

No. 747,555.

PATENTED DEC. 22, 1903.

O. KRAUS.

GARMENT SUPPORTER.

APPLICATION FILED DEC. 2, 1902.

NO MODEL.

Fig: 2.

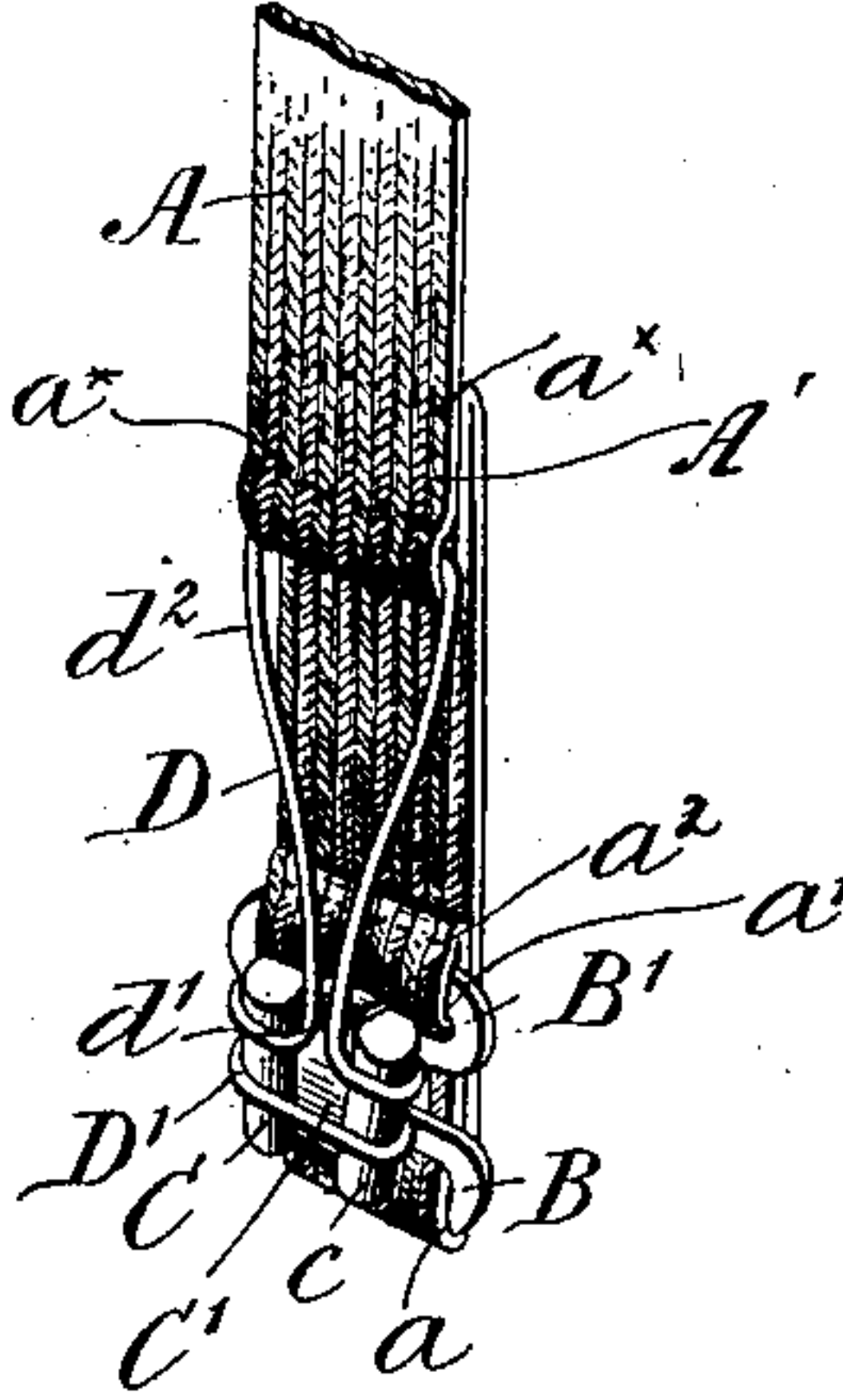


Fig:3.

