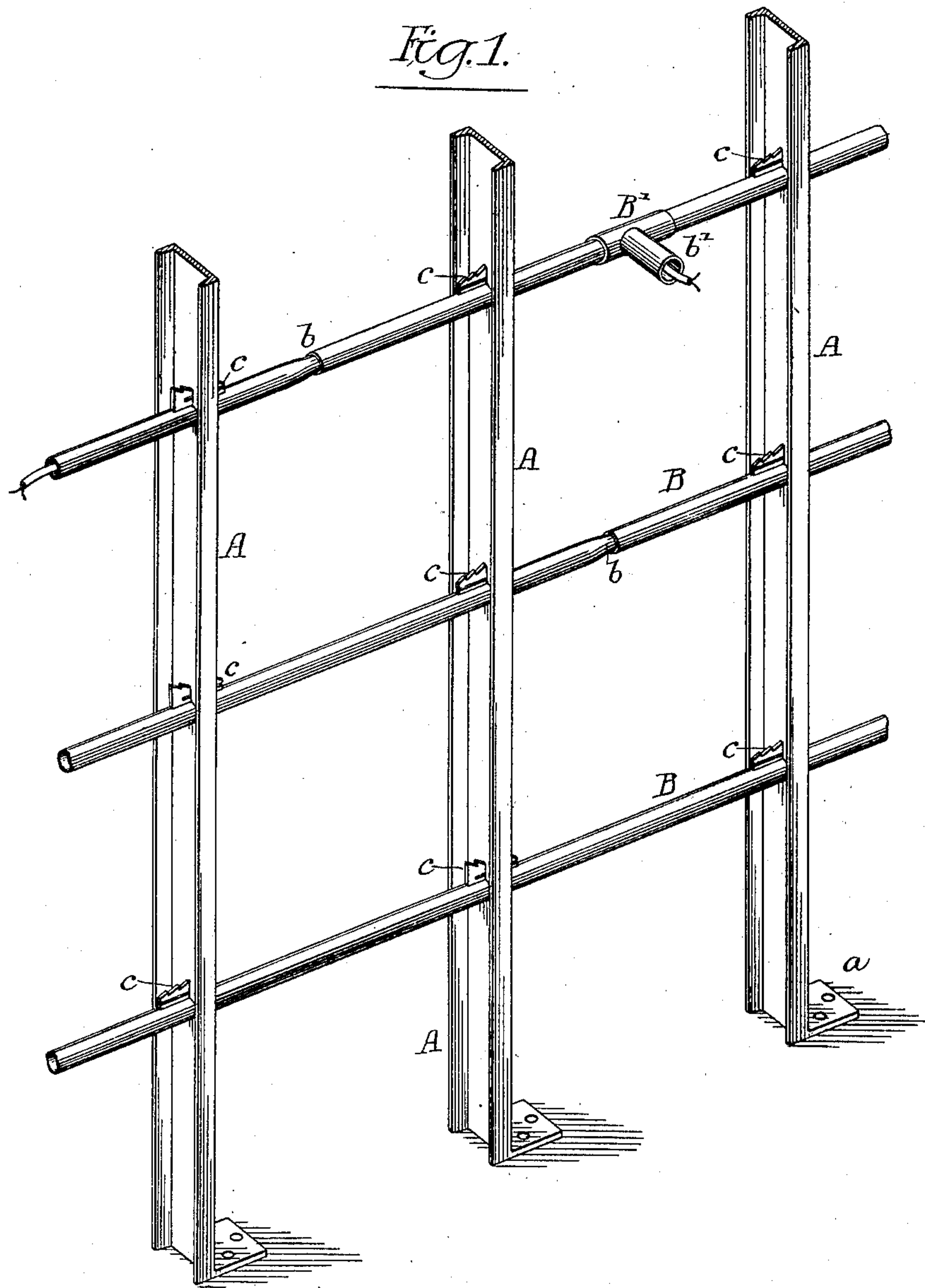
PATENTED APR. 5, 1904.

D. H. WATTS, JR.
PARTITION FOR BUILDINGS, &c.
APPLICATION FILED MAR. 20, 1902.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses:-

Frank L. Graham.
Wm. A. Barr.

Inventor:-

David H. Watts, Jr.,

by his Attorneys:

Harold J. Brown

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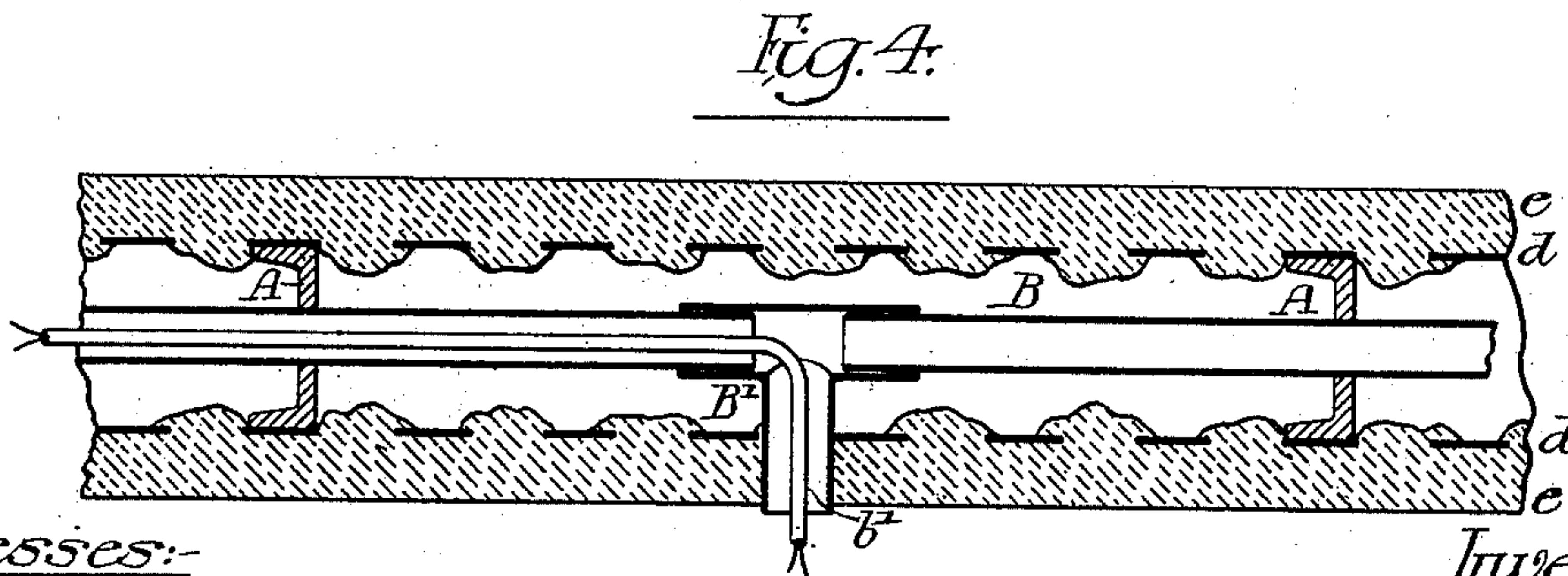
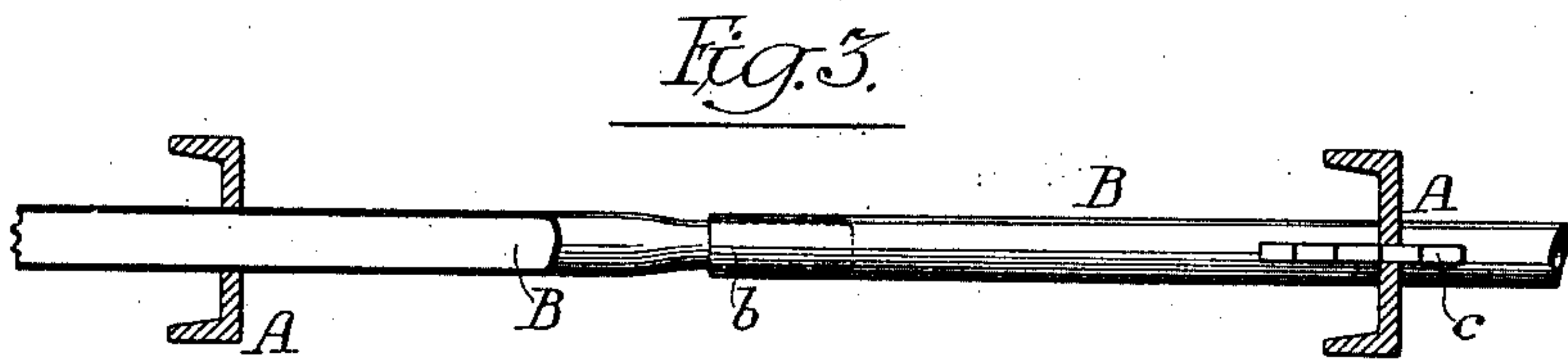
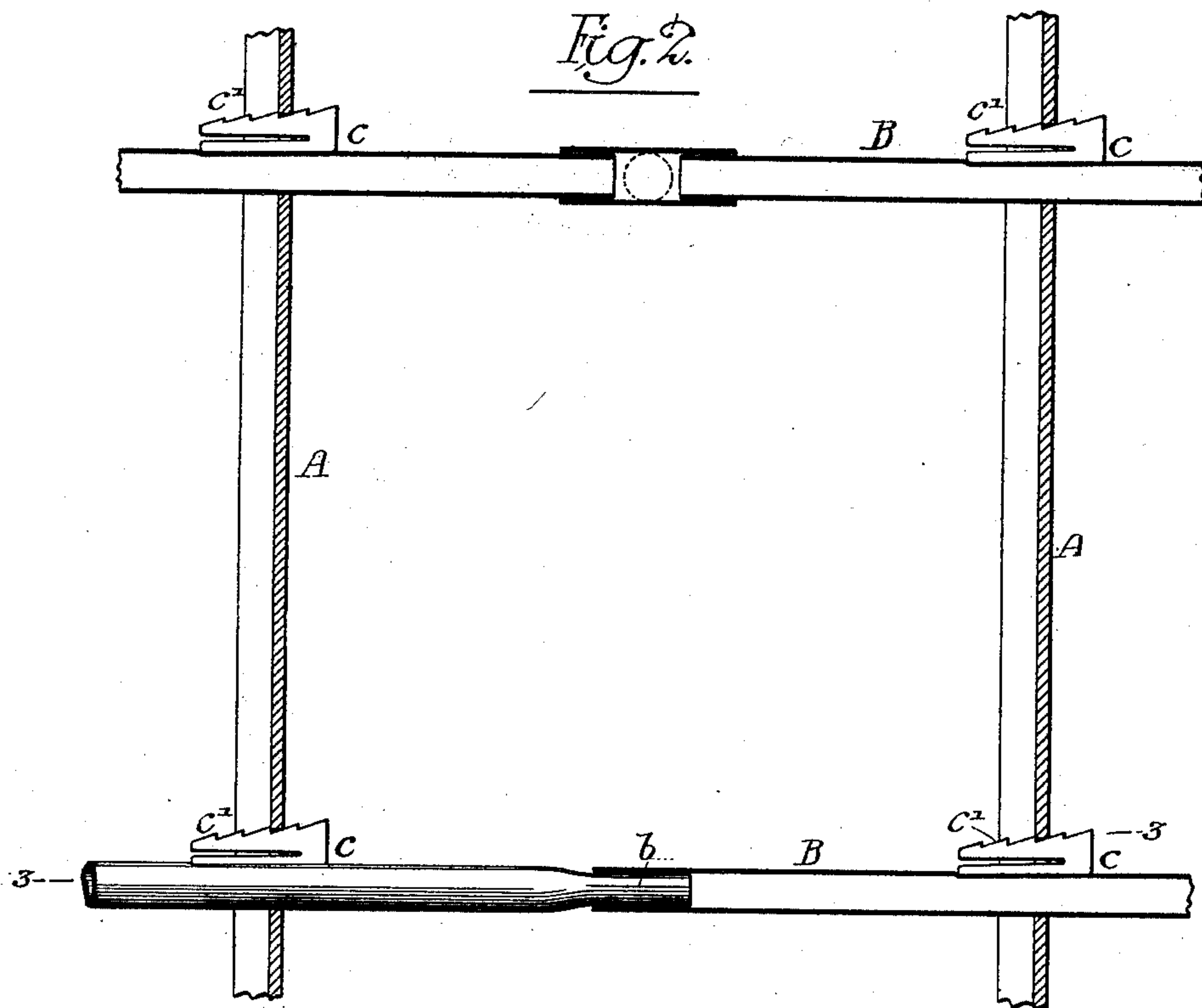
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APPLICATION FILED MAR. 20, 1902.

NO MODEL.

2 SHEETS—SHEET 2.



Witnesses:-

Frank L. Abraham
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UNITED STATES PATENT OFFICE.

DAVID H. WATTS, JR., OF PHILADELPHIA, PENNSYLVANIA.

PARTITION FOR BUILDINGS, &c.

SPECIFICATION forming part of Letters Patent No. 756,749, dated April 5, 1904.

Application filed March 20, 1902. Serial No. 99,225. (No model.)

To all whom it may concern:

Be it known that I, DAVID H. WATTS, Jr., a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain
 5 Improvements in Partitions for Buildings, &c., of which the following is a specification.

The object of my invention is to construct the framework of a metal partition so that it will be perfectly stiff and at the same time
 10 comparatively light, which can be readily set up, and through which electric or other wires can be passed. This object I attain in the following manner, reference being had to the accompanying drawings, in which—

15 Figure 1 is a perspective view of sufficient of the framing of a partition to illustrate my invention. Fig. 2 is a sectional elevation. Fig. 3 is a sectional plan on the line 3 3, Fig. 2; and Fig. 4 is a section of a partition, showing the metallic lathing and plaster applied.

20 A A are the uprights of the partition-frame, made of light channel-bars. These bars extend from the floor to the ceiling in most instances and the ends of the bars are cut to form flanges *a*, which are fastened to the floors and
 25 ceilings in any suitable manner. Usually solid rods or wires form the horizontal ties of the partition; but these are usually weak and weigh considerable. Furthermore, it is difficult in
 30 this class of framing to pass electric wires through the partition after it is finished.

B B are the transverse tie-bars. These bars are in the form of light steel tubes which are passed through openings in the vertical mem-
 35 bers A and are secured to the vertical members in the present instance by wedges *c*. These wedges are preferably made as shown in Fig. 2, being split and having teeth *c'* on one edge, so that as they are driven in place
 40 they will yield to allow the teeth to engage the vertical members, and thus prevent the wedge from being detached accidentally. It will be understood that other means of securing the tubes to the vertical members may be
 45 resorted to without departing from my invention. The tubes are made in given lengths and the end of one tube is reduced, as shown at *b*, Fig. 2, so as to enter an adjoining tube, and the workman simply drives the one tube
 50 into the other, making a joint sufficiently tight

for the purpose, although these tubes may be pinned together or brazed, if desired.

One great objection to the ordinary solid-metal-bar partition is the fact that if the partition is subjected to side pressure during the
 55 time it is being constructed it is liable to remain in the bent position and must be forced back to its original line; otherwise the complete partition will bulge or remain out of plumb; but by the use of the thin steel tubes
 60 for the horizontal members of the partition I am enabled to make a partition which has a certain amount of spring to it, so that if the partition should be subjected to side pressure as soon as the pressure is released the parti-
 65 tion will spring back to its plumb position. Furthermore, the horizontal members being tubular electric wires can be passed through the tubes, as shown clearly in Figs. 1 and 4, and when it is desired to use the tubes as elec-
 70 tric conduits I provide a T-joint B', having a portion *b'*, which extends through the metal lath, so that the wires may be passed out of the partition at the points desired. It will be understood also that where speaking-tubes
 75 are used the tubular members of the partition can be used as the tubes of the speaking-tube outfit, the mouthpieces being applied to the projecting members *b'*, and when the tubes are to be used as speaking-tubes I may cou-
 80 ple the horizontal tube used for this purpose to a vertical tube by a coupling similar to the coupling B'.

Fig. 4 is a sectional view showing the tubular horizontal members and the channeled
 85 vertical members, with wires, and the T connection for the tubes, with the metallic lath *d d* on each side, and plaster E E, showing the complete partition. The lathing and plaster may be applied in any suitable manner, my
 90 invention relating particularly to the framing to which the lath and plaster is applied.

I claim as my invention—

1. The combination in a partition, of a series of vertically-arranged channel members
 95 having their webs perforated at intervals, with a series of horizontal tubular members extending through the perforations in the vertical members, and means for fastening the horizontal and vertical members together, the 100

whole forming a rigid and self-sustaining structure, substantially as described.

2. The combination in a partition, of a series of vertically-arranged members perforated at intervals, a series of tubular transverse members passing through the perforations in the vertical members, and fastenings attaching each horizontal tube to a vertical member, substantially as described.

3. The combination of the vertical members made of channel-bars and perforated at intervals, with a series of tubular transverse members passing through the perforations of the channel members, and wedges securing the tubular members to the channel members, substantially as described.

4. The combination of the perforated vertical members, the transverse tubular members, with notched spring-keys securing the tubular members to the vertical members, substantially as described.

5. The combination of the perforated ver-

tical members, a series of tubular members passing through the perforations of the vertical members and secured thereto, the tubular members being made in sections, the end of one section being reduced and forced into the end of the adjoining section, substantially as described.

6. The combination in a partition, of vertical members, tubular members, means for securing the tubular members to the vertical members, and one or more T-sections secured to the tubular members, with lathing and plaster, the said T-sections extending through the lathing, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DAVID H. WATTS, JR.

Witnesses:

WILL. A. BARR,
JOS. H. KLEIN.