

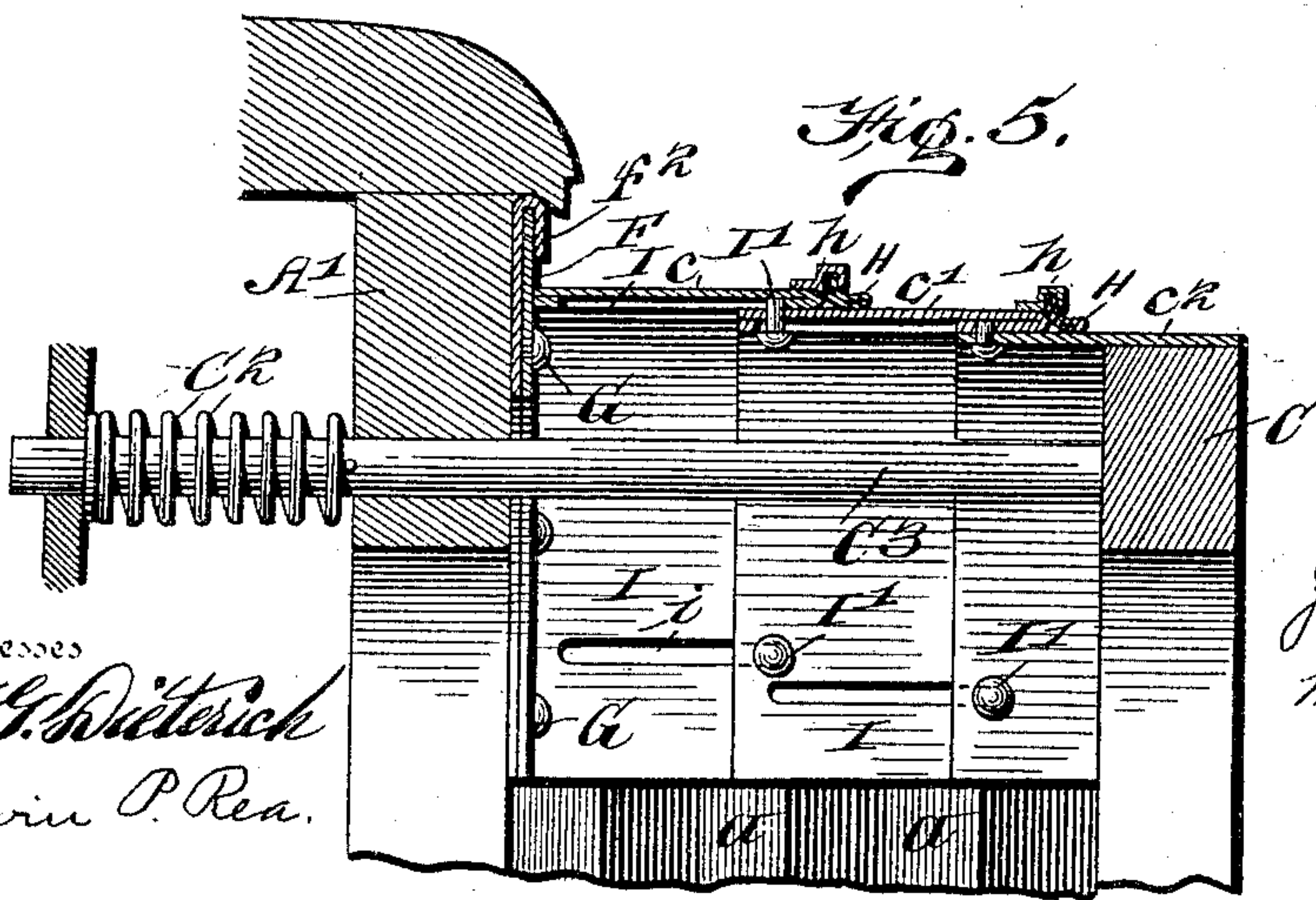
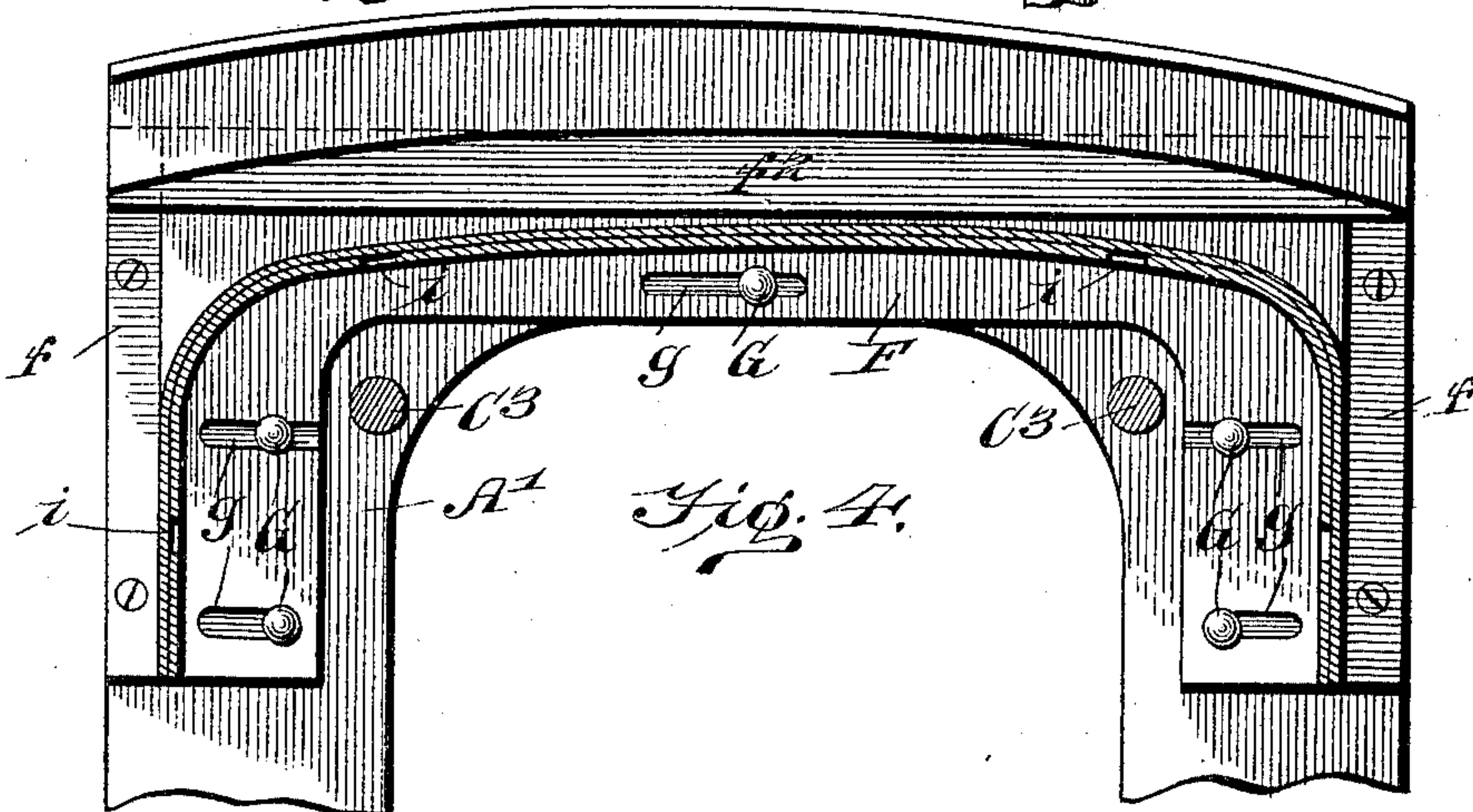