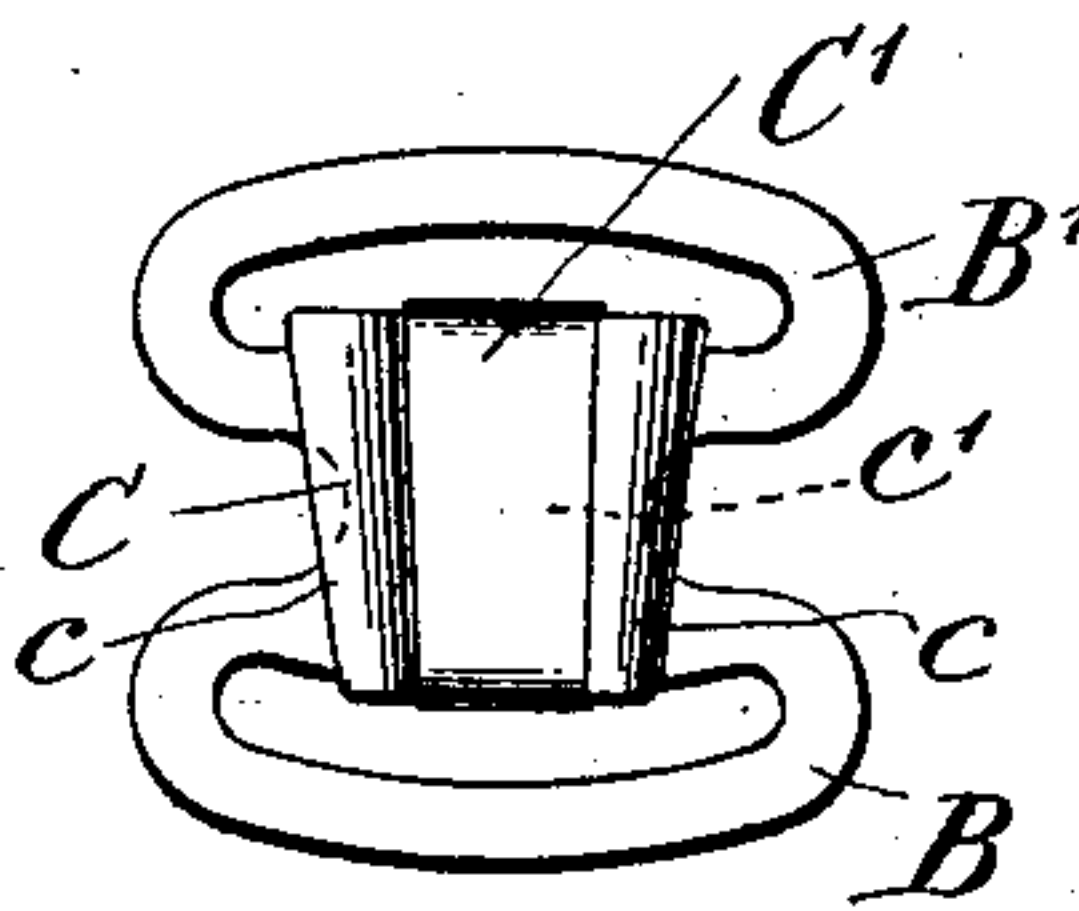


Fig: 4:

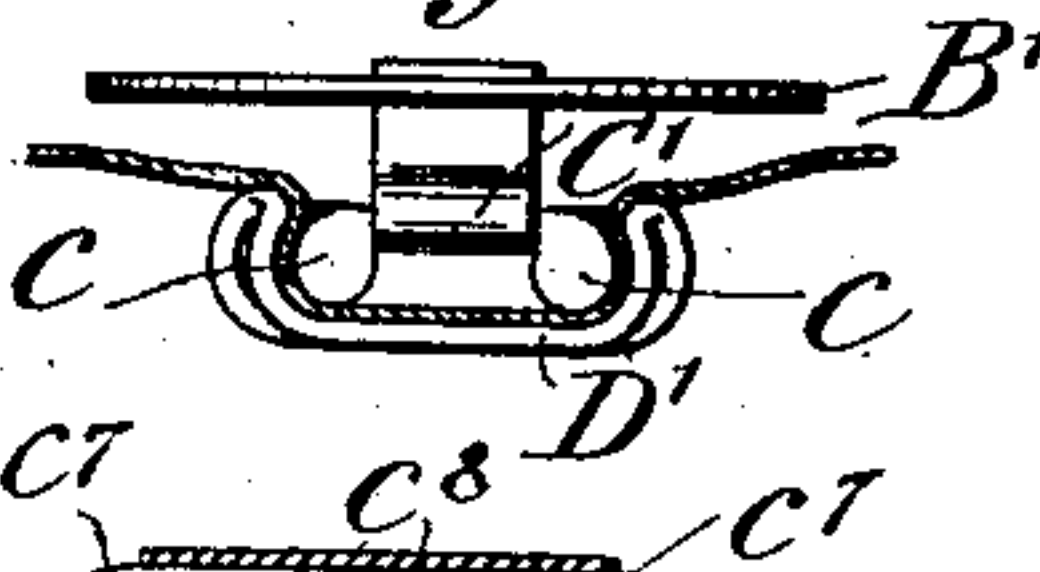


Fig:8.

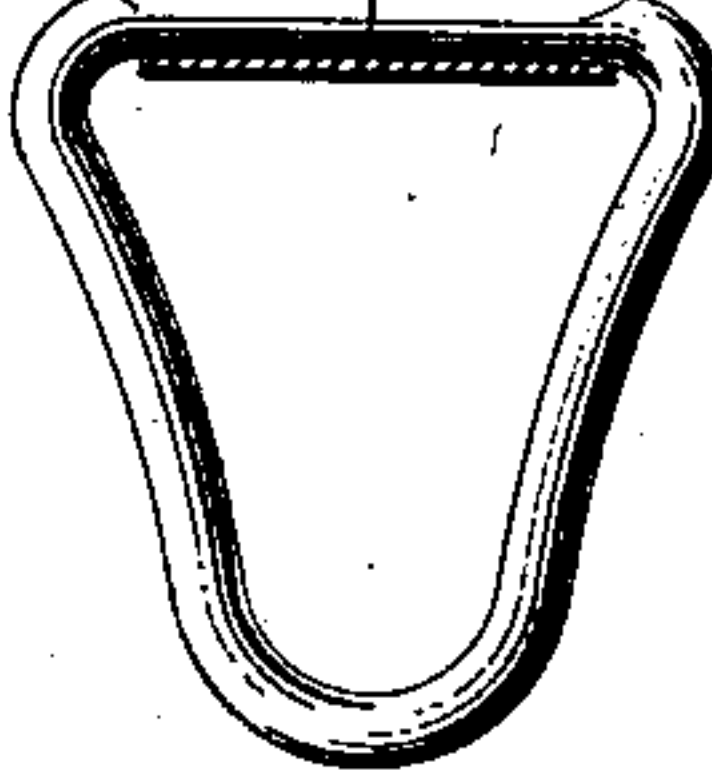


Fig:7

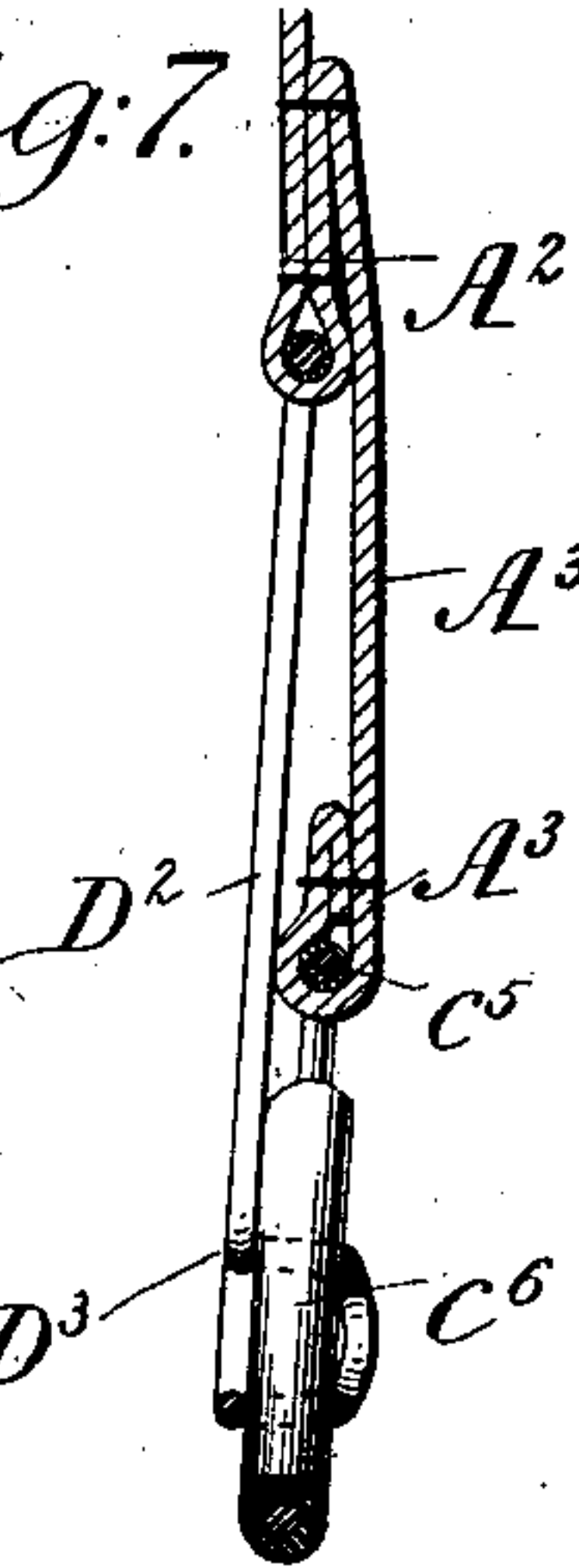


Fig:9

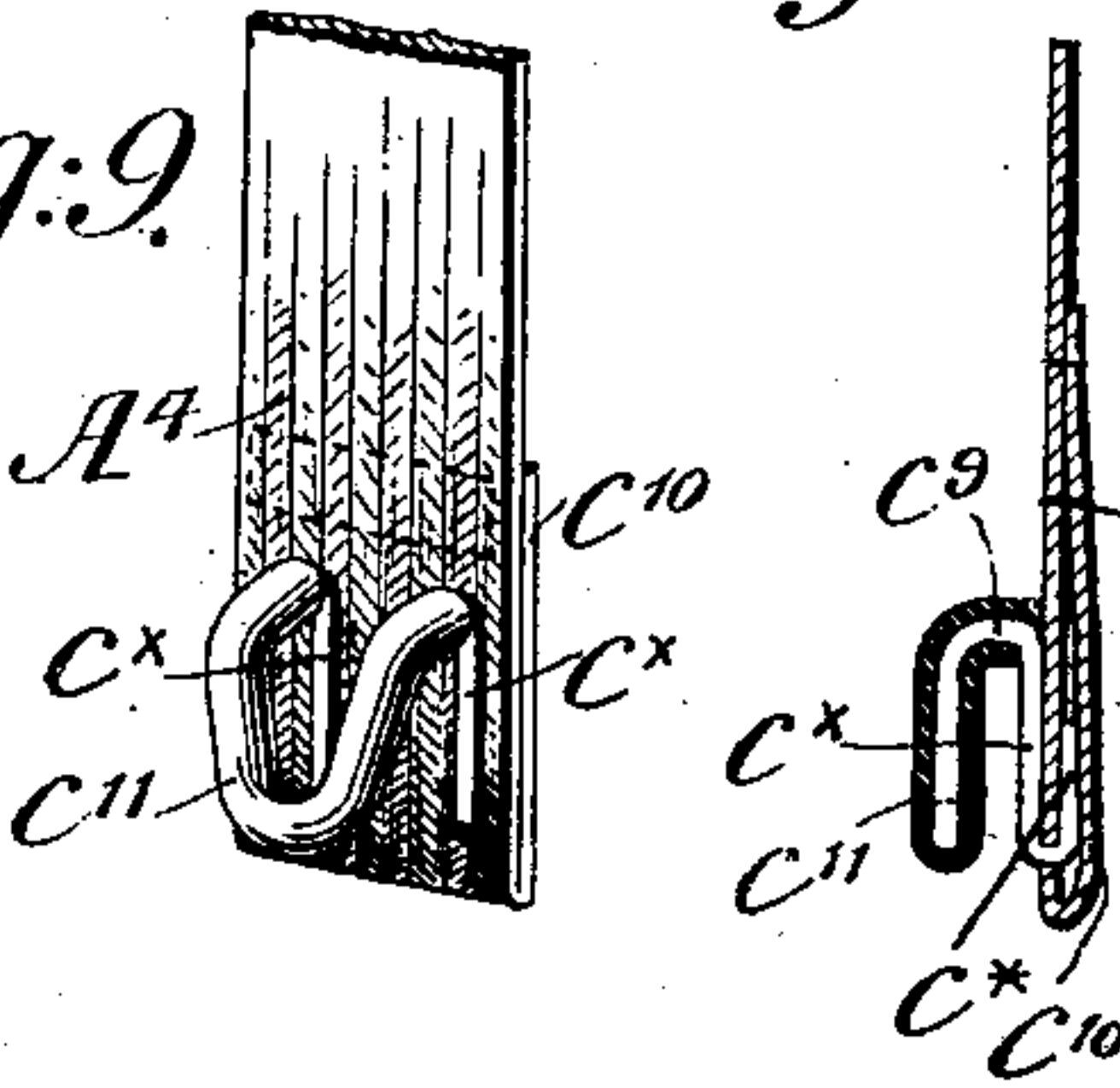
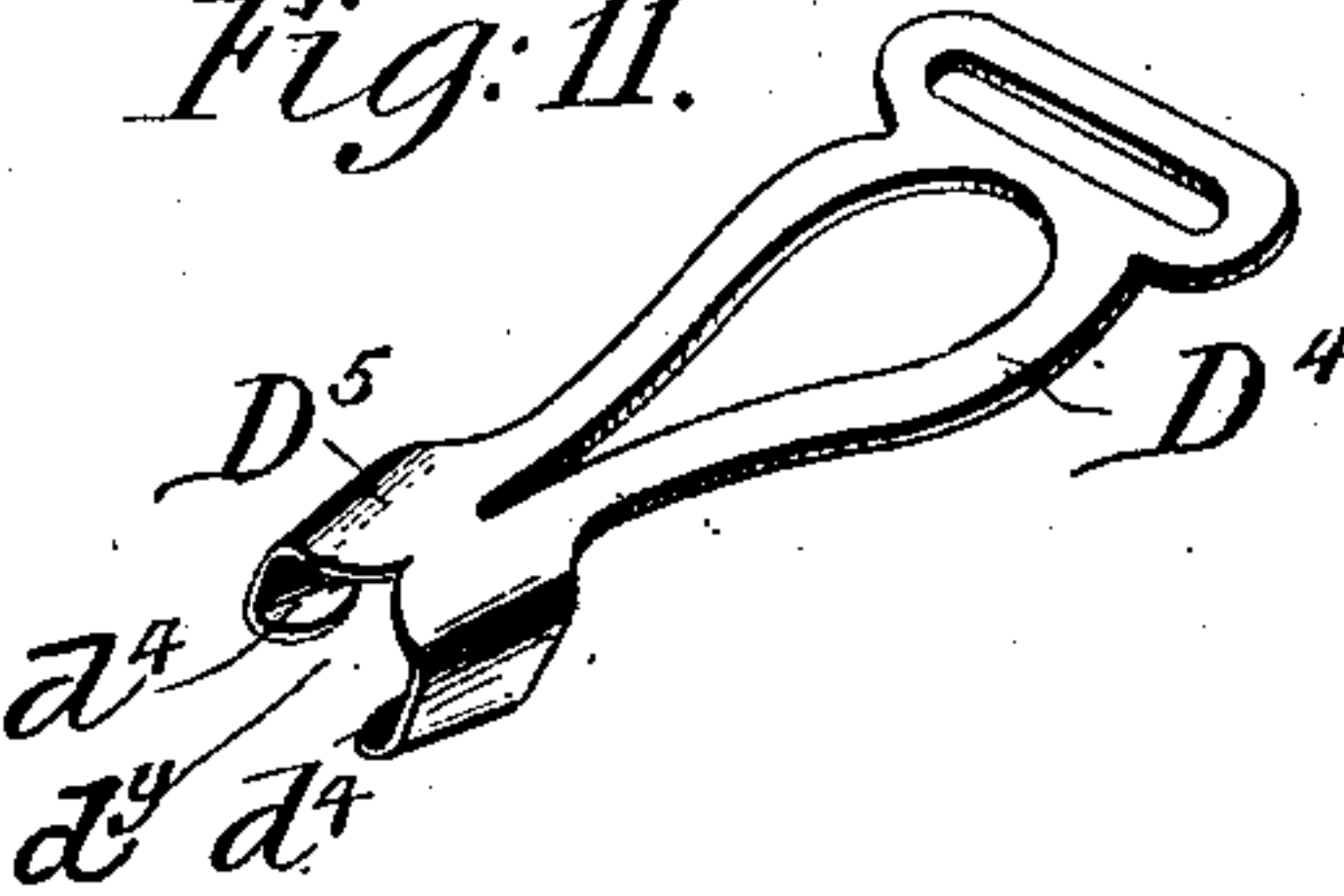


Fig:10.



Witnesses

William P. Parker
Helen E. Parker

Inventor

Otto Kraus

UNITED STATES PATENT OFFICE.

OTTO KRAUS, OF NEW YORK, N. Y.

GARMENT-SUPPORTER.

SPECIFICATION forming part of Letters Patent No. 747,555, dated December 22, 1903.

Application filed December 2, 1902. Serial No. 133,631. (No model.)

To all whom it may concern:

Be it known that I, OTTO KRAUS, a citizen of the United States, and a resident of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Garment-Supporters, of which the following is a specification.

This invention relates to garment-supporters, and is disclosed herein as a device more particularly designed for service as a hose-supporter.

A prominent object associated with the device is the adaptation, in connection with a member to be clamped, of a clamping member comprising a head open at one end, whereby by a single movement of one of said members in the direction of the open end of the head the member to be clamped will be inserted in the head and assume a wedged condition therein, a single movement in the opposite direction sufficing for the complete removal of the clamped member from the head.

With the above and other purposes in view I have devised the improvements in garment-supporters set forth in detail in the subsequent extended description.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of so much of a hose-supporter as is necessary to show one form of my invention, the parts being represented in an unclamped position. Fig. 2 is another perspective view of the parts disclosed in Fig. 1, but showing the same in the clamped position. Fig. 3 is a face view showing, on an enlarged scale, the wedge-carrying plate. Fig. 4 is a plan view of the wedge-carrying plate, the clamping member being shown as gripping a fabric. Fig. 5 is a view illustrating a central vertical section of the wedge-carrying plate, the same being shown in a horizontal position. Fig. 6 is a front elevation showing, on an enlarged scale, another form of my invention, the parts being represented in the clamped position. Fig. 7 is a central vertical sectional view of the construction disclosed in Fig. 6. Fig. 8 is a detail view illustrating a convenient arrangement by which the configuration of wedge generally disclosed in the two preceding figures can be made of wire without the employment of rubber or other additional compressible material. Fig. 9 is

a perspective view illustrating a modification of the wedge more particularly shown in Figs. 6 and 7. Fig. 10 is a sectional view indicating how the wedge disclosed in Fig. 9 is secured. Fig. 11 is a perspective view of a sheet-metal clamping member adapted to serve in connection with the wedges shown in any of the other figures.

Similar reference characters are employed to designate corresponding parts throughout the figures of the drawings wherein they occur.

At the outset it may be here stated that for the purpose of differentiation the clamping member will generally be referred to as the "clamping-arm."

Referring now more particularly to Figs. 1 to 5, inclusive, the webbing A at the appropriate points is folded upon itself at the rear and secured by rows of transverse stitching $a^x a^*$ to form a depending bight A', the stitching a^* passing only through the lower portion of the bight, forming a snug loop for the suspension of the clamping member, while the stitching a^x above passing both through the upper portion of the bight and contiguous part of the webbing permits that portion of the latter which depends below said bight to be raised to a limited extent independently of the latter and its suspended member. The webbing then continues down back of the wedge-carrying plate, passes forward beneath the bottom bar of the lower transversely-slotted portion B of said plate, thence rearwardly through the slot in said portion, as indicated by a , ascends up and forwardly through the slot in the upper slotted portion B', as indicated by a' , is led up for a short distance above the plate, where a neat fold a^2 occurs with the web-terminal turned rearward and neatly tucked between the plate and adjacent part of the webbing. The two parts of the fold a^2 are conjointly united by a single line of transverse stitching to the contiguous portion of the webbing. A peculiarly-shaped section C, of india-rubber or other suitable yielding material, on the front of the plate integrally presents the downwardly-converging raised edges c and comparatively thin connecting-web c' , the section being in general outline a wedge. This "wedge," as it may be termed, is positively se-

cured to the plate by a thin metallic keeper C' , which fits snugly between the edges c , is turned around and under the web c' at the upper and lower edges thereof, and is then passed through perforations in the central bar of the plate and clenched at the back thereof. The clamping-arm D consists of a single piece of wire bent to present the lower head D' with under turns d conjointly downwardly contracting and contributing to provide the head with top, bottom, and side openings, the latter being indicated by d^x in Fig. 1, the remainder of the arm D at the point of junction with the head presenting a narrow neck d' , which widens into a spreading shank d^2 , the wire terminals d^3 at the top of which are bent horizontally toward each other to constitute a means for engaging the stitched loop of the bight A' , and thereby pivotally suspend the arm.

Assuming the parts to be arranged as illustrated in Fig. 1, by drawing the fabric of the hose or other article to be supported over the wedge and then raising both with one hand, while the other retains the arm D in proper position, the wedge and fabric can by a downward movement be inserted and embraced with the head, the downward pull on the hose serving to more tightly wedge the parts into engagement. The hose will thus be securely and positively gripped, and the operation of gripping will be effected with such gradually-increasing pressure on the fabric that injury to the latter by tearing or straining will be avoided. By simply holding the arm in fixed relation and raising the wedge the latter will be completely removed from the head and the fabric quickly released. The wedge character of the member clamped and its yielding contact portions, together with the contracting form of the clamping member, will result in the device accommodating itself to different thicknesses of fabric in the gripping operation. The side opening presented by the contiguous free edges of the under turns d of the head permits of the fabric being introduced through said side opening to lie within the head with lateral portions overlapping the edges of the turns and smoothly extending exteriorly with respect thereto. By this arrangement the necessity for inconveniently introducing the fabric through an end opening is obviated. Furthermore, were the introduction made through the end opening downward tension on the hose would operate to eject the wedging-section and pull the fabric out of said end opening instead of said downward tension of the hose pulling said parts more tightly into engagement, as it does in my supporter.

From the foregoing it will be appreciated that a garment-supporter embodying my invention is comparatively simple and inexpensive, as well as highly efficient in use.

In the construction illustrated in Figs. 6 and 7 the clamping-arm D^2 is suspended from the bight A^2 , as before. The wedge com-

prises a length of wire C^5 , bent generally to partake of the characteristics of a wedge, the inwardly-bent terminals c^5 at the top being a means by which the wedge is suspended from the lower looped end A^3 of the webbing. The major portion of the wire forming this wedge is incased in a tube c^6 , of india-rubber, to secure the elastic clamping effect. In this construction the wedge is caused to engage the head D^3 of the arm D^2 in a manner similar to that already described.

Fig. 8 illustrates an arrangement wherein the wedge is made of wire somewhat after the manner of that in Figs. 6 and 7, but without the employment of rubber or other yielding material. $c^7 c^7$ designate the terminals, which in this instance are confined within an incasing sleeve c^8 , as they are in the preceding constructions.

In Figs. 9 and 10 the wedge is represented as comprising a length of wire bent to present the depending wedging portion proper maintained a short distance from the web A^4 by upper inwardly-horizontal bends c^9 , which merge into vertically-descending extensions c^x , bearing against the front of the webbing, and terminate in spurs c^* , which pierce the webbing and secure the wedge thereto by being clenched at the back of the same, the webbing having an upward fold c^{10} to mask the clenched parts and render the device comfortable at its inner side. The depending wedge portion and so much of the horizontal bends c^9 as are at the front of the webbing are incased in a rubber tube c^{11} , which contributes to the yielding clamping effect.

Fig. 11 illustrates how a clamping-arm D^4 may be made of sheet metal, the under turns d^4 of the head D^5 of course downwardly converging, as in the case of the under turns of the arms in the other constructions. The side opening of the head in this construction is indicated by d^y .

I do not desire to limit myself to the particular arrangement and details set forth herein, but reserve the right to all modifications as may be within the scope of my invention.

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

1. In a garment-supporter, a suitably-supported member comprising a head presenting internal gripping-surfaces and an end and side opening, and a wedging member having a supporting engagement permitting such member to swing relative to the other member, said wedging member insertible in and completely removable from the head for clamping and unclamping the fabric and in either instance, by a single movement through the end opening, and presenting gripping-surfaces for coacting with those of the other member.

2. In a garment-supporter, a suitably-supported member comprising a head presenting internal gripping-surfaces and an end and side opening, and a wedging member having

a supporting engagement permitting such member to swing relative to the other member, said wedging member insertible in and completely removable from the head for clamping and unclamping the fabric and in either instance, by a single movement through the end opening, and presenting gripping-surfaces for coacting with those of the other member, the gripping-surfaces of one of said members being of yielding material.

3. In a garment-supporter, a suitably-supported member comprising a head presenting internal gripping-surfaces and an end and side opening, and a wedging member having a supporting engagement permitting such member to swing relative to the other member, said wedging member comprising a plate and a section carried by said plate and adapted to be inserted in and completely removed from said head for clamping and unclamping the fabric, in either instance by a single movement through the end opening, the section presenting gripping-surfaces of yielding material for coacting with those of the head.

4. In a garment-supporter, the combination with a suitably-supported inner member having extended descending portions, the outer sides thereof presenting gripping-surfaces, of an outer member having a supporting engagement independent of the inner member, such outer member comprising a head having an end opening and adapted for the insertion and complete removal of the extended portions of the inner member, for clamping and unclamping the fabric, in either instance, by a single movement through the end opening, said head presenting inner gripping-surfaces for coacting with those of the inner member, the gripping-surfaces of one of said members being converged.

5. In a garment-supporter, the combination with an inner member comprising a plate for connection with the suspending medium, and a section of yielding material secured to said plate and presenting extended descending gripping-surfaces, of an outer member comprising a head having an end opening and adapted for the insertion and complete removal of the yielding section, in either instance, by a single movement through the end opening, said head presenting inner gripping-surfaces for coacting with those of the yielding section, the supporting engagements of said members being in different horizontal planes, and the gripping-surfaces of one of said members downwardly converged.

6. A garment-supporter comprising a suit-

ably-supported wedge-shaped section of yielding material, and a member having an engaging support independent of that of the section, said member embodying a head permitting the section to be inserted therein and completely removed therefrom, to clamp and unclamp the fabric, in either case, by a single movement.

7. A garment-supporter comprising a suitably-supported plate and a wedge-shaped section laterally projecting therefrom, and a member having an engaging support independent of that of the plate and section, said member embodying a head permitting the section to be inserted therein and completely removed therefrom to clamp and unclamp the fabric in either case, by a single movement.

8. A garment-supporter comprising an embracing member, a suitably-suspended plate, a wedging-section with raised edges, and a keeper between said edges and secured to the plate.

9. A garment-supporter comprising an embracing member embodying a head, a suitably-suspended plate, a wedging-section projecting laterally therefrom, and a keeper securing said section to the plate.

10. A garment-supporter comprising a contracting embracing member, a suitably-suspended plate, a yielding wedge-section with raised edges, and a keeper lying between said edges and secured to the plate.

11. A garment-supporter comprising an embracing member, a suitably-suspended plate, a yielding wedge-section, and a keeper extending over the section, bent around and beneath the opposite edges thereof and secured to the plate.

12. A garment-supporter comprising a webbing embodying a depending bight and a portion depending below and adapted to be raised independently of the same, an arm suspended from said bight and having a contracting embracing portion, a plate suspended from said lower depending portion, a yielding wedge-section with raised edges, a keeper extending over the section, bent around and beneath opposite edges thereof and secured to the plate.

Signed at New York city, in the county of New York and State of New York, this 22d day of November, A. D. 1902.

OTTO KRAUS.

Witnesses:

WILLIAM PAXTON,
HELEN E. MAHER.