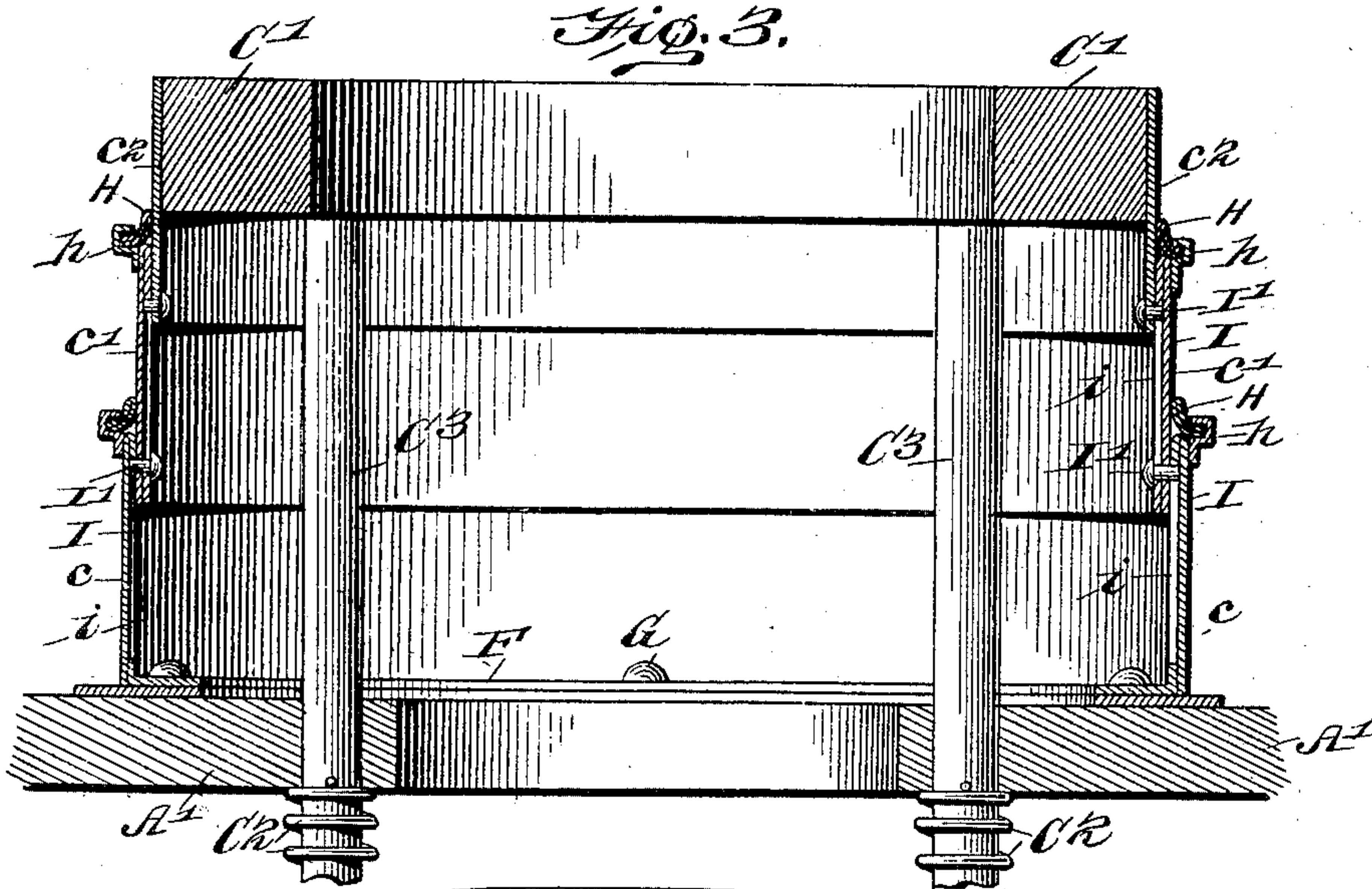
J. M. KNAUS.

METALLIC HOOD FOR VESTIBULES OF CARS

(Application filed Apr. 16, 1902.)

(No Model.)

2 Sheets—Sheet 2.



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UNITED STATES PATENT OFFICE.

JAMES M. KNAUS, OF SEDALIA, MISSOURI.

METALLIC HOOD FOR VESTIBULES OF CARS.

SPECIFICATION forming part of Letters Patent No. 706,424, dated August 5, 1902.

Application filed April 16, 1902. Serial No. 103,219. (No model.)

To all whom it may concern:

Be it known that I, JAMES M. KNAUS, a citizen of the United States, residing at Sedalia, in the county of Pettis and State of Missouri, have invented certain new and useful Improvements in Metallic Hoods for Vestibules of Cars; 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.

This invention relates to hoods for covering the space between the adjacent ends of vestibuled cars when coupled together. In the practical use of hoods of this class many objections to those in use have been discovered, and to be fully efficient experience has shown that such a device should be of lasting material, economical in construction, readily adjustable into position, easily removable, and constructed to give without danger of displacement or breakage to all the movements of the cars while in rapid motion.

It is the object of my invention to provide a hood for the stated purpose having all of these qualities; and with this object in view my invention consists in the improved construction, arrangement, and combination of the parts of such a hood, which will be hereinafter fully described and afterward specifically claimed.

I have illustrated in the accompanying drawings a hood constructed in accordance with my invention, in which drawings—

Figure 1 is a view in side elevation of the adjacent ends of two vestibuled cars having my hood attached. Fig. 2 is a horizontal transverse sectional view on the plane of the line 2 2 of Fig. 1. Fig. 3 is a horizontal transverse sectional view on the plane of the line 3 3 of Fig. 1. Fig. 4 is a vertical transverse sectional view through the hood looking toward the vestibule to which it is attached. Fig. 5 is a transverse vertical sectional view on the planes of the line 5 5 of Fig. 1. Fig. 6 is a detail sectional view, on an enlarged scale, through the contact-point of two adjacent hood-sections, more clearly illustrating the construction of the weather-strip.

Like parts are indicated by the same reference-letters in all of the figures.

Referring to the drawings by letters, A' and

B' indicate the vestibules of two adjacent cars, at the outer ends of which are the frames A' and B', surrounding the openings of the vestibules to permit of passage from one car to the other. To this frame is connected the usual expansible sides *a* and *b*, which are surmounted by the hoods C and D. These hoods are exactly alike in construction, each being made of a plurality of telescoping metallic sections, as at *c c' c²* and *d d' d²*, and at its outer end each hood is connected to a face-plate or contact-plate, as at C' D', preferably of wood and of substantially the shape of the door-frame, which face-plates when the cars are coupled up are in contact with each other and permit of passage through them from one car to the other, such contact being yieldingly maintained by means of strong springs C² D², coiled about rods C³ D³, as is usual in such structures, the limit of movement of each face-plate, and consequently the distention of the sides *a* and *b*, being limited by a plate E, secured to the vestibule and provided with a slot E', in which moves a screw or pin E², which after passing through said slots enters the face-plate.

To the inner telescoping section of each hood, as at *c* in Figs. 4 and 5, is secured a slidable metal plate F, which lies against the frame, as A', of the vestibule and is confined thereon, with freedom to move laterally with the motion of the car, by cleat-plates *f f* at the sides and *f²* at the top, secured to said frame A' and overlapping the edges of said plate, such lateral movement being limited by pins G, passed through horizontal slots *g* in the plate and into the frame A'.

To prevent undue wear and noise in the movement of the telescoping sections and to close the joints against the admission of soot, dirt, cinders, &c., I provide what might be termed "weather-strips" H H', Figs. 1, 5, and 6, between the sections *c c'* and *c' c²*, as in Figs. 1 and 5, which weather-strips consist of a doubled strip of suitable material—such as rubber-cloth, felt, leather, &c.—arranged to rest upon the outer section when the hood is in place, such strips being bent at right angles at about their mid-width and having their raw edges secured in a metallic strip, as at *h h'*, soldered or otherwise firmly secured to the adjacent overlapping section, as

most clearly shown in connection with sections *c* and *c'* in Fig. 6. The strips *h h'* are suitably bent at their ends, as at *h²* in Fig. 6, to accurately and securely hold the weather-

5 strips of flexible material.

The two inner sections, as *c c'* of the hood, are composed of sheets of suitable not easily corrosive or frangible metal doubled under upon the main body, as at *I*, said under fold

10 being slotted, as at *i'*, to receive pins, as at *I'*, passed through the next section, the outer section being preferably of a single thickness and secured to the face-plate.

From the foregoing it will be seen that I

15 have provided a hood having all the desired qualities heretofore enumerated and fully carrying out the object of my invention, and while I have specifically described the construction of each of the parts it will be obvi-

20 ous to those skilled in the art to which my invention appertains that changes and variations might be made in such specific constructions without departing from the spirit and scope of the invention.

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

1. A hood for vestibuled cars comprising a plurality of telescoping sections, a face-plate

30 secured to the outer section, means for holding the hood yieldingly distended, and means for securing the inner section to the vestibule with freedom to give laterally to the motion of the car, substantially as described.

35 2. A hood for vestibuled cars comprising a plurality of telescoping sections, a slotted plate secured to the inner section and adapted to rest against the outside of the frame of the vestibule, cleat-plates adapted to be se-

40 cured to the vestibule to overlap the edges of

the slotted plate and pins adapted to be passed through the slots of the slotted plate into the frame of the vestibule, substantially as described.

3. A hood for vestibuled cars comprising a 45 plurality of telescoping sections, the two inner sections being composed of metallic plates doubled back and under exposing only the rounded folded edge, a face-plate secured to the outer section, means for holding the 50 sections yieldingly in their extended position, and means for limiting such outward extensions, substantially as described.

4. A hood for vestibuled cars, comprising a plurality of telescoping sections, each over- 55 lapping section consisting of a plate of metal folded back and under, the under fold being slotted longitudinally of the car, means for yieldingly maintaining the sections extended, and pins passing through the interior sec- 60 tions into the slots in the inner folds of the exterior sections to limit the outward movement of the sections on each other, substantially as described.

5. A hood for vestibuled cars comprising a 65 plurality of telescoping sections, a strip of metal secured to the edge of each overlapping or exterior section, bent to form a pocket facing the interior section, and a strip of flexible material, having one edge secured in said 70 pocket and its other edge bent outward and resting on the exterior of the interior section, substantially as described.

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

JAMES M. KNAUS.

Witnesses:

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R. C. BARKSDALE